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OFFERING CIRCULAR **22 September 2022**

J.P. Morgan Structured Products B.V.
(*incorporated with limited liability in The Netherlands*)

as Issuer

JPMorgan Chase Financial Company LLC
(*incorporated with limited liability in the State of Delaware, United States of America*)

as Issuer

JPMorgan Chase Bank, N.A.
(*a national banking association organised under the laws of the United States of America*)

as Issuer and as Guarantor in respect of Securities
issued by
J.P. Morgan Structured Products B.V.

JPMorgan Chase & Co.
(*incorporated in the State of Delaware, United States of America*)

as Issuer and as Guarantor in respect of Securities
issued by
JPMorgan Chase Financial Company LLC

Structured Products Programme for the issuance

of

Notes, Warrants and Certificates

Arranger and Dealer for the Programme

J.P. Morgan

The Securities issued from time to time under this Offering Circular are derivative financial instruments and do not constitute a participation in a collective investment scheme in the meaning of the Swiss Federal Act on Collective Investment Schemes ("CISA"). They are neither subject to authorisation nor supervision by the Swiss Financial Market Supervisory Authority ("FINMA"). Accordingly, investors do not benefit from the specific investor protection provided under the CISA and are exposed to the credit risk of the relevant Issuer and (if applicable) relevant Guarantor.

This Offering Circular has been approved on 22 September 2022 by the Prospectus Office of the SIX Exchange Regulation AG as reviewing body (the "Reviewing Body") under the Swiss Financial Services Act ("FinSA").

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INTRODUCTION TO THIS DOCUMENT

The Securities, the Guarantees and, in certain instances, the securities to be delivered upon redemption or exercise of the Securities, if any, have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**"), or the laws of any state or other jurisdiction of the United States, and trading in the Securities and the Guarantees has not been approved by the U.S. Commodity Futures Trading Commission ("**CFTC**") under the U.S. Commodity Exchange Act of 1936, as amended (the "**Commodity Exchange Act**"). The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee (as defined below) have not been and will not be registered under the rules of the U.S. Office of the Comptroller of the Currency (the "**OCC**"). Subject to certain exceptions, the Securities may not be offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person except, in respect of certain of the Securities, in accordance with Rule 144A under the Securities Act ("**Rule 144A**") and in reliance upon the relevant exemptions from state securities laws and any other applicable laws of other jurisdictions. Hedging transactions involving "equity securities" of "domestic issuers" (as each such term is defined in the Securities Act and regulations thereunder) may only be conducted in compliance with the Securities Act and the Commodity Exchange Act.

What is this document?

This document (referred to as the "**Offering Circular**"), including the documents incorporated by reference within it, is intended to provide investors with information necessary to enable them to make an informed investment decision before purchasing Securities. It may be supplemented from time to time. It is not a "prospectus" for the purposes of the EU Prospectus Regulation or the UK Prospectus Regulation (see "*Important Legal Information – Warning*" below).

This Offering Circular is the successor to the Offering Circular dated 21 April 2022 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**April 2022 Offering Circular**"). It succeeds the April 2022 Offering Circular as soon as the April 2022 Offering Circular becomes invalid on 22 September 2022.

Who are the Issuers and the Guarantors of the Securities?

The Securities will be issued by one of (i) JPMorgan Chase Financial Company LLC, (ii) J.P. Morgan Structured Products B.V., (iii) JPMorgan Chase Bank, N.A. and (iv) JPMorgan Chase & Co. The relevant "Pricing Supplement" document (as described below) will specify which of these companies is the Issuer of the relevant Securities. Securities issued by JPMorgan Chase Financial Company LLC will be guaranteed by JPMorgan Chase & Co. (the "**JPMorgan Chase & Co. Guarantee**"). Securities issued by J.P. Morgan Structured Products B.V. will be guaranteed by JPMorgan Chase Bank, N.A. (the "**JPMorgan Chase Bank, N.A. Guarantee**") (each of the JPMorgan Chase & Co. Guarantee and the JPMorgan Chase Bank, N.A. Guarantee, a "Guarantee" and together, the "**Guarantees**"). Securities issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. will not be the subject of a guarantee.

The Securities are unsecured and unsubordinated general obligations of the relevant Issuer (and, if applicable, the relevant Guarantor). All payments or deliveries to be made by the relevant Issuer (and, if applicable, the relevant Guarantor) under the Securities are subject to the credit risk of the relevant Issuer (and, if applicable, the relevant Guarantor). The potential return on and value of the Securities will be adversely affected in the event of a default or deterioration in the financial position of the relevant Issuer (and, if applicable, the relevant Guarantor). The financial and other information which is incorporated by reference into this Offering Circular, together with other information provided in this Offering Circular, provides a description of each Issuer's business activities as well as certain financial information and material risks faced by each Issuer.

What are the Securities?

The relevant Issuer may issue Securities in the form of any of (i) Warrants (ii) Certificates and (iii) Notes (all of which are referred to as "**Securities**"), under the Structured Products Programme for the issuance of Notes, Warrants and Certificates (the "**Programme**"). Securities may (a) have any maturity (save that any Securities issued by JPMorgan Chase & Co. will not have a maturity of less than one year from the date of their issue), (b) be listed and traded on an exchange-regulated (or other) market, or not listed or

traded, (c) be unrated or rated, (d) be non-interest bearing or bear fixed or floating rate interest or other variable interest, (e) have interest and/or redemption amounts which are dependent on the performance of one or more "Reference Assets" (as described below), (f) be settled by way of cash payment or physical delivery and (g) provide that the scheduled amount payable could be as low as zero or else provide some level of minimum scheduled amount payable at maturity (subject to the credit risk of the relevant Issuer and, if applicable, the relevant Guarantor). Notwithstanding the foregoing, JPMCFC will not issue Securities in the form of Warrants and Securities issued by JPMCFC will not be subject to physical delivery.

What are the Reference Assets?

The return on the Securities may be dependent on the performance of one or more "Reference Assets". The types of Reference Assets to which Securities issued under the Programme may be linked are (i) a share or a depositary receipt (ii) a share index, (iii) a commodity, (iv) a commodity index, (v) a foreign exchange rate, (vi) a fund (regulated or unregulated, mutual, exchange traded tracker or hedge), (vii) the credit of a specified entity or entities, (viii) a consumer price or other inflation index, (ix) an interest rate or constant maturity swap rate or any other rate, (x) a loan or bond or other debt obligation or certificate, (xi) a basket of the above or (xii) any combination of any of the above or other types of reference asset(s). The relevant Issuer is under no obligation to hold a Reference Asset, and holders of Securities will have no beneficial interest or any other rights in relation to any Reference Assets.

What are Pricing Supplements?

A "Pricing Supplement" document will be prepared in relation to each tranche of Securities, and sets out the specific details of the Securities. For example, the Pricing Supplement will contain the issue date, the maturity date, the Reference Asset(s) to which the Securities are linked and specify the method used to calculate the redemption amount and any interest/coupon payments (if applicable).

What documents should I read before purchasing Securities?

You should read the applicable Pricing Supplement, together with this Offering Circular (including the information incorporated by reference in it), before deciding to purchase any Securities.

This Offering Circular will be supplemented and replaced after the date hereof from time to time. If you purchase Securities after the date of the applicable Pricing Supplement, you should review the most recent version (if any) of this Offering Circular and each supplement thereafter up to (and including) the date of purchase to ensure that you have the most up to date information on the Issuer and (if applicable) the relevant Guarantor on which to base your investment decision (note that the terms and conditions of the Securities will remain as described in the applicable Pricing Supplement and the version of the Offering Circular described in the Pricing Supplement, subject to any amendments notified to Holders). Each supplement and replacement version (if any) to the Offering Circular can be found on (www.bourse.lu) and (https://www.euronext.com/en/markets/dublin).

What are the principal risks?

Securities issued under the Programme may include embedded derivatives, and an investment in Securities is subject to a number of risks, as described in the section of this Offering Circular entitled "*Risk Factors*" below.

Securities are speculative investments, and returns may at times be volatile and losses may occur quickly and in unanticipated magnitude. Depending on the particular "payout" terms of the Securities, you may bear the risk of losing some or up to all of your investment depending on the performance of the Reference Asset(s) to which your Securities are linked.

Even if the relevant Securities provide for a minimum scheduled amount payable at maturity, you could still lose some or up to all of your investment where (i) the relevant Issuer (and, if applicable, the relevant Guarantor) becomes insolvent or otherwise fails to meet its payment (or delivery) obligations under the Securities, (ii) you are able to sell your Securities prior to maturity (which may not be the case, as there may not be a secondary market for them), but the amount you receive is less than what you paid for them, (iii) your Securities are redeemed or terminated by the relevant Issuer prior to maturity due to the occurrence of one or more specified events as provided in the terms and conditions of the Securities, and the amount you receive on such early redemption or termination is less than what you paid for the

Securities or (iv) the terms and conditions of your Securities are unilaterally adjusted by the relevant Issuer due to the occurrence of one or more specified events as described in the terms and conditions of the Securities, resulting in a reduced return.

You should not acquire any Securities unless you (whether by yourself or in conjunction with your financial adviser) understand the nature of the relevant Securities and the extent of your exposure to potential loss on the Securities, and any investment in Securities must be consistent with your overall investment strategy. You (whether by yourself or in conjunction with your financial adviser) should consider carefully whether the particular Securities are suitable for you in the light of your investment objectives, financial capabilities and expertise. You should consult your own legal, tax, accountancy, regulatory, investment and other professional advisers as may be required to assist you in determining the suitability of the Securities for you as an investment.

You should read, in particular, the sections of this Offering Circular entitled "*Risk Factors*" and "*Commonly Asked Questions*" for important information prior to making any decision to purchase Securities.

Potential for Discretionary Determinations by the Calculation Agent and the Issuer under the Securities

Under the terms and conditions of the Securities, following the occurrence of certain events outside of the control of JPMorgan Chase (as defined below), the Calculation Agent and/or the Issuer may exercise discretion to take one or more of the actions available to it in order to deal with the impact of such event on the Securities or (if applicable in respect of the terms and conditions of the particular Securities) the Issuer's hedging arrangements. Any such discretionary determinations could have a material adverse impact on the value of and return on the Securities. An overview of the potential for discretionary determinations by the Calculation Agent and the Issuer under the Securities is provided in the section of this Offering Circular entitled "*Overview of the Potential for Discretionary Determinations by the Calculation Agent and the Issuer*".

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IMPORTANT NOTICES

Status of the Securities

The Securities are unsecured and unsubordinated general obligations of the relevant Issuer and not of any affiliate of that Issuer.

Status of the JPMorgan Chase Bank, N.A. Guarantee

The JPMorgan Chase Bank, N.A. Guarantee is an unsecured and unsubordinated general obligation of JPMorgan Chase Bank, N.A. and not of any of its affiliates.

Status of the JPMorgan Chase & Co. Guarantee

The JPMorgan Chase & Co. Guarantee is an unsecured and unsubordinated general obligation of JPMorgan Chase & Co. and not of any of its affiliates.

Status of the Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee

The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee: (i) are not savings accounts or deposits of JPMorgan Chase Bank, N.A. or any bank or non-bank subsidiary of JPMorgan Chase Bank, N.A.; and (ii) will rank *pari passu* with all other unsecured and unsubordinated indebtedness of JPMorgan Chase Bank, N.A. except obligations, including U.S. domestic deposits of JPMorgan Chase Bank, N.A., that are subject to any priorities or preferences by law.

Status of the Securities issued by JPMorgan Chase & Co. and the JPMorgan Chase & Co. Guarantee

The Securities issued by JPMorgan Chase & Co. and the JPMorgan Chase & Co. Guarantee: (i) are not savings accounts or deposits of JPMorgan Chase & Co. or any bank or non-bank subsidiary of JPMorgan Chase & Co., and (ii) will rank *pari passu* with all other unsecured and unsubordinated indebtedness of JPMorgan Chase & Co., except obligations that are subject to any priorities or preferences by law.

Neither the Securities nor the relevant Guarantee are covered by any deposit insurance protection scheme

Neither the Securities nor the relevant Guarantee are deposits insured by the U.S. Federal Deposit Insurance Corporation (the "FDIC"), the U.S. Deposit Insurance Fund or any other governmental agency or instrumentality, in the United States or in any other jurisdiction.

Offering restrictions in the European Economic Area

This Offering Circular has been prepared on the basis that any offer of Securities in any Member State of the European Economic Area (the "EEA") will be made pursuant to an exemption under Regulation (EU) 2017/1129, as amended (the "EU Prospectus Regulation") from the requirement to publish a prospectus for offers of Securities. Accordingly, any person making or intending to make an offer in that Member State of Securities which are the subject of an offering contemplated in this Offering Circular as completed by a Pricing Supplement in relation to the offer of those Securities may only do so in circumstances in which no obligation arises for the Issuer or the Dealers to publish a prospectus pursuant to Article 3 of the EU Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the EU Prospectus Regulation in relation to such offer.

Offering restrictions in the United Kingdom

This Offering Circular has been prepared on the basis that any offer of Securities in the United Kingdom will be made pursuant to an exemption under section 86 of the Financial Services and Markets Act 2000 (as amended, the "FSMA") from the requirement to publish a prospectus for offers of Securities. Accordingly, any person making or intending to make an offer in the United

Kingdom of Securities which are the subject of an offering contemplated in this Offering Circular as completed by a Pricing Supplement in relation to the offer of those Securities may only do so in circumstances in which no obligation arises for the Issuer or the Dealers to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation in relation to such offer, where "UK Prospectus Regulation" means Regulation (EU) No 2017/565 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (as amended, the "EUWA") and regulations made thereunder.

None of the Issuers, Guarantors or Dealers has authorised, nor do they authorise, the making of any offer of Securities in circumstances in which an obligation arises for the Issuer to publish a prospectus in the EEA, the United Kingdom or in any other jurisdiction.

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to EEA Retail Investors", the Securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the EU Prospectus Regulation. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "EU PRIIPs Regulation") for offering or selling the Securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the EEA may be unlawful under the EU PRIIPs Regulation.

Notwithstanding the above paragraph, in the case where the Pricing Supplement in respect of any Securities does not specify "Prohibition of Sales to EEA Retail Investors" to be not applicable but where the Dealer subsequently prepares and publishes a key information document under the EU PRIIPs Regulation in respect of such Securities, then following such publication, the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the EEA as described in the above paragraph and in such legend shall no longer apply.

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to UK Retail Investors", the Securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of UK domestic law by virtue of the EUWA; (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in the UK Prospectus Regulation. Consequently, no key information document required by Regulation (EU) No 1286/2014 as it forms part of UK domestic law by virtue of the EUWA (as amended, the "UK PRIIPs Regulation") for offering or selling the Securities or otherwise making them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation.

Notwithstanding the above paragraph, in the case where the Pricing Supplement in respect of any Securities does not specify "Prohibition of Sales to UK Retail Investors" to be not applicable but where the Dealer subsequently prepares and publishes a key information document under the UK PRIIPs Regulation in respect of such Securities, then following such publication, the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the United Kingdom as described in the above paragraph and in such legend shall no longer apply.

Certain U.S. restrictions and other disclosure

The Securities, the Guarantees and, in certain instances, the securities to be delivered upon redemption or exercise of the Securities, if any, have not been and will not be registered under the Securities Act and

trading in the Securities and the Guarantees has not been approved by the CFTC under the Commodity Exchange Act. The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee have not been and will not be registered under the rules of the OCC.

The Securities are being offered and sold only (i) to non-U.S. Persons in offshore transactions in accordance with Regulation S under the Securities Act ("**Regulation S**"); provided that such Securities may also be sold to U.S. Persons that are affiliates (as defined in Rule 405 under the Securities Act) of the Issuer and (ii), in the case of Rule 144A Securities and of New York Law Notes and Regulation S/Rule 144A Securities, being offered or sold in reliance on Rule 144A, to qualified institutional buyers ("**QIBs**") (as defined in Rule 144A) that are also Eligible Investors (as defined herein) at the time of sale in reliance on Rule 144A under the Securities Act.

The Securities may not be offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act), except, in the case of Rule 144A Securities and of New York Law Notes and Regulation S/Rule 144A Securities being sold in accordance with Rule 144A, in accordance with Rule 144A and in reliance upon the relevant exemptions from state securities laws and any other applicable laws of other jurisdictions and an exemption under the Commodity Exchange Act. Hedging transactions involving "equity securities" of "domestic issuers" (as each such term is defined in the Securities Act and regulations thereunder) may only be conducted in compliance with the Securities Act.

Investors are hereby notified that sellers of the Securities may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.

The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee may also be offered or sold in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 3(a)(2) thereof and will be offered and sold pursuant to an exemption from the registration requirements of the OCC (including, in the case of offers or sales outside the United States, in compliance with Regulation S as such regulation is incorporated into the regulations of the OCC pursuant to 12 C.F.R. Section 16.5(g)).

JPMCFC (as defined herein) has not registered, nor intends to register, as an investment company under the Investment Company Act of 1940, as amended (the "**Investment Company Act**"). JPMCFC intends to rely on the exemption from registration as an investment company under the Investment Company Act afforded by Rule 3a-5 of the Investment Company Act.

JPMSP (as defined herein) has not registered, nor intends to register, as an investment company under the Investment Company Act. JPMSP intends to rely on the exemption from registration as an investment company under the Investment Company Act afforded by Section 3(c)(7) of the Investment Company Act. In order to rely on such exemption, JPMSP is required to limit the purchase in the United States of Securities issued by JPMSP to qualified purchasers ("**QPs**") (as defined in Section 2(a)(51) and related rules under the Investment Company Act).

If a legal or beneficial owner of a Security is a U.S. Person and (i) not a QIB, (ii) not a QP in relation to Securities issued by JPMSP, (iii) not an Eligible Contract Participant ("**ECP**") (as defined in Section 1(a)(12) of the Commodity Exchange Act), (iv) in relation to Securities issued by JPMSP, neither (a) a major U.S. institutional investor ("**MUSIV**") (as defined in Rule 15a-6(b)(4) under the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) nor (b) a Qualified Offshore Client (as defined in the General Conditions) or (v) (a) in the case of Securities which are Notes held in definitive form or of Warrants or Certificates (in definitive or global form), has not remained in compliance with the provisions of the relevant Investor Letter of Representations at the time of any acquisition thereof in a transaction to or through the relevant Issuer or the Dealer and (b) in the case of Notes represented by a Global Security, has not remained in compliance with the representations such beneficial holder is deemed to have made, the relevant Issuer may, at its discretion, cause any such Securities to be sold or give notice to the transferee that such Securities will be redeemed pursuant to the General Conditions and the Programme Agreement.

For a description of certain additional restrictions on offers and sales of the Securities, on distribution of this Offering Circular and the relevant Pricing Supplement and of certain agreements and representations that any person who purchases Securities at any time is required to make, or is deemed to have made, as

a condition to purchasing such Security or any legal or beneficial interest therein, see the sections of this Offering Circular entitled "*Subscription and Sale*" and "*Purchaser representations and requirements and transfer restrictions*" below.

The Securities, other than (i) Rule 144A Securities and (ii) Regulation S/Rule 144A Securities and New York Law Notes being offered or sold in accordance with Rule 144A, are being offered and sold outside the United States to non-U.S. Persons in offshore transactions in accordance with Regulation S and may not at any time be legally or beneficially owned by any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer at any time.

Neither the U.S. Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of the Securities and the Guarantees or determined that this Offering Circular is accurate or complete. Any representation to the contrary is a criminal offence. The OCC has not approved or disapproved of the Securities issued by JPMorgan Chase Bank, N.A. or the JPMorgan Chase Bank, N.A. Guarantee or determined that this Offering Circular is accurate or complete.

General restriction on distribution of this Offering Circular

The distribution of this Offering Circular and the offering or sale of the Securities in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular comes are required by the Issuers, the Guarantors, the Dealers and the Arranger to inform themselves about and to observe any such restriction. The publication of this Offering Circular is not intended as an offer or solicitation for the purchase or sale of any financial instrument in any jurisdiction where such offer or solicitation would violate the laws of such jurisdiction.

No other person is authorised to give information on the Securities beyond what is in this Offering Circular and related Pricing Supplement

No person has been authorised to give any information or to make any representation other than as contained in this Offering Circular in connection with the issue or sale of the Securities and, if given or made, such information or representation must not be relied upon as having been authorised by the relevant Issuer, JPMorgan Chase Bank, N.A., as guarantor under the JPMorgan Chase Bank, N.A. Guarantee, JPMorgan Chase & Co. as guarantor under the JPMorgan Chase & Co. Guarantee or any of the Dealers or J.P. Morgan Securities plc as arranger (the "**Arranger**").

The information in this Offering Circular (and any supplement) is subject to change

Neither the delivery of this Offering Circular nor any sale made in connection herewith shall, under any circumstances, create any implication that there has been no change in the affairs of the relevant Issuer or the relevant Guarantor (if applicable) since the date hereof or the date upon which this Offering Circular has been most recently supplemented or replaced or that there has been no adverse change in the financial position of the relevant Issuer or the relevant Guarantor (if applicable), since the date hereof or the date upon which this Offering Circular has been most recently supplemented or replaced or that any other information supplied in connection with the Programme is correct as of any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

Important Swiss notices

The Securities do not constitute a participation in a collective investment scheme in the meaning of the Swiss Federal Act on Collective Investment Schemes ("CISA") and they are neither subject to approval nor supervision by the Swiss Financial Market Supervisory Authority ("FINMA"). Accordingly, investors do not benefit from the specific investor protection provided under the CISA and are exposed to the credit risk of the relevant Issuer and, if applicable, the relevant Guarantor.

Swiss Securities, Swiss Certificates (UBS-cleared) and the Guarantees are governed by and shall be construed in accordance with English law. The Courts of England are to have exclusive jurisdiction to settle any disputes, controversy, proceedings or claim of whatever nature that may arise out of or in connection with any Securities, including the Guarantees.

Swiss Certificates (UBS-cleared) are Securities which are cleared and settled through UBS Switzerland AG (and not SIX SIS AG) and no external clearing of such Securities is possible through any international or domestic clearing system. For a description of the clearing and settlement arrangements, certain additional risks relating to such Securities and restrictions on the transfer of such Securities, see the sections of this Offering Circular entitled "*Risk Factors*", "*Book-Entry Clearing Systems*" and "*Purchaser representations and requirements and transfer restrictions*" below.

Notwithstanding anything else in this Offering Circular, Swiss Certificates (UBS-cleared) will only be FX-linked Securities in the form of Certificates issued by JPMCFC, which may only be settled by way of Cash Settlement and subject to Regulation S. Swiss Certificates (UBS-cleared) will not be listed or admitted to trading on any exchange and will not be publicly offered in Switzerland unless pursuant to and in accordance with an exemption from the prospectus requirement of the FinSA.

Swiss Certificates (UBS-cleared) will not be listed and admitted to trading on the Luxembourg Stock Exchange's Euro MTF.

Disclaimer by Arranger and Dealers

The Arranger and the Dealers have not separately verified the information contained in this Offering Circular. None of the Arranger or any of the Dealers makes any representation, express or implied, or accepts any responsibility, with respect to the accuracy or completeness of any of the information in this Offering Circular. None of the Arranger or any of the Dealers undertakes to review the financial condition or affairs of any of the Issuers or the Guarantors during the life of the arrangements contemplated by this Offering Circular nor to advise any potential purchaser or Holder of Securities of any information coming to the attention of the Arranger or any of the Dealers.

Not a basis for a credit or other evaluation and not a recommendation to purchase Securities

This Offering Circular is not intended to provide the basis of any credit or other evaluation and should not be considered as a recommendation by any of the Issuers, any of the Guarantors, the Arranger or the Dealers that any recipient of this Offering Circular should purchase the Securities. Each potential purchaser of Securities should determine for himself or herself or itself the relevance of the information contained in this Offering Circular and any purchase of Securities should be based upon such investigation as such potential purchaser deems necessary.

Important Dutch notice

None of JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A. has received authorisations from De Nederlandsche Bank NV for the pursuit of the business of a bank in The Netherlands and are not licensed pursuant to section 2:11(1) of the Netherlands Financial Supervision Act (*Wet op het financieel toezicht*). However, they are permitted to issue Securities in The Netherlands under the Netherlands Financial Supervision Act.

Important Jersey notice

The Jersey Financial Services Commission (the "**Commission**") has given, and has not withdrawn, its consent under Article 8 of the Control of Borrowing (Jersey) Order 1958 to the circulation in Jersey of an offer for subscription, sale or exchange of Securities by the Issuers. The Commission is protected by the Control of Borrowing (Jersey) Law 1947, as amended, against liability arising from the discharge of its functions under that law. It must be distinctly understood that, in giving these consents, the Commission does not take any responsibility for the financial soundness of the Issuers or for the correctness of any statements made, or opinions expressed, with regard to them.

Stabilising legend

In connection with the issue of any Tranche of Securities, the Dealer or Dealers (if any) named as the Stabilising Manager(s) (or persons acting on behalf of any Stabilising Manager(s)) in the relevant Pricing Supplement may over-allot Securities or effect transactions with a view to supporting the market price of the Securities at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Securities is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche

of Securities and 60 days after the date of the allotment of the relevant Tranche of Securities. Any stabilisation action or over-allotment shall be conducted in accordance with all applicable laws and rules.

Approvals of the Offering Circular, listing and admission to trading

Euronext Dublin's GEM

This Offering Circular has been approved by the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") as base listing particulars pursuant to the listing and admission to trading rules of Euronext Dublin (the "**GEM Rules**") in connection with the admission to the Official List of Euronext Dublin and to trading on the Global Exchange Market (the "**GEM**") of Euronext Dublin of Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co.

The Form of Pricing Supplement has also been approved by Euronext Dublin pursuant to the GEM Rules in connection with the admission to the Official List of Euronext Dublin and to trading on the GEM of Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co.

Luxembourg Stock Exchange's Euro MTF

This Offering Circular has been approved by the Luxembourg Stock Exchange in connection with the admission to the Official List of the Luxembourg Stock Exchange and to trading on the Luxembourg Stock Exchange's Euro MTF (the "**Euro MTF**") of Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. on the Official List of the Luxembourg Stock Exchange's Euro MTF. This Offering Circular constitutes a prospectus for the purposes of Part IV of the Luxembourg Law dated 16 July 2019 on prospectuses for securities and is valid for a period of 12 months from the date of this Offering Circular.

Switzerland

This Offering Circular has been approved as a base prospectus within the meaning of article 45 FinSA on 22 September 2022 by the Prospectus Office of the SIX Exchange Regulation AG as reviewing body under the FinSA.

In respect of Securities to be listed on the SIX Swiss Exchange AG (the "**SIX Swiss Exchange**"), the relevant Pricing Supplement in respect of such Securities will specify whether an application for such listing and the corresponding application for trading of such Securities on SIX Swiss Exchange or any successor thereto or any such other exchange as the relevant Pricing Supplement may specify has been or will be made.

Other exchanges

Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. may, subject to compliance with all relevant laws, also be listed on other exchanges which are not regulated markets for the purposes of the Markets in Financial Instrument Directive (Directive 2014/65/EU, as amended, "**MiFID II**") or Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA (as amended, "**UK MiFIR**"), as indicated in the relevant Pricing Supplement.

CREST Depository Interests

If specified in the relevant Pricing Supplement, investors may hold indirect interests in Securities issued by JPMSP through Euroclear UK & Ireland Limited ("**CREST**") through the issuance of dematerialised depository interests ("**CDIs**"). CDIs are independent securities constituted under English law and transferred through CREST and will be issued by CREST Depository Limited or any successor thereto pursuant to the global deed poll dated 25 June 2001 (as subsequently modified, supplemented and/or restated). See "*Book-Entry Clearing Systems*" below for more information in relation to CDIs.

Important notice in relation to Securities offered in the Kingdom of Bahrain

In relation to investors in the Kingdom of Bahrain, Securities issued in connection with this Offering Circular and related offering documents must be in registered form and must only be marketed to existing account holders and accredited investors as defined by the Central Bank of Bahrain ("**CBB**") in the

Kingdom of Bahrain where such investors make a minimum investment of at least U.S.$ 100,000, or any equivalent amount in other currency or such other amount as the CBB may determine.

This offer does not constitute an offer of securities in the Kingdom of Bahrain in terms of Article 81 of the Central Bank and Financial Institutions Law 2006 (decree Law No. 64 of 2006). This Offering Circular and related offering documents have not been and will not be registered as a prospectus with the CBB. Accordingly, no Securities may be offered, sold or made the subject of an invitation for subscription or purchase nor will this Offering Circular or any other related document or material be used in connection with any offer, sale or invitation to subscribe or purchase securities, whether directly or indirectly, to persons in the Kingdom of Bahrain, other than as marketing to accredited investors for an offer outside Bahrain.

The CBB has not reviewed, approved or registered the Offering Circular or related offering documents and it has not in any way considered the merits of the securities to be marketed for investment, whether in or outside the Kingdom of Bahrain. Therefore, the CBB assumes no responsibility for the accuracy and completeness of the statements and information contained in this document and expressly disclaims any liability whatsoever for any loss howsoever arising from reliance upon the whole or any part of the content of this document.

No offer of Securities will be made to the public in the Kingdom of Bahrain and this Offering Circular must be read by the addressee only and must not be issued, passed to, or made available to the public generally.

THE CBB AND THE BAHRAIN BOURSE ASSUME NO RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF THE STATEMENTS AND INFORMATION CONTAINED IN THIS OFFERING CIRCULAR AND EXPRESSLY DISCLAIM ANY LIABILITY WHATSOEVER FOR ANY LOSS HOWSOEVER ARISING FROM RELIANCE UPON THE WHOLE OR ANY PART OF THE CONTENTS OF THIS OFFERING CIRCULAR.

EACH OF THE RESPONSIBLE PERSONS (AS DEFINED IN "*IMPORTANT LEGAL INFORMATION*" BELOW) ACCEPTS RESPONSIBILITY FOR THE INFORMATION GIVEN IN THIS OFFERING CIRCULAR AND CONFIRMS THAT, HAVING TAKEN ALL REASONABLE CARE TO ENSURE THAT SUCH IS THE CASE, THE INFORMATION CONTAINED IN THIS OFFERING CIRCULAR IS, TO THE BEST OF ITS KNOWLEDGE, IN ACCORDANCE WITH THE FACTS AND DOES NOT OMIT ANYTHING LIKELY TO AFFECT ITS IMPORT.

Any offer of Securities to investors in the Kingdom of Bahrain will be made by way of private placement. For the avoidance of doubt, no offer of Securities will be made to the public in the Kingdom of Bahrain. All offers of Securities to investors in the Kingdom of Bahrain are therefore intended for "Accredited Investors" only. "Accredited Investors" are defined as:

- individuals holding financial assets (either singly or jointly with their spouse) of U.S.$1,000,000 or more, excluding that person's principal place of residence;
- companies, partnerships, trusts or other commercial undertakings, which have financial assets available for investment of not less than U.S.$ 1,000,000; or
- governments, supranational organisations, central banks or other national monetary authorities, and state organisations whose main activity is to invest in financial instruments (such as state pension funds).

All offers of Securities to investors in the Kingdom of Bahrain will be made by way of private placement and may only be offered to investors in the Kingdom of Bahrain in minimum subscriptions of U.S.$ 100,000 (or equivalent in other currencies).

Important Notice in relation to Securities offered in Peru

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Securities have not and will not be placed, offered, sold, disposed of or distributed in Peru, except in circumstances which do not constitute a public offer of securities in Peru within the meaning of Peruvian securities laws and regulations. Accordingly, the Securities will not be the subject of a duly diffused invitation for subscription, acquisition or purchase of

the Securities in Peru, pursuant to the Peruvian Securities Market Law, Supreme Decree No. 093-2002-EF, as amended and restated.

The Securities may only be offered in Peru, under private offerings, complying with the Securities Market Law and the regulations that govern the investment policy of institutional investors such as, but not restricted to, banking and other financial entities, insurance entities, private pension fund managers, open ended and close ended collective investment schemes.

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge that the Securities Market Superintendence (*Superintendencia del Mercado de Valores*, "**SMV**") does not exercise any supervision over this Offering Circular, nor the management of it, and that the information each Dealer provides to its investors and the other services it provides to them are the sole responsibility of the relevant Dealer. Therefore, this Offering Circular is not intended for any public offer of the Securities in Peru. If the Securities were to be offered under private offerings in Peru, regulations do not impose reporting obligations with SMV, to any of the Issuer or the Dealers.

Defined terms

An index of defined terms is set out on pages 729 to 740 of this Offering Circular.

In this Offering Circular, unless otherwise specified or the context otherwise requires, references to:

J.P. Morgan

- "**JPMorgan Chase**" are to JPMorgan Chase & Co. and its consolidated subsidiaries.
- "**JPMorgan Chase Bank**" are to JPMorgan Chase Bank, N.A. and its consolidated subsidiaries.
- "**JPMorgan Chase Bank, N.A. Guarantee**" are to the guarantee provided by JPMorgan Chase Bank, N.A. (in its capacity as a guarantor) in respect of Securities issued by JPMSP.
- "**JPMorgan Chase & Co. Guarantee**" are to the guarantee provided by JPMorgan Chase & Co. (in its capacity as a guarantor) in respect of Securities issued by JPMCFC.
- "**Guarantee**" or "**relevant Guarantee**" are to (i) in respect of Securities issued by JPMCFC, the JPMorgan Chase & Co. Guarantee, or (ii) in respect of Securities issued by JPMSP, the JPMorgan Chase Bank, N.A. Guarantee (as applicable).
- "**JPMCFC**" are to JPMorgan Chase Financial Company LLC.
- "**JPMSP**" are to J.P. Morgan Structured Products B.V.

Currencies

- "**euro**", "**EUR**" and "**€**" are to the lawful single currency of the member states of the European Union that have adopted and continue to retain a common single currency through monetary union in accordance with European Union treaty law (as amended from time to time).
- "**Sterling**" and "**£**" are to the lawful currency of the United Kingdom.
- "**U.S.$**", "**USD**", "**$**" and "**U.S. Dollars**" are to United States dollars.

JPMCFC restrictions

Notwithstanding anything else in this Offering Circular, JPMCFC will not issue Securities in the form of Warrants and Securities issued by JPMCFC will not be subject to physical delivery.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Offering Circular, including the documents incorporated by reference herein, are forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate", "target", "expect", "estimate", "intend", "plan", "goal", "believe", or other words of similar meaning. Forward-looking statements provide JPMorgan Chase's ("**JPMorgan Chase**" being JPMorgan Chase & Co. together with its consolidated subsidiaries) current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase also may make forward-looking statements in its other documents filed or furnished with the SEC. In addition, JPMorgan Chase's senior management may make forward-looking statements orally to investors, analysts, representatives of the media and others.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond JPMorgan Chase's control. JPMorgan Chase's actual future results may differ materially from those set forth in its forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

- economic, financial, reputational and other impacts of the COVID-19 pandemic;
- local, regional and global business, economic and political conditions and geopolitical events;
- changes in laws, rules and regulatory requirements, including capital and liquidity requirements affecting the businesses of JPMorgan Chase, and the ability of JPMorgan Chase to address those requirements;
- heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase's business practices, including dealings with retail customers;
- changes in trade, monetary and fiscal policies and laws;
- changes in income tax laws, rules and regulations;
- securities and capital markets behaviour, including changes in market liquidity and volatility;
- changes in investor sentiment or consumer spending or savings behaviour;
- ability of JPMorgan Chase to manage effectively its capital and liquidity;
- changes in credit ratings assigned to JPMorgan Chase & Co. or its subsidiaries;
- damage to JPMorgan Chase's reputation;
- ability of JPMorgan Chase to appropriately address social, environmental and sustainability concerns that may arise, including from its business activities;
- ability of JPMorgan Chase to deal effectively with an economic slowdown or other economic or market disruption, including, but not limited to, in the interest rate environment;
- technology changes instituted by JPMorgan Chase, its counterparties or competitors;
- the effectiveness of JPMorgan Chase's control agenda;
- ability of JPMorgan Chase to develop or discontinue products and services, and the extent to which products or services previously sold by JPMorgan Chase require JPMorgan Chase to incur liabilities or absorb losses not contemplated at their initiation or origination;
- acceptance of JPMorgan Chase's new and existing products and services by the marketplace and the ability of JPMorgan Chase to innovate and to increase market share;
- ability of JPMorgan Chase to attract and retain qualified and diverse employees;

- ability of JPMorgan Chase to control expenses;
- competitive pressures;
- changes in the credit quality of JPMorgan Chase's clients, customers and counterparties;
- adequacy of JPMorgan Chase's risk management framework, disclosure controls and procedures and internal control over financial reporting;
- adverse judicial or regulatory proceedings;
- changes in applicable accounting policies, including the introduction of new accounting standards;
- ability of JPMorgan Chase to determine accurate values of certain assets and liabilities;
- occurrence of natural or man-made disasters or calamities, including health emergencies, the spread of infectious diseases, epidemics or pandemics, an outbreak or escalation of hostilities or other geopolitical instabilities, the effects of climate change or extraordinary events beyond the JPMorgan Chase's control, and the JPMorgan Chase's ability to deal effectively with disruptions caused by the foregoing;
- ability of JPMorgan Chase to maintain the security of its financial, accounting, technology, data processing and other operational systems and facilities;
- ability of JPMorgan Chase to withstand disruptions that may be caused by any failure of its operational systems or those of third parties;
- ability of JPMorgan Chase to effectively defend itself against cyber attacks and other attempts by unauthorised parties to access information of JPMorgan Chase or its customers or to disrupt JPMorgan Chase's systems; and
- the other risks and uncertainties detailed in Part I, Item 1A, "*Risk Factors*", in the Annual Report on Form 10-K of JPMorgan Chase & Co. for the year ended 31 December 2021.

Any forward-looking statements made by or on behalf of JPMorgan Chase & Co. speak only as of the date they are made, and JPMorgan Chase & Co. does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made. Investors should, however, consult any further disclosures of a forward-looking nature which JPMorgan Chase & Co. may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, or Current Reports on Form 8-K filed with the SEC.

SUMMARY OF THE PROGRAMME

This summary must be read as an introduction to this Offering Circular and any decision to invest in the Securities should be based on a consideration of this Offering Circular as a whole, including the documents incorporated by reference.

Issuers:

JPMorgan Chase Financial Company LLC ("JPMCFC")

JPMCFC is a limited liability company incorporated under the Limited Liability Company Act of the State of Delaware U.S.A. JPMCFC is an indirect, wholly owned finance subsidiary of JPMorgan Chase & Co., created for the purpose of issuing securities designed to meet investor needs for products that reflect certain risk-return profiles and specific market exposure. The principal executive office of JPMCFC is located in New York, New York, U.S.A.

The legal entity identifier ("**LEI**") in respect of JPMCFC is 549300NJFDJOFYVV6789.

J.P. Morgan Structured Products B.V. ("JPMSP")

JPMSP was incorporated as a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) in Amsterdam, The Netherlands, on 6 November 2006 to exist for an unlimited duration. JPMSP mainly operates under the Dutch Civil Code (*Burgerlijk Wetboek*) and the Dutch Financial Supervision Act (*Wet op het financieel toezicht*). JPMSP's business principally consists of the issuance of securitised derivatives comprising notes, warrants and certificates, including equity-linked, reverse convertible and market participation notes and the subsequent hedging of those risk positions.

The LEI in respect of JPMSP is XZYUUT6IYN31D9K77X08.

JPMorgan Chase Bank, N.A.

JPMorgan Chase Bank, N.A. is a national banking association organised under U.S. federal law. JPMorgan Chase Bank, N.A. is one of the principal bank subsidiaries of JPMorgan Chase & Co. JPMorgan Chase Bank, N.A.'s activities are organised and integrated with the businesses of JPMorgan Chase & Co. JPMorgan Chase Bank operates and is subject to regulation under federal and state banking and other laws in the United States, including the National Banking Act and the Federal Deposit Insurance Act, as well as the applicable laws of each of the various jurisdictions outside the United States in which it does business. The registered office of JPMorgan Chase Bank, N.A. is located in Columbus, Ohio, U.S.A. and its principal place of business is located in New York, New York, U.S.A.

The LEI in respect of JPMorgan Chase Bank, N.A. is 7H6GLXDRUGQFU57RNE97.

JPMorgan Chase & Co.

JPMorgan Chase & Co. is a corporation incorporated under the General Corporation Law of the State of Delaware, U.S.A. JPMorgan Chase's activities are organised, for management reporting purposes, into four business segments, as well as a Corporate segment. The consumer business is the Consumer & Community Banking segment. The Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management segments comprise the wholesale business. JPMorgan Chase operates and is subject to regulation under federal and state banking, securities and other laws in the United States, including the Bank Holding Company Act, the Gramm-Leach-Bliley Act and the Securities Exchange Act of 1934, as well as the applicable laws of each of the various jurisdictions outside the United States in which it does business. The principal

	executive office of JPMorgan Chase & Co. is located in New York, New York, U.S.A. The LEI in respect of JPMorgan Chase & Co. is 8I5DZWZKVSZI1NUHU748.
Guarantors:	**JPMorgan Chase & Co., in respect of Securities issued by JPMCFC.** **JPMorgan Chase Bank, N.A. in respect of Securities issued by JPMSP.** **Securities issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. will not be the subject of a guarantee.**
Substitution of Issuer:	The Issuer of Securities may be substituted (subject, in the case of Securities issued by JPMCFC or JPMSP, to (i) the relevant Issuer or the relevant Guarantor having become obliged (due to a change in law) to pay Additional Amounts in accordance with General Condition 18.1 (*Obligation to pay Additional Amounts*) or (ii) the relevant Issuer or any affiliate(s) of such Issuer or any entity (or entities) acting on behalf of such Issuer incurring a materially increased cost with respect to taxes in performing its obligations in relation to underlying hedging transactions (due to a change in law)) as obligor under such Securities in favour of JPMorgan Chase & Co. or any of its subsidiaries. Whilst the new issuer will provide an indemnity in favour of the Holders of such Securities in relation to any additional tax or duties that become payable solely as a result of such substitution, Holders will not have the right to object to such substitution.
Arranger:	J.P. Morgan Securities plc
Dealers:	J.P. Morgan Securities plc J.P. Morgan SE J.P. Morgan Securities LLC J.P. Morgan Securities (Asia Pacific) Limited J.P. Morgan Securities Australia Limited JPMorgan Securities Japan Co., Ltd or as otherwise specified in the relevant Pricing Supplement.
Calculation Agent:	J.P. Morgan Securities plc J.P. Morgan Securities LLC J.P. Morgan SE or as otherwise specified in the relevant Pricing Supplement. If the Calculation Agent is unable or fails to act as such, then the Issuer shall appoint a leading financial institution to act as such in its place provided that the Holders may appoint a replacement in such circumstances if the Issuer is insolvent. The Calculation Agent has broad discretion in certain circumstances to make certain determinations, including to make adjustments to the terms of the Securities and/or to replace the original Reference Asset(s) with another and/or to cause early redemption of the Securities, any of which may be adverse to Holders of Securities. See in particular "*Overview of the Potential for*

Discretionary Determinations by the Calculation Agent and Issuer" and "*Risk Factors*" below.

The Calculation Agent is an agent of the Issuer and not of the Holders of Securities. You should also be aware that the Calculation Agent is likely to be J.P. Morgan Securities plc, J.P. Morgan Securities LLC or J.P. Morgan SE which are each affiliates of the Issuer. See the section entitled "*Conflicts of Interest*" below.

Regulation S Securities:

Subject to certain exceptions, Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time or offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person, provided, however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer. "**U.S. Person**" means any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S (as may be amended from time to time) or any person which is a "United States person" as defined in section 7701(a)(30) of the U.S. Internal Revenue Code and Treasury regulations thereunder (as may be amended from time to time), as the context requires.

In addition, where Notes or Certificates issued by JPMCFC, JPMSP or JPMorgan Chase Bank, N.A. (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities) are being offered and sold pursuant to an exemption from registration under the Securities Act provided by Regulation S and where the relevant Pricing Supplement specifies "ECI Holder Restrictions" to be applicable, the Securities may not at any time be legally or beneficially owned by any non-U.S. Person whose income, gain or loss, if any, or the Notes or Certificates (if applicable) would be effectively connected with a U.S. trade or business (an "**ECI Holder**").

Certain Regulation S Securities issued by JPMSP and guaranteed by JPMorgan Chase Bank, N.A. under the Programme will be deposited with a common depository for Euroclear and Clearstream, Luxembourg and will be accepted for settlement in CREST via the CREST Depository Interest ("**CDI**") mechanism (such Securities, the "**CREST CDI Securities**").

Rule 144A Securities:

Securities issued by JPMCFC, JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. under the Programme may also be offered and sold pursuant to Rule 144A under the Securities Act to U.S. Persons that are "qualified institutional buyers" (as defined in Rule 144A) ("**QIBs**") and that (i) in the case of Securities issued by JPMSP, are "qualified purchasers" ("**QPs**"), as defined in Section 2(a)(51) and related rules under the U.S. Investment Company Act of 1940, as amended (the "**Investment Company Act**"), (ii) are "eligible contract participants" ("**ECPs**"), as defined in Section 1(a)(12) of the U.S. Commodity Exchange Act, as amended (the "**Commodity Exchange Act**"), (iii) in the case of Securities issued by JPMSP are either (a) "major U.S. institutional investors" ("**MUSIVs**"), as defined in Rule 15a-6(b)(4) under the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), or (b) "qualified offshore clients" ("**Qualified Offshore Clients**") and (iv) (a) in the case of Securities which are Notes held in definitive form or Warrants or Certificates (in definitive or global form), have entered into and remain in compliance with the provisions of an approved investor letter of representations for the benefit of the relevant Dealer, the relevant Issuer and (if applicable) the relevant Guarantor (together with their respective affiliates and control persons) (such letter, for the benefit of such parties, an "**Investor Letter of Representations**") and (b) in the case of Notes represented by a Global

	Security, have remained in compliance with the representations such beneficial holders are deemed to have made (each such QIB, an "**Eligible Investor**").
Regulation S/Rule 144A Securities:	Certain Securities issued by JPMSP under the Programme may also be offered and sold concurrently (A) to or for the benefit of persons who are either affiliates (as defined in Rule 405 under the Securities Act) of the Issuer or who (i) are not U.S. persons (as such term is defined in Rule 902(k) of Regulation S) in accordance with Regulation S in "offshore transactions" (as such term is defined in Rule 902(h) of Regulation S); (ii) have entered into and remain in compliance with the provisions of an Investor Letter of Representations; and (iii) are "qualified investors", as defined in the EU Prospectus Regulation or UK Prospectus Regulation (as applicable), or any other purchaser that is approved by the relevant Dealer from time to time and (B) to U.S. Persons that are QIBs pursuant to Rule 144A under the Securities Act and that (i) are QPs, (ii) are ECPs, (iii) are either (a) MUSIVs or (b) Qualified Offshore Clients, and (iv) have entered into and remain in compliance with the provisions of an Investor Letter of Representations (each such QIB, an "**Eligible Investor**").
New York Law Notes:	Certain Notes issued by JPMorgan Chase & Co. under the Programme will be governed by the laws of the State of New York if so specified in the relevant Pricing Supplement. New York Law Notes may be offered and sold outside the United States to persons that are either an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer or not a U.S. Person ("**Regulation S New York Law Notes**") or within the United States to certain qualified investors that are both QIBs and Eligible Investors ("**Rule 144A New York Law Notes**").
Status of Securities:	The Securities are unsecured and unsubordinated obligations of the relevant Issuer.
Status of the Guarantees:	**The JPMorgan Chase & Co. Guarantee in respect of Securities issued by JPMCFC is an unsecured and unsubordinated obligation of JPMorgan Chase & Co., which ranks *pari passu* with all other unsecured and unsubordinated indebtedness of JPMorgan Chase & Co.** **The JPMorgan Chase Bank, N.A. Guarantee in respect of Securities issued by JPMSP is an unsecured and unsubordinated obligation of JPMorgan Chase Bank, N.A., which ranks *pari passu* with all other unsecured and unsubordinated indebtedness of JPMorgan Chase Bank, N.A., subject to a preference in favour of certain U.S. domestic deposit liabilities and except for other obligations that are subject to any priorities or preferences.**
Method of Issue:	The Securities will be issued in series. Each series may be issued in tranches having the same terms as other Securities of such series other than the issue date and the issue price.
Form of Securities:	Securities may be issued in bearer form or in registered form. In respect of bearer Securities, if: • "Temporary Bearer Global Security exchangeable for a Permanent Bearer Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in bearer form will be represented on issue by a temporary global security in bearer form exchangeable upon certification of non-U.S. beneficial ownership for a permanent global security in bearer form and, in the case of Securities other than German Securities, exchangeable, in limited circumstances, for Securities in definitive registered form; or • "Permanent Bearer Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in bearer form will be

represented on issue by a permanent global security in bearer form and, in the case of Securities other than German Securities, exchangeable, in limited circumstances, for Securities in definitive registered form.

No Securities will be issued in definitive bearer form.

In respect of registered Securities, if:

- "Temporary Registered Global Security which is exchangeable for a Permanent Registered Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in registered form will be represented on issue by a temporary global security in registered form exchangeable upon certification of non-U.S. beneficial ownership for a permanent global security in registered form exchangeable, in limited circumstances, for Securities in definitive registered form; or

- "Permanent Registered Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in registered form will be represented on issue by a permanent global security in registered form exchangeable, in limited circumstances, for Securities in definitive registered form.

Global Securities may be deposited on the issue date with a common depository on behalf of Euroclear Bank SA/NV and Clearstream Banking, société anonyme, Clearstream Banking AG, Eschborn, The Depository Trust Company and/or the Swiss Domestic Settlement System, SIX SIS AG, or with a depository for such other clearing system as specified in the General Conditions and/or the relevant Pricing Supplement.

Swiss Securities and Swiss Certificates (UBS-cleared)

Swiss Securities shall be either (i) issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of SIX SIS AG as custodian (*Verwahrungsstelle*) or (ii) initially represented by a single Global Security in registered form that is deposited with SIX SIS AG as central depository. Swiss Securities will be exchangeable for definitive Securities in registered form only under the limited circumstances described in the General Conditions. No Holder of Swiss Securities shall, at any time, have the right to effect or demand the conversion of such Swiss Securities into, or the delivery of, Securities in definitive form.

Swiss Certificates (UBS-cleared) are cleared and settled through UBS Switzerland AG (and not SIX SIS AG) and shall only be issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of UBS Switzerland AG (and not SIX SIS AG) as custodian (*Verwahrungsstelle*). UBS Switzerland AG has the right but not the obligation at any time to transfer the main register (*Hauptregister*) to another UBS group entity licensed as a Swiss bank or securities firm, subject to the prior written consent of the Product Provider, such consent not to be unreasonably withheld.

Swiss Certificates (UBS-cleared) are held with and cleared and settled through UBS Switzerland AG (and not SIX SIS AG). Swiss Certificates (UBS-cleared) may only be acquired by, transferred to and held by Holders having a securities account with UBS Switzerland AG or holding in a securities account with another provider which, in turn, has a securities account with UBS Switzerland AG. Any transfers or purported transfers of Swiss Certificates (UBS-cleared) will be in accordance with the terms and conditions (including any related

requirements, restrictions and prohibitions) determined by UBS Switzerland AG (or, if applicable, the relevant institution other than UBS Switzerland AG where the Holder maintains a securities account), and the Issuer and Product Provider have no responsibility therefor and shall have no liability for any losses suffered by Holders or others in relation to failed or delayed transfers or other consequences of a transfer.

References to UBS Switzerland AG include any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable. References to the Product Provider mean J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

French Securities

French Securities may only be issued by JPMSP and shall be in dematerialised form and deposited with Euroclear France S.A. as central depository. French Securities may be issued in bearer form (*au porteur*) or in registered form (*au nominatif*).

Danish Notes

Danish Notes may only be issued by JPMSP. Danish Notes shall be registered in uncertificated and dematerialised book-entry form with Euronext Securities Copenhagen (VP Securities A/S) in accordance with all applicable Danish laws, regulations and rules. Danish Notes will not be issued in definitive form.

Finnish Securities

Finnish Securities may only be issued by JPMSP. Finnish Securities shall be registered in uncertificated and dematerialised book-entry form with Euroclear Finland Oy, the Finnish Central Securities Depository in accordance with all applicable Finnish laws, regulations and rules. Finnish Securities will not be issued in definitive form.

Norwegian Securities

Norwegian Securities may only be issued by JPMSP. Norwegian Securities shall be registered in uncertificated and dematerialised electronic book-entry form with the Norwegian Central Securities Depository in accordance with all applicable Norwegian laws, regulations and rules. Norwegian Securities will not be issued in definitive form.

Swedish Securities

Swedish Securities may only be issued by JPMSP. Swedish Securities shall be registered in uncertificated and dematerialised electronic book-entry form with Euroclear Sweden AB, the Swedish Central Securities Depository in accordance with all applicable Swedish laws, regulations and rules. Swedish Securities will not be issued in definitive form.

Rule 144A Securities and Rule 144A New York Law Notes

Securities and New York Law Notes issued under the Programme may be sold pursuant to Rule 144A under the Securities Act to a person who (A) is (i) a QIB, (ii) in relation to Securities issued by JPMSP, a QP, (iii) an ECP and (iv) in relation to Securities issued by JPMSP, either (a) a MUSIV or (b) a Qualified Offshore Client and (B) (i) in the case of Securities which are Notes held in definitive form or Warrants or Certificates (in definitive or global form), who has entered into, and has remained in compliance with, the relevant Investor Letter of Representations at the time of such transfer or (ii) in the case of Notes

represented by a Global Security, who has remained in compliance with the representations such beneficial holder is deemed to have made. The Registered Global Security in respect of Rule 144A Securities will be deposited with the DTC Custodian on behalf of DTC and/or a Relevant Clearing System or a depository therefor.

Regulation S/Rule 144A Securities

Regulation S/Rule 144A Securities issued by JPMSP may be sold to certain investors outside the United States in "offshore transactions" (as defined in Regulation S) in accordance with Regulation S and to certain QIBs in the United States in accordance with Rule 144A of the Securities Act. The Registered Global Security in respect of Regulation S/Rule 144A Securities will be deposited with a depository that is common to Euroclear and Clearstream, Luxembourg.

CREST CDI Securities

CREST CDI Securities shall be in registered form and represented by a permanent registered global security exchangeable, in limited circumstances, for Securities in definitive registered form. However, investors will hold interests in CREST CDI Securities through the holding of CDIs.

Currency: The Securities may be denominated in such currency as specified in the relevant Pricing Supplement, subject to compliance with applicable legal and/or regulatory and/or central bank requirements.

Maturity: Such maturity as specified in the relevant Pricing Supplement, subject, in relation to specific currencies, to compliance with applicable legal and/or regulatory and/or central bank requirements. JP Morgan Chase & Co. will not issue Securities which have a maturity of less than one year from the date of their issue.

Issue Price: The price and amount of Securities to be issued will be determined by the Issuer and the relevant Dealer at the time of issue in accordance with prevailing market conditions. In particular, the Issue Price in respect of any Securities may take into account (amongst other things) amounts with respect to commissions relating to the issue and sale of such Securities and amounts relating to the hedging of the Issuer's obligations under such Securities.

Denomination: Such denominations as specified in the relevant Pricing Supplement, provided that any Notes or Certificates issued by JPMCFC or JPMSP (i) which have a maturity of less than one year and (ii) the terms of which require JPMCFC or JPMSP to pay the investor at maturity or on redemption, as the case may be, an amount equal to at least 100 per cent. of the Specified Denomination of each such Note or of the Notional Amount of each such Certificate, as the case may be, must have a minimum denomination of £100,000 (or its equivalent in other currencies) provided that, for the avoidance of doubt, the foregoing shall not apply in circumstances where Article 5(1) of the UK Financial Services and Markets Act 2000 (Regulated Activities) Order is not applicable in respect of the relevant Security.

Interest – Notes only: The relevant Pricing Supplement shall specify whether the Notes shall bear interest and, if so, whether at fixed rates, floating rates, variable rates or rates linked to the performance of one or more Reference Assets.

The amount of interest payable on an Interest Payment Date in respect of fixed rate Notes will typically be a fixed interest amount specified in the relevant Pricing Supplement. In circumstances where interest applies to a period other than the typical interest period, the interest payable will be calculated on the basis of the relevant day count fraction.

	The amount of interest payable on an Interest Payment Date in respect of floating rate Notes will be calculated as specified in the relevant Pricing Supplement on the basis of either (a) a floating rate under a notional interest rate swap transaction, (b) a reference rate appearing on a screen page of a commercial information service or (c) such other basis as may be agreed between the Issuer and the relevant Dealer. The amount of interest payable on an Interest Payment Date in respect of variable rate Notes will be calculated as specified in the relevant Pricing Supplement. The amount of interest payable on an Interest Payment Date in respect of Notes whose interest is linked to the performance of one or more Reference Assets will be calculated as specified in the relevant Pricing Supplement. Payments of interest in respect of Zero Coupon Notes shall be payable where any principal is overdue. The rate of interest shall be equal to the Amortisation Yield. Interest will accrue on Partly Paid Notes on the paid-up nominal amount of such Partly Paid Notes.
Redemption – Notes only:	The relevant Pricing Supplement may specify the date of redemption of Notes (or that the Notes may be redeemed at such other time or on such event as specified in the relevant Pricing Supplement) and the amount payable or asset(s) deliverable on redemption, which may be linked to the performance of one or more Reference Assets. The relevant Pricing Supplement may specify that the Notes shall be redeemed earlier than the scheduled maturity date pursuant to the exercise of a call option by the Issuer or pursuant to the exercise of a put option by the Holders of the Notes. Notes may also be redeemed at the option of the Issuer for taxation reasons, or for reasons of illegality, as specified below. Notes may also be redeemed earlier than the scheduled maturity date following the occurrence of certain events in accordance with the relevant Specific Product Provisions and/or as specified in the relevant Pricing Supplement.
Certificate Coupons – Certificates only:	The relevant Pricing Supplement shall specify whether the Certificates will pay a coupon and, if so, whether such coupon will be at a fixed rate or a floating rate and whether or not payment of the coupon is contingent upon the performance of any Reference Asset(s).
Redemption – Certificates only:	The relevant Pricing Supplement may specify the date of redemption of Certificates (or that the Certificates may be redeemed at such other time or on such event as specified in the relevant Pricing Supplement) and the amount payable or asset(s) deliverable on redemption, which may be linked to the performance of one or more Reference Asset(s). The relevant Pricing Supplement may specify that the Certificates shall be redeemed earlier than the scheduled redemption date pursuant to the exercise of a call option by the Issuer or pursuant to the exercise of a put option by the Holders of the Certificates. Certificates may also be redeemed earlier than the scheduled redemption date following the occurrence of certain events in accordance with the relevant Specific Product Provisions and/or as specified in the relevant Pricing Supplement.

Exercise – Warrants only:

Warrants create options exercisable by the relevant Holder. Unless the Warrants are automatically exercisable, there is no obligation upon any Holder to exercise his or her Warrant(s) nor, in the absence of such exercise, any obligation on the relevant Issuer or the relevant Guarantor (if applicable) to pay any amount in respect of the Warrants.

Warrants may be subject to a maximum or minimum number of Warrants exercisable on any date.

Early Termination of Certificates and Warrants:

Certificates and Warrants may also be redeemed at the option of the Issuer for taxation reasons or for reasons of illegality, as specified below.

Payment Disruption:

If the Calculation Agent determines that a "**Payment Disruption Event**" has occurred prior to or on any date on which payments in respect of any Securities shall fall due, then the Maturity Date, Redemption Date, Settlement Date or any relevant payment date (as applicable) in respect of such Securities may be postponed and the Issuer's payment obligations under the Securities may be reduced to zero.

Physical Settlement:

If the relevant Pricing Supplement specifies that "Physical Settlement" is applicable to any Series of Securities, the delivery of any Reference Asset Amount(s) will be made in accordance with the terms of the relevant Pricing Supplement. Physical settlement will not apply to CREST CDI Securities.

Each purchaser of Securities for which the relevant Pricing Supplement specifies that "physical settlement" of shares of a company is applicable will be deemed to have made certain representations on and after the date of purchase – see "*Purchaser representations and requirements and transfer restrictions*" - "*Representations relating to Securities that may be settled by Physical Settlement of Shares*".

If the relevant Pricing Supplement specifies that "Reference Asset Transfer Notice" is applicable, in order to receive the Reference Asset Amount, the Holder of the Security must deliver a duly completed Reference Asset Transfer Notice on or prior to the relevant time on the Physical Settlement Cut-off Date. The Reference Asset Transfer Notice requires the Holder to make certain representations:

- to pay delivery expenses;
- (where the Reference Asset Amount comprises shares in a company) to make the representations referred to in the paragraph immediately above; and
- to make a certification in relation to applicable U.S. securities and other laws.

Failure to make such certifications could result in payment of a cash amount in lieu of delivering the Reference Asset Amount.

If the Calculation Agent determines that a Settlement Disruption Event has occurred (which is essentially, an event beyond the control of the Issuer, the Guarantor or any Hedging Entity as a result of which, delivery of the Reference Asset Amount(s) by or on behalf of the Issuer or the Guarantor, in accordance with the General Conditions, is illegal or is not practicable, or as a result of which the relevant Clearing System cannot clear the transfer of the relevant Reference Asset Amount(s)) on the delivery date, delivery of the Reference Asset Amount(s) may be postponed until the next day on which delivery may occur and on which no Settlement Disruption Event occurs. For so long as

delivery of the Reference Asset Amount(s) is illegal or is not practicable, the relevant Issuer or (if applicable) the Guarantor may also have the right to pay the Disruption Cash Settlement Price in lieu of delivering the Reference Asset Amount.

Negative Pledge: None.

Cross Default: None.

Events of Default: Events of Default include (a) in respect of Securities issued by any of the Issuers, a failure to pay or deliver amounts payable or deliverable in respect of the Securities, subject to certain grace periods (if applicable), (b) in respect of Securities issued by JPMCFC, the insolvency of JPMCFC or repudiation of the JPMorgan Chase & Co. Guarantee (see the next paragraph, however) (c) in respect of Securities issued by JPMSP, the insolvency of JPMSP or repudiation of the JPMorgan Chase Bank, N.A. Guarantee, or the insolvency of JPMorgan Chase Bank, N.A., (d) in respect of Securities issued by JPMorgan Chase Bank, N.A., the insolvency of JPMorgan Chase Bank, N.A., or (e) in respect of Securities issued by JPMorgan Chase & Co., the insolvency of JPMorgan Chase & Co.

It will not constitute an Event of Default under Securities issued by JPMCFC for a payment or other covenant default by JPMorgan Chase & Co. to occur or be continuing under the JPMorgan Chase & Co. Guarantee or for any event to occur or be continuing that is directly or indirectly related to JPMorgan Chase & Co. becoming subject to receivership, bankruptcy, insolvency, liquidation, resolution, reorganisation or other similar proceeding. Securities issued by JPMCFC will not have the benefit of any cross-default or cross-acceleration with any other indebtedness of JPMCFC or JPMorgan Chase & Co.

In respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., if an Event of Default has occurred and is continuing, the Holder of any Security may declare such Security immediately due and payable. In respect of Securities issued by JPMCFC: (a) if an Event of Default relating to a failure to pay amounts payable in respect of the Securities has occurred and is continuing, the Holders of (i) in the case of Notes, not less than 25 per cent. of the aggregate principal amount of the outstanding Notes of the relevant Series and (ii) in the case of Certificates, not less than 25 per cent. of the total number of the outstanding Certificates of the relevant Series, may declare all Securities of such Series to be immediately due and payable; or (b) if an Event of Default relating to the insolvency of JPMCFC has occurred and is continuing, such Security shall automatically, and without any declaration or any other action on the part of any Holder of such Security, become immediately due and payable. In such case, unless such Security is a Zero Coupon Note or has a Minimum Redemption Amount, the amount payable on such unscheduled early redemption shall be the Early Payment Amount. Unless the relevant Pricing Supplement specifies "Early Payment Amount 3" as applicable or the Securities are New York Law Notes, the Early Payment Amount on acceleration following an Event of Default shall be an amount determined by the Calculation Agent as the fair market value of the Securities, determined using its internal models and methodologies and taking into account all relevant factors (but disregarding any change in the creditworthiness of the Issuer and (if applicable) the Guarantor since the Issue Date) (and if the relevant Pricing Supplement specifies "Early Payment Amount 2" to be applicable) less all costs incurred by the Issuer or any affiliate in connection with such early redemption or settlement.

If the relevant Pricing Supplement specifies "Early Payment Amount 3" to be applicable or the Security is a New York Law Note, the Early Payment Amount will be an amount equal to the outstanding nominal amount of such Security,

including, if applicable, any accrued interest to (but excluding) the date of redemption or settlement of the Securities.

If the Security is a Zero Coupon Note, the amount payable on such unscheduled early redemption shall be the Amortised Face Amount, which is an amount equal to the scheduled Final Redemption Amount discounted at an amortisation yield (compounded annually).

If the Security has a Minimum Redemption Amount, the amount payable on such unscheduled early redemption following an Event of Default shall be the greater of (x) the monetary amount repayable at scheduled maturity which is not conditional or subject to the performance of any underlying asset or other variable and (y) unless the relevant Pricing Supplement specifies 'Early Payment Amount 3' to be applicable, an amount representing the fair market value of the Security determined using its internal models and methodologies by reference to such factors as the Calculation Agent considers to be appropriate (but disregarding any change in the creditworthiness of the Issuer and (if applicable) the Guarantor since the Issue Date) (and if the Pricing Supplement specifies "Early Payment Amount 2" to be applicable) less all costs incurred by the Issuer or any affiliate in connection with such early redemption or settlement.

Illegality: The Issuer may, at its option, redeem or terminate the Securities early at the Early Payment Amount if it determines that the performance of its obligations under the Securities and/or the performance by the relevant Guarantor under the Guarantee has become unlawful.

Taxation: Subject to customary and other exceptions (and unless "Gross up" is specified not to be applicable in the relevant Pricing Supplement), as set forth in the General Conditions, the relevant Issuer will pay additional amounts should withholding taxes become payable on payments of principal or interest by or within a Relevant Jurisdiction (other than to a Holder that is resident within such Relevant Jurisdiction). However, in no event will additional amounts be payable in respect of (i) U.S. withholding taxes on Rule 144A Securities issued by JPMCFC, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., (ii) taxes imposed pursuant to FATCA or (iii) if "Exclude Section 871(m) Taxes from Gross Up" is specified to be applicable in the relevant Pricing Supplement, taxes imposed pursuant to Section 871(m) of the U.S. Internal Revenue Code.

The Issuer may, at its option, early redeem or terminate some or all of the Securities upon notice early at the Early Payment Amount in the event that the Issuer determines that (i) it has, or there is a substantial likelihood that it will, become subject to withholding imposed on a payment made to it on account of the Issuer's inability to comply with the reporting requirements imposed by FATCA as a result of any Holder failing to comply with requests for information or certification from the Issuer which would enable the Issuer to avoid such withholding, (ii) there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA, or (iii) there is a substantial likelihood that a Series of Securities will be treated, for U.S. federal income tax purposes, as being in bearer form (as applicable). The Issuer may also redeem or terminate the Securities where (i) it is obliged to pay additional amounts as determined above or (ii) (if "Early Redemption for Tax on Underlying Hedge Transactions" is specified to be applicable in the relevant Pricing Supplement) in respect of Securities issued by JPMSP, if certain taxation events occur with respect to the Issuer's (or its affiliates') underlying hedge transactions.

Reference Assets: The settlement amount, redemption amount, interest amount, certificate coupon and/or early payment amount may be calculated by reference to: (a) a share or a basket of shares and/or one or more Depositary Receipts and/or a formula specified in the relevant Pricing Supplement ("**Share Linked Securities**"); (b)

an index or a basket of indices and/or a formula specified in the relevant Pricing Supplement ("**Index Linked Securities**"); (c) a commodity or a basket of commodities or a commodity index or a basket of commodity indices and/or a formula specified in the relevant Pricing Supplement ("**Commodity Linked Securities**"); (d) a foreign exchange rate or a basket of foreign exchange rates and/or a formula specified in the relevant Pricing Supplement ("**FX Linked Securities**"); (e) a mutual fund or a basket of mutual funds and/or formula specified in the relevant Pricing Supplement ("**Fund Linked Securities**"); (f) a bond or a basket of bonds of a reference entity and/or formula specified in the relevant Pricing Supplement ("**Bond Linked Securities**"); (g) the credit of a specified entity or entities (the "**Reference Entity**") ("**Credit Linked Notes**") or (h) a combination of any of the above and/or one or more other types of Reference Assets.

Securities which are linked to Reference Assets are subject to provisions which provide for various adjustments and modifications of their terms and alternative means of valuation of the underlying Reference Asset(s) in certain circumstances, any of which provisions could be exercised by the Calculation Agent in a manner which has an adverse effect on the market value and/or amount payable or deliverable in respect of such Securities.

Market Access Participation Notes and other "market access" Securities:

"**Market Access Participation Notes**" are Notes issued at a price linked to the value of the relevant underlying shares on particular trading days during a fixing period. At maturity (or early redemption) a Holder will not receive the principal amount of its investment but instead will receive an amount calculated as a percentage of the weighted average sale price of the underlying shares over a valuation period (or such other price as may be specified in the relevant Pricing Supplement) less deductions for local taxes (if any) and other costs which would have been incurred had the underlying shares been held by such Holder (qualifying as a foreign or non-resident institutional investor in respect of the relevant country) directly (unless otherwise set forth in the relevant Pricing Supplement). Generally, returns to investors in Market Access Participation Notes will be payable in U.S. dollars or another currency other than the currency in which the shares are denominated and returns will therefore be subject to exchange rate risk. **Investors in Market Access Participation Notes (and other "Market Access" Securities") may lose up to the entire value of their investment.**

Low Exercise Price Warrants:

"Low Exercise Price Warrants" are Warrants which are linked to the value of the relevant underlying shares during a specified period. If cash dividends are declared and paid on the relevant underlying shares during specified dividend periods, Holders will receive such amounts, less deductions for local taxes (if any) and other costs incurred by the Issuer. On the settlement date, Holders will essentially receive an amount calculated as the difference between a percentage of the notional weighted average sale price (converted into the settlement currency, if necessary) of the underlying shares over a period (or such other price as may be specified in the relevant Pricing Supplement) minus a strike price, less deductions for local taxes (if any) and other costs incurred by the Issuer (unless otherwise set forth in the relevant Pricing Supplement). If the difference between such percentage of the notional weighted average sale price minus the strike price is less than or equal to zero, then the Holders will generally not receive any return on the Warrants, which will expire valueless. Generally, returns (by way of dividend amount(s) and/or settlement amount) to investors in Low Exercise Price Warrants will be payable in U.S. dollars or another currency other than the currency in which the relevant underlying shares are denominated and returns will therefore be subject to exchange rate risk. **Investors in Low Exercise Price Warrants may therefore lose up to the entire value of their investment (unless otherwise set forth in the relevant Pricing Supplement).**

If the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Provisions" are applicable:

- only if the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Investor Agreement Letter" is applicable, investors in such Warrants ("**Saudi Arabia LEPWs**") will be required to execute and deliver to the Dealer an investor agreement letter containing certain representations, warranties, consents, undertakings and indemnities (the "**Saudi Arabia LEPW Investor Agreement Letter**") as a condition of any purchase of such instrument, and before such Warrants may be subsequently transferred by such investor; and

- the terms of the Warrants may be adjusted or the Warrants may be terminated prior to their scheduled maturity at the Early Payment Amount at the discretion of the Issuer (i) to give effect to any instruction given by the Saudi Arabian Capital Market Authority (the "**CMA**") or (ii) only if the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Investor Agreement Letter" is applicable, if a Holder is in breach of any of the agreements made in the Saudi Arabia LEPW Investor Agreement Letter, or any of the representations or warranties made by the Holder therein are not or no longer true and accurate.

See "*Risk Factors*", "*Annex 6 – Low Exercise Price Warrant Provisions*" and "*Purchaser Representations and Requirements and Transfer Restrictions - Saudi Arabia LEPW Investor Agreement Letter*" below.

Market Disruption Events or FX Disruption Events linked to Reference Assets:

If the Calculation Agent determines that a "**Market Disruption Event**" (which is essentially an event that may affect the valuation of the Reference Asset or, depending on the type of Reference Asset, possibly its content or formula including, for example, early closure or trading disruption or imposition of a "limit price" on a relevant exchange or failure to publish the value of the Reference Asset or various other events and circumstances) and/or an "**FX Disruption Event**" has occurred or exists on any type of valuation date, such date may be postponed and/or alternative provisions in respect of the relevant Reference Asset may apply, which provisions could be exercised by the Calculation Agent in a manner which has an adverse effect on the market value and/or amount payable or deliverable in respect of the Securities.

Adjustments to conditions of Securities that are linked to Reference Assets:

In respect of Share Linked Securities, the occurrence of a Potential Adjustment Event, certain Extraordinary Events (including a Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting) or Additional Disruption Events (including a Change in Law and, if applicable, an Insolvency Filing and/or Hedging Disruption), may result in the Calculation Agent (i) making adjustments to the terms of the Securities and calculations as described in the General Conditions and/or (ii) in certain cases, causing early redemption of the Securities and/or (iii) substituting the applicable underlying Share for another.

In respect of Index Linked Securities, the occurrence of certain events in relation to an underlying Index (such as, for example, the replacement of the Index Sponsor, modification, cancellation or disruptions to the Index, subsequent correction of relevant Index Levels or a Change in Law and, if applicable, Hedging Disruption) may lead to the Calculation Agent making changes in the terms of the Securities and/or adjustments to relevant Index Levels as described in the General Conditions and could lead to the Securities being redeemed early.

In respect of Commodity Linked Securities, the occurrence of certain adjustment events in relation to an underlying Commodity Index (such as, for example, the cancellation and non-replacement of a commodity index, the failure to publish the index level or a non-scheduled material modification to

	the formula for, or calculation of, the commodity index) may lead to the Calculation Agent making changes in the terms of the Securities and/or adjustments to relevant prices as described in the General Conditions and could lead to the Securities being redeemed early. In respect of Fund Linked Securities, the occurrence of a Potential Adjustment Event, certain Fund Events (including a Fund Merger Event, Fund Termination, Nationalisation, Insolvency or certain global events, net asset value and performance issues, trading matters, exceptional failures and regulatory and legal constraints), a failure to pay full redemption proceeds in cash or a payment in kind to a holder of Fund Shares in the Fund or Additional Disruption Events (including a Change in Law and, if applicable, a Hedging Disruption), may result in the Calculation Agent (i) making adjustments to the terms of the Securities and calculations as described in the General Conditions and/or (ii) in certain cases, causing early redemption of the Securities, (iii) postponement the redemption of the Securities by up to one year and/or (iv) substituting the applicable underlying Fund for another underlying asset. In respect of Bond Linked Securities, the occurrence of an Adjustment Event (Residual Risk Event, Settlement/Custodial Event or Tax Event) or Additional Disruption Events (Change in Law and/or Hedging Disruption) may lead to the Calculation Agent making changes in the terms of the Securities and/or adjustments to relevant amounts payable under the Securities as described in the General Conditions and could lead to the Securities being redeemed early.
Adjustments to conditions of Securities that are not linked to Reference Assets:	In respect of Securities not linked to Reference Assets, the occurrence of a Disruption Event (a Change in Law (Hedge) or a Hedging Disruption), may result in the Calculation Agent (i) making adjustments to the terms of the Securities and/or (ii) in certain cases, causing early redemption of the Securities.
Governing law of the Securities:	Save as provided below, Securities shall be governed by English law. Danish law shall govern the title to and registration of Danish Notes, Finnish law shall govern the title to and registration of Finnish Securities, Norwegian law shall govern the registration of Norwegian Securities and Swedish law shall govern the registration of Swedish Securities so long as such securities are held within the Relevant Clearing System in Denmark, Finland, Norway and Sweden, respectively. French Securities shall be governed by French law. German Securities shall be governed by German law. New York Law Notes and Rule 144A Securities (other than Rule 144A Notes) shall be governed by the laws of the State of New York.
Governing law of the Guarantees:	The JPMorgan Chase Bank, N.A. Guarantee shall be governed by English law and the JPMorgan Chase & Co. Guarantee shall be governed by the laws of the State of New York.
Listing and Admission to Trading:	Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. may be unlisted or may be listed on the Official List and admitted to trading on the Luxembourg Stock Exchange's Euro MTF and/or admitted to the Official List and to trading on the Global Exchange Market of Euronext Dublin (the "**GEM**") and/or listed on the SIX Swiss Exchange AG and admitted to trading on SIX Swiss Exchange, any combination of the above or as otherwise specified in the relevant Pricing Supplement.

No Securities will be listed or admitted to trading on a regulated market (for the purposes of MiFID II) in the European Economic Area or regulated market (for the purposes of UK MiFIR) in the United Kingdom.

Rating: **Securities may be rated or unrated. A security rating is not a recommendation to buy, sell or hold Securities and may be subject to suspension, change or withdrawal at any time by the assigning rating agency.**

Selling Restrictions: Restrictions apply to offers, sales or transfers of the Securities in various jurisdictions and any person who purchases Securities at any time is required to make, or is deemed to have made, certain agreements and representations as a condition to purchasing such Securities or any legal or beneficial interest therein. See "*Subscription and Sale*" and "*Purchaser representations and requirements and transfer restrictions*" below. In all jurisdictions offers, sales or transfers may only be effected to the extent lawful in the relevant jurisdiction.

Compulsory Transfer or Redemption: ***Securities other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities***

Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time or offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person; provided, however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer.

In addition, where Notes or Certificates issued by JPMCFC, JPMSP or JPMorgan Chase Bank, N.A (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities) are being offered and sold pursuant to an exemption from registration under the Securities Act provided by Regulation S and where the relevant Pricing Supplement specifies "ECI Holder Restrictions" to be applicable, the Securities may not at any time be legally or beneficially owned by any non-U.S. Person whose income, gain or loss, if any, or the Notes or Certificates (if applicable) would be effectively connected with a U.S. trade or business (an "**ECI Holder**").

If the Issuer determines at any time that any Security (other than a Rule 144A Security, a Rule 144A New York Law Note, a Regulation S/Rule 144A Security or a CREST CDI Security) is legally or beneficially owned by any U.S. Person that is not an affiliate of the Issuer, the Issuer may direct the Holder to sell or transfer such Security to a person who either is not a U.S. Person or is an affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold either to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not a U.S. Person or to an affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of the Security or (y) give notice to the Holder that the Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

If the Issuer determines at any time that (a) any CREST CDI Security is legally or beneficially owned by a U.S. Person that is not an affiliate of the Issuer or (b) any transfer of a CREST CDI Security has been effected other than to a person that is not an affiliate of the Issuer and who (i) is not (A) a U.S. person (as such term is defined in Rule 902(k) of Regulation S) and (B) resident or

otherwise located in the United States, and (ii) has entered into and remains in compliance with the provisions of the relevant Investor Letter of Representations (for the purposes of this paragraph only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer such CREST CDI Security to a person who is either a Permitted Transferee or an affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such CREST CDI Security within such period, the Issuer may at its discretion (x) cause such CREST CDI Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee or an affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such CREST CDI Security or (y) give notice to the Holder that such CREST CDI Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

If (a) ECI Holder Restrictions apply and (b) the Issuer determines at any time that any Note or Certificate issued by JPMCFC, JPMSP or JPMorgan Chase Bank, N.A. (other than a Rule 144A Security, a Rule 144A New York Law Note, a Regulation S/Rule 144A Security or a CREST CDI Security) is legally or beneficially owned by (x) any U.S. Person that is not an affiliate of the Issuer or (y) an ECI Holder, the Issuer may direct the Holder to sell or transfer such Security to a person who is either (i) not a U.S. Person and not an ECI Holder or (ii) is an affiliate of the Issuer, in each case, within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (A) cause such Security to be sold either to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is (i) not a U.S. Person and not an ECI Holder or (ii) to an affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of the Security or (B) give notice to the Holder that the Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

Rule 144A Securities and Rule 144A New York Law Notes

If the Issuer determines at any time that any transfer of a Rule 144A Security or a Rule 144A New York Law Note has been effected other than to a person who (A) is (i) a QIB, (ii) in relation to Securities issued by JPMSP, a QP, (iii) an ECP and (iv) in relation to Securities issued by JPMSP either a Qualified Offshore Client or MUSIV and (B) (i) in the case of Securities which are Notes held in definitive form or Certificates or Warrants (in definitive or global form), has entered into and remains in compliance with the relevant Investor Letter of Representations and (ii) in the case of Notes represented by a Global Security, has remained in compliance with the representations such beneficial holder is deemed to have made (for the purposes of this paragraph only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer such Security to a person who is a Permitted Transferee within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Security or (y) give notice to the Holder that such Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

Regulation S/Rule 144A Securities

If the Issuer determines at any time that any transfer of a Regulation S/Rule 144A Security has been effected other than (A) to a person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer who (i) is not a U.S. person (as such term is defined in Rule 902(k) of Regulation S) in accordance with Regulation S in "offshore transactions" (as such term is defined in Rule 902(h) of Regulation S); (ii) has entered into and remains in compliance with the provisions of the relevant Investor Letter of Representations; and (iii) is a "qualified investor", as defined in the EU Prospectus Regulation or UK Prospectus Regulation (as applicable) or any other purchaser that is approved by the Dealer from time to time; or (B) to a person who is (i) a QIB, (ii) a QP, (iii) an ECP and (iv) either (a) a MUSIV or (b) a Qualified Offshore Client and (v) who has entered into and has remained in compliance with the relevant Investor Letter of Representations at the time of such transfer, (each person satisfying either sub-clause (A) or (B), for the purposes of this paragraph only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer such Security to a person who is a Permitted Transferee or to an affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee or to an affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Security or (y) give notice to the Holder that such Warrant will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

Indian Participation Securities

Securities for which the Reference Asset is an equity security or index listed or proposed to be listed on an Indian securities exchange (an "**Indian Participation Security**") may not be legally or beneficially owned by (i) a person that is a resident of the Republic of India (an "**Indian Resident**") in terms of Section 2(v) of the Foreign Exchange Management Act, 1999; (ii) a citizen of India who is a not an Indian Resident (a "**Non-Resident Indian**" as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019; (iii) an individual resident outside India who is registered as an overseas citizen of India (an "**Overseas Citizen of India**") as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019, together with Indian Resident and Non-Resident Indian, each, a "**Restricted Entity**"); or (iv) any person/entity which is not eligible to, directly or indirectly, subscribe to, deal in or otherwise be involved in Indian Participation Securities as specifically identified by the Securities and Exchange Board of India ("**SEBI**") or otherwise in accordance with the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019, and notifications, circulars, rules and guidelines issued by SEBI from time to time (collectively, the "**FPI Regulations**") (together with any Restricted Entity, each, an "**Ineligible Entity**"). If the Issuer determines at any time that any Holder of an Indian Participation Security is an Ineligible Entity, the Issuer may at its discretion (i) cause the Indian Participation Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not an Ineligible Entity, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of the Indian Participation Security or (ii) give notice to the Holder that the Indian Participation Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

Each prospective purchaser of Indian Participation Securities will be required to execute and deliver to the Dealer or any of its affiliates a letter of investor representations as may be amended from time to time due to legal and regulatory changes. Investors interested in purchasing such Securities should specifically refer to the India specific representations in the Purchaser Representations and Requirements and Transfer Restrictions set out herein (and in the Agency Agreement) and ensure that the conditionalities mentioned therein are satisfied.

Risk Factors relating to the Securities:

Securities are structured products which will typically include embedded derivatives, and investors must understand their terms including the potential risk of loss of investment and the relation to the performance of the Reference Asset(s) before investing: No person should invest in Securities unless that person understands the terms and conditions of the Securities and, in particular, the extent of the exposure to potential loss, together with the characteristics and risks inherent in any relevant Reference Asset(s) and the relevant Issuer and the relevant Guarantor (if applicable). Investors should reach an investment decision only after careful consideration, with their advisers, of the suitability of such Securities in the light of their particular financial circumstances and investment objectives and risk profile, all information set forth or incorporated by reference herein and in any supplements hereto, the information regarding the relevant Securities set out in the relevant Pricing Supplement and any particular Reference Asset(s) to which the value of the relevant Securities may relate. Investors in Securities should consult their own legal, tax, accountancy, regulatory, investment or other professional advisers to assist them in determining the suitability of the Securities for them as an investment or if they are in any doubt about the contents of this Offering Circular and any related Pricing Supplement.

Investors in Securities may lose up to the entire value of their investment: Depending on the particular payout terms of the Securities as shall be set forth in the relevant Pricing Supplement, the Securities may not provide for full repayment of principal or initial purchase price at maturity and therefore investors in such Securities may lose some or all of their capital on maturity, depending on the performance of the Reference Asset(s). Even if the relevant Securities do provide for full (or at least partial) repayment of principal or initial purchase price at maturity, the investor is exposed to the credit risk of the Issuer and (if applicable) the Guarantor and will lose up to the entire value of their investment if the Issuer and (if applicable) the Guarantor become insolvent, go bankrupt or are otherwise unable to fulfil the payment, delivery or other obligations under the Securities (e.g. see the last risk factor below (*Risk Factors relating to the Issuers and the Guarantors*)). **Investors may also lose some or all of their investment if (i) the Securities are not held to maturity by the investor, or (ii) are redeemed early, or (iii) the terms of the Securities are adjusted in a materially adverse way (in accordance with the terms and conditions of the Securities).**

Holders of Securities have no rights in relation to the underlying Reference Asset(s): The obligations of the Issuer and the Guarantor (if applicable) are not secured and investors in Securities do not have any rights in respect of any Reference Assets referenced by such Securities.

The market value of Securities may be volatile and adversely affected by a number of factors: The market value of the Securities may be highly volatile and may be adversely affected by a number of factors, such as (i) the credit rating of JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. (which credit ratings may move independently of each other), (ii) the performance of the underlying Reference Asset(s), (iii) the application of leverage in the structure of the Securities and (iv) various other factors.

An active trading market for the Securities is not likely to develop: Securities may have no liquidity or the market for such Securities may be limited and this may adversely impact their value or the ability of an investor in Securities to dispose of them.

Investors in Securities are exposed to the performance of the relevant Reference Assets: Investors in Securities must clearly understand (if necessary, in consultation with the investor's own legal, tax, accountancy, regulatory, investment or other professional advisers) the nature of the Reference Assets and how the performance thereof may affect the pay-out and value of the Securities. The past performance of a Reference Asset is not indicative of future performance. Actual results will be different, and such differences may be material. Postponement or alternative provisions for the valuation of Reference Assets may have an adverse effect on the value of the Securities. There are significant risks in investing in Securities which reference one or more emerging market Reference Asset(s). There is generally foreign exchange currency exposure in respect of Securities which provide payment to be made in a currency which is different to the currency of the Reference Asset(s).

Risk Factors relating to the Issuers and the Guarantors:

Investors in Securities are exposed to the creditworthiness of the relevant Issuer and (if applicable) the relevant Guarantor: JPMorgan Chase is a major, global financial services group and, as such, faces a variety of risks that are substantial and inherent in its businesses, and which may affect the relevant Issuer's and (if applicable) the relevant Guarantor's ability to fulfil their respective payment, delivery or other obligations under the relevant Securities. These risks include liquidity risk, market risk, credit risk, operational risk, reputational risk, the adequacy of risk management disclosure controls or control over financial reporting, legal, regulatory and compliance risks, litigation and other contingent liabilities, competition risks, the financial condition of clients, customers and counterparties, adverse economic, monetary, political or legal developments, cross-border and foreign exchange risk, catastrophic events, risks from estimates and valuations and risks relating to strategy. JPMorgan Chase's results of operations have in the past been, and may in the future be, adversely affected by unfavourable U.S. and international financial market and economic conditions.

As a finance subsidiary of JPMorgan Chase & Co., JPMCFC has no independent operations beyond the issuance and administration of its securities. Aside from the initial capital contribution from an affiliate, JPMCFC is dependent upon payments from one or more of its affiliates under intercompany loans and other intercompany agreements to meet its obligations under the Securities it issues. It will not constitute an Event of Default under Securities issued by JPMCFC for a payment or other covenant default by JPMorgan Chase & Co. to occur or be continuing under the JPMorgan Chase & Co. Guarantee or for any event to occur or be continuing that is directly or indirectly related to JPMorgan Chase & Co. becoming subject to receivership, bankruptcy, insolvency, liquidation, resolution, reorganisation or other similar proceeding. Securities issued by JPMCFC will not have the benefit of any cross-default or cross-acceleration with any other indebtedness of JPMCFC or JPMorgan Chase & Co.

The principal business of JPMSP is the raising and borrowing of money for JPMorgan Chase entities by issuing securities and undertaking other financing activity. Generally, the proceeds of such activity will be delivered to other JPMorgan Chase entities and JPMSP will be dependent on receipt of funds or on the delivery of other obligations from hedging transactions entered into with other JPMorgan Chase entities to fulfil their respective payment, delivery or other obligations under the relevant Securities. Accordingly, JPMSP is exposed to the same risks that affect JPMorgan Chase Bank, N.A.

The above is a summary only: see "*Risk Factors*" below.

Conflicts of Interest:

JPMorgan Chase affiliates (including the Issuers and the Guarantors) are subject to certain conflicts of interest between their own interests and those of Holders of Securities, including:

- An offering of Securities does not constitute an expression of the view of JPMorgan Chase, or a recommendation by JPMorgan Chase of, any Reference Asset or the constituents or components of any Reference Asset, including through an investment in the Securities;
- JPMorgan Chase may have economic interests that are adverse to those of the Holders of the Securities as a result of JPMorgan Chase's hedging and other trading activities;
- JPMorgan Chase may have economic interests that are adverse to those of the Holders of the Securities as a result of JPMorgan Chase's business activities;
- J.P. Morgan Securities plc or another JPMorgan Chase entity, in their role as calculation agent, reference market dealer and/or reference dealer or custodian of the Bond in the case of Bond Linked Securities may have economic interests that are adverse to those of the Holders of the Securities;
- JPMorgan Chase may have published research, expressed opinions or provided recommendations that are inconsistent with investing in or holding the Securities, and may do so in the future. Any such research, opinions or recommendations could affect the value of any relevant Reference Asset, and, therefore, the market value of the Securities; and
- A JPMorgan Chase affiliate may be the sponsor of an index or strategy which is referenced by a Security.
- JPMorgan Chase's participation in foreign exchange markets will be conducted without regard to the Securities and may affect the value of the Securities.
- JPMorgan Chase entities may engage in business with the issuer of a Reference Asset and may not disclose information about such issuer to Holders of the Securities.

The above is a summary only: see the sections entitled "*Conflicts of Interest*" below and Risk Factor 7 (*Risks related to conflicts of interest of JPMorgan Chase and its discretionary powers as Issuer and Calculation Agent under the Securities*).

SUMMARY OF THE PROGRAMME FOR PURPOSES OF THE FINSA

*This summary constitutes a summary of the Offering Circular, for purposes of articles 40(3) and 43 of the Swiss Financial Services Act ("**FinSA**"). This summary is to be read and understood as an introduction to the Offering Circular dated 22 September 2022 (as supplemented from time to time). The key information on the Securities and any public offers or admission to trading of the Securities will be supplemented in the relevant Pricing Supplement.*

Any decision by an investor to invest in the Securities should not be based on this summary but on a consideration of this Offering Circular as a whole, including the documents incorporated by reference, and the relevant Pricing Supplement. This summary is therefore subject to the information contained in the remainder of the Offering Circular and the relevant Pricing Supplement.

Potential investors should be aware that any liabilities for this summary under article 69 of the FinSA is limited to cases where the information contained herein is misleading, inaccurate or inconsistent when read together with the other parts of the Offering Circular and the relevant Pricing Supplement.

This summary has been prepared and is being provided solely for the purpose of an offer of the Securities in Switzerland pursuant to the FinSA and it must not be used for any other purpose or in any other context than for which it is prepared and provided. This summary must not be used for, or in connection with, and does not constitute any offer to, or solicitation by, any person in a jurisdiction other than Switzerland.

Issuers:

JPMorgan Chase Financial Company LLC ("**JPMCFC**")

JPMCFC is a limited liability company incorporated under the Limited Liability Company Act of the State of Delaware U.S.A. on 30 September 2015. JPMCFC is domiciled in the State of Delaware, U.S.A. The principal executive office of JPMCFC is located at 383 Madison Avenue, New York, New York 10179, United States of America.

The LEI in respect of JPMCFC is 549300NJFDJOFYVV6789.

J.P. Morgan Structured Products B.V. ("**JPMSP**")

JPMSP was incorporated as a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) in Amsterdam, The Netherlands, on 6 November 2006 to exist for an unlimited duration. JPMSP is domiciled in the Netherlands. JPMSP's registered office is at Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands.

The LEI in respect of JPMSP is XZYUUT6IYN31D9K77X08.

JPMorgan Chase Bank, N.A.

JPMorgan Chase Bank, N.A. is a national banking association organised under U.S. federal law and domiciled in Columbus, Ohio, U.S.A. JPMorgan Chase Bank, N.A.'s registered office is at 1111 Polaris Parkway, Columbus, Ohio 43240, United States of America.

The LEI in respect of JPMorgan Chase Bank, N.A. is 7H6GLXDRUGQFU57RNE97.

JPMorgan Chase & Co.

JPMorgan Chase & Co. is a corporation incorporated under the General Corporation Law of the State of Delaware, U.S.A., and is domiciled in the State of Delaware, U.S.A. JPMorgan Chase & Co.'s registered office is at 383 Madison Avenue, New York, New York 10179, United States of America.

The LEI in respect of JPMorgan Chase & Co. is 8I5DZWZKVSZI1NUHU748.

Guarantor: **JPMorgan Chase & Co. in respect of Securities issued by JPMCFC.**

JPMorgan Chase & Co. is a corporation incorporated under the General Corporation Law of the State of Delaware, U.S.A., and is domiciled in the State of Delaware, U.S.A. JPMorgan Chase & Co.'s registered office is at 383 Madison Avenue, New York, New York 10179, United States of America.

The LEI in respect of JPMorgan Chase & Co. is 8I5DZWZKVSZI1NUHU748.

JPMorgan Chase Bank, N.A. in respect of Securities issued by JPMSP.

JPMorgan Chase Bank, N.A. is a national banking association organised under U.S. federal law and domiciled in Columbus, Ohio, U.S.A. JPMorgan Chase Bank, N.A.'s registered office is at 1111 Polaris Parkway, Columbus, Ohio 43240, United States of America.

The LEI in respect of JPMorgan Chase Bank, N.A. is 7H6GLXDRUGQFU57RNE97.

Description of Securities: The Securities issued under the Offering Circular and publicly offered in Switzerland and/or listed and/or admitted to trading on SIX Swiss Exchange or any other trading venue in Switzerland constitute investment products and leverage products pursuant to the categorization of the Swiss Structured Products Association SSPA.

The product types and products features are based on the categories and additional product features used in the SSPA Swiss Derivatives Map 2022 issued by the Swiss Structured Products Association SSPA (see https://www.sspa.ch/en). The product types and product features are not universal and, in different markets and jurisdictions, different products types and product features may be used for the same product.

Each Security issued under this Offering Circular will be linked to one or more Reference Assets, which may be a share or a depositary receipt, a share index, a commodity, a commodity index, a foreign exchange rate, a fund (regulated or unregulated, mutual, exchange traded tracker or hedge), the credit of a specified entity or entities, a consumer price or other inflation index, an interest rate or constant maturity swap rate or any other rate, a loan or bond or other debt obligation or certificate, a basket of the above or any combination of any of the above or other types of reference asset(s) (the "**Reference Assets**"). The performance of the Securities will depend to a certain degree on the performance of such Reference Asset(s).

Types of Securities: The following product types may be issued under this Offering Circular and publicly offered in Switzerland and/or listed and/or admitted to trading on SIX Swiss Exchange or any other trading venue in Switzerland:

(a) Capital Protection Products (SSPA Category **11**)

- Capital Protection Note with Participation (formerly known as: "Capital Protection Certificate with Participation") (SSPA Category **1100**)
- Capital Protection Note with Barrier (formerly known as: " Barrier Capital Protection Certificate") (SSPA Category **1130**)

- Capital Protection Note with Twin-Win (formerly known as: "Capital Protection Certificate with Twin Win") (SSPA Category **1135**)
- Capital Protection Note with Coupon (formerly known as: "Capital Protection Certificate with Coupon") (SSPA Category **1140**)

(b) Yield Enhancement Products (SSPA Category **12**)

- Discount Certificate (SSPA Category **1200**)
- Barrier Discount Certificate (SSPA Category **1210**)
- Reverse Convertible (SSPA Category **1220**)
- Barrier Reverse Convertible (SSPA Category **1230**)
- Conditional Coupon Reverse Convertible (formerly known as: "Express Certificate without Barrier") (SSPA Category **1255**)
- Conditional Coupon Barrier Reverse Convertible (formerly known as: "Express-Barrier-Certificate") (SSPA Category **1260**)

(c) Participation Products (SSPA Category **13**)

- Tracker Certificate (SSPA Category **1300**)
- Outperformance Certificate (SSPA Category **1310**)
- Bonus Certificate (SSPA Category **1320**)
- Bonus Outperformance Certificate (SSPA Category **1330**)
- Twin-Win Certificate (SSPA Category **1340**)
- Airbag Certificate
- Buy-the-Dip Certificate

(d) Investment Products with Additional Credit Risk (formerly known as: "Products with Reference Entities") (SSPA Category **14**)

- Credit Linked Notes (SSPA Category **1400**)
- Conditional Capital Protection Note with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Conditional Capital Protection") (SSPA Category **1410**)
- Yield Enhancement Certificate with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Yield Enhancement") (SSPA Category **1420**)
- Participation Certificate with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Participation") (SSPA Category **1430**)

(e) Leverage Products (SSPA Category **20**)

- Warrant (SSPA Category **2100**)
- Spread Warrant (SSPA Category **2110**)
- Warrant with Knock-Out (SSPA Category **2200**)
- Mini-Future (SSPA Category **2210**)
- Constant Leverage Certificate (SSPA Category **2300**)
- Other Products
- Accummulator Securities

Key information on the Securities:	The key information on the Securities (including information on the offer and admission to trading) for a specific public offer or a specific admission to trading of Securities in Switzerland will be set out in the relevant Pricing Supplement. The relevant Pricing Supplement for such Securities will be filed with the Reviewing Body and published in accordance with the FinSA as soon as the Pricing Supplement for such Securities is available, but, in the case of an admission to trading, in any case no later than the first day of trading for such Securities on the SIX Swiss Exchange or other exchange or trading venue, as applicable. Such Pricing Supplement is not subject to review or approval by the Reviewing Body.
Key information on the public offer or admission to trading:	The key information on a specific public offer or a specific admission to trading of the Securities in Switzerland will be set out in the relevant Pricing Supplement.
Approval of the Offering Circular by the Reviewing Body:	This Offering Circular is dated and was approved as a base prospectus within the meaning of article 45 of the FinSA by SIX Exchange Regulation AG, Hardturmstrasse 201, 8005 Zurich, Switzerland on 22 September 2022.

RISK FACTORS

*An investment in Securities involves substantial risks and is a riskier investment than an investment in ordinary debt or equity securities. Also, your Securities are not equivalent to investing directly in the underlying reference asset(s) (the "**Reference Asset(s)**") (if any).*

Each of the relevant Issuer and (if applicable) each of the relevant Guarantor believes that the following factors may affect its ability to fulfil its respective obligations in respect of the Securities and (if applicable) the Guarantee and are material for the purpose of assessing the market risks and other risks associated with the Securities. All of these factors are contingencies which may or may not occur and none of the relevant Issuer or (if applicable) the relevant Guarantor expresses a view on the likelihood of any such contingency occurring. The factors discussed below regarding the risks of acquiring or holding any Securities are not exhaustive, and additional risks and uncertainties that are not presently known to the relevant Issuer or (if applicable) the relevant Guarantor, or that any of the relevant Issuer or (if applicable) the relevant Guarantor currently believes to be immaterial, could also have a material impact on the business operations or financial condition of the relevant Issuer or (if applicable) the relevant Guarantor or on the Securities.

You should consider carefully the following discussion of risks to help you decide whether or not the Securities are suitable for you.

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Risk warning: You may lose some or all of your investment in the Securities.

The terms of your particular Securities may not provide for scheduled minimum payment of the face value or issue price of the Securities at maturity or upon early redemption. In such case,

depending on the performance of the Relevant Asset(s) (if any) and how much you paid for the Securities, you may lose some and up to all of your investment.

The payment of any amount due under the Securities is subject to the credit risk of the relevant Issuer and (if applicable) the relevant Guarantor. The Securities are unsecured obligations. They are not deposits and are not protected under any deposit protection insurance scheme. Therefore, if the relevant Issuer and (if applicable) the relevant Guarantor fail or are otherwise unable to meet their payment (or delivery) obligations on the Securities, you will lose up to the entire value of your investment. See Risk Factor 1 "*The Securities are subject to the credit risk of the relevant Issuer and (if applicable) the relevant Guarantor and the risk of U.S. insolvency and resolution considerations as well as the risk relating to other recovery and resolution proceedings*" below.

You may also lose some or all of your investment where:

- **the market price of your Securities prior to maturity may be significantly lower than the purchase price you pay for them. Consequently, if you sell your Securities before the stated maturity date, you may receive far less than your original invested amount. See Risk Factor 2.2 (*The market value and the price at which you may be able to sell your Securities prior to maturity may be at a substantial discount to the original issue price of the Securities, and you may lose some or up to all of your investment in any such secondary sale*) below;**

- **your Securities may be redeemed in certain circumstances for reasons not in the control of the Issuer and, in such case, the early redemption amount paid to you may be less than what you paid for the Securities. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) below; or**

- **your Securities are subject to certain adjustments in accordance with the terms and conditions of the Securities that may result in the scheduled amount to be paid or asset(s) to be delivered upon redemption being reduced to, or being valued at an amount less than, your initial investment.**

FACTORS THAT MAY AFFECT THE ABILITY OF THE RELEVANT ISSUER TO FULFIL ITS OBLIGATIONS UNDER THE SECURITIES AND (IF APPLICABLE) THE RELEVANT GUARANTOR'S OBLIGATIONS UNDER THE GUARANTEE

1. The Securities are subject to the credit risk of the relevant Issuer and (if applicable) the relevant Guarantor and the risk of U.S. insolvency and resolution considerations as well as the risk relating to other recovery and resolution proceedings

1.1 General

The Securities are subject to the credit risk of the relevant Issuer and (if applicable) the relevant Guarantor, and changes in their respective credit ratings and credit spreads may adversely affect the market value of the Securities. Investors are dependent on the relevant Issuer's and (if applicable) the relevant Guarantor's ability to pay (or deliver, as applicable) all amounts due on the Securities, and therefore investors are subject to the credit risk of such JPMorgan Chase entities and to changes in the market's view of the creditworthiness of such JPMorgan Chase entities. Any decline in such credit ratings or increase in the credit spreads charged by the market for taking credit risk on such JPMorgan Chase entities is likely to adversely affect the value of the Securities. If the relevant Issuer and (if applicable) the relevant Guarantor were to default on its payment or other obligations, you may not receive any amounts owed to you under the Securities and could lose up to your entire investment.

1.2 Status of the JPMorgan Chase Bank, N.A. Guarantee and of Securities issued by JPMorgan Chase Bank, N.A.

The JPMorgan Chase Bank, N.A. Guarantee and the Securities issued by JPMorgan Chase Bank, N.A. (i) are unsecured and unsubordinated general obligations of JPMorgan Chase Bank, N.A. and not of any of its affiliates, (ii) are not savings accounts or deposits of JPMorgan Chase Bank, N.A. or any bank or non-bank subsidiary of JPMorgan Chase Bank, N.A. and (iii) will rank pari passu with all other unsecured and unsubordinated indebtedness of JPMorgan Chase Bank, N.A., except obligations, including U.S. domestic deposits of JPMorgan Chase Bank, N.A., that are subject to any priorities or preferences by law.

Neither the Securities issued by JPMorgan Chase Bank, N.A. nor the JPMorgan Chase Bank, N.A. Guarantee are deposits insured by the FDIC, the U.S. Deposit Insurance Fund or any other governmental agency or instrumentality.

In particular, U.S. federal legislation adopted in 1993 provides for a preference in right of payment of certain claims made in the liquidation or other resolution of any FDIC-insured depository institution, which includes JPMorgan Chase Bank, N.A. The statute requires claims to be paid in the following order:

- first, administrative expenses of the receiver;
- second, any deposit liability of the institution;
- third, any other general or senior liability of the institution not described below;
- fourth, any obligation subordinated to depositors or general creditors not described below; and
- fifth, any obligation to shareholders or members (including any depository institution holding company or any shareholder or creditor of such company).

Deposit liabilities has been interpreted by the FDIC to include any deposit payable at an office of the insured depository institution in the United States, and not to include international banking facility deposits or deposits payable at an office of the insured depository institution outside the United States.

1.3 **Status of the JPMorgan Chase & Co. Guarantee and of Securities issued by JPMorgan Chase & Co.**

The JPMorgan Chase & Co. Guarantee and the Securities issued by JPMorgan Chase & Co. (i) are unsecured and unsubordinated general obligations of JPMorgan Chase & Co. and not of any of its affiliates, (ii) are not savings accounts or deposits of JPMorgan Chase & Co. or any bank or non-bank subsidiary of JPMorgan Chase & Co. and (iii) will rank pari passu with all other unsecured and unsubordinated indebtedness of JPMorgan Chase & Co., except obligations, that are subject to any priorities or preferences by law.

Neither the Securities issued by JPMorgan Chase & Co. nor the JPMorgan Chase & Co. Guarantee are deposits insured by the FDIC, the U.S. Deposit Insurance Fund or any other governmental agency or instrumentality.

1.4 **There are risks that may affect the relevant Issuer's and (if applicable) the relevant Guarantor's ability to fulfil their respective obligations under the Securities and (if applicable) the Guarantee**

The following factors could materially adversely affect the business of JPMorgan Chase and consequently the ability of the relevant Issuer to fulfil its obligations under the Securities and (if applicable) the ability of the relevant Guarantor to fulfil its obligations under the Guarantee. Each of the risks described below could adversely affect the trading value (if any) of the Securities. Investors could lose some or all of their investment.

(a) ***Regulatory, Legal and Reputation Risks***

JPMorgan Chase's businesses are highly regulated, and the laws, rules and regulations that apply to JPMorgan Chase have a significant impact on its business and operations.

JPMorgan Chase is a financial services firm with operations worldwide. JPMorgan Chase must comply with the laws, rules and regulations that apply to its operations in all of the jurisdictions around the world in which it does business. Regulation of the financial services industry is extensive.

The regulation and supervision of financial services firms has expanded significantly over an extended period of time. The increased regulation and supervision of JPMorgan Chase has affected the way that it conducts its business and structures its operations. JPMorgan Chase could be required to make further changes to its business and operations in response to expanded supervision or to new or changed laws, rules and regulations. These types of developments could result in JPMorgan Chase incurring additional costs in connection with complying with applicable laws, rules and regulations, which could reduce its profitability. Furthermore, JPMorgan Chase's entry into or acquisition of a new business or an increase in its principal investments may require JPMorgan Chase to comply with additional laws, rules, and regulations.

In response to new and existing laws, rules and regulations and expanded supervision, JPMorgan Chase has in the past been and could in the future be, required to:

- limit the products and services that it offers;
- reduce the liquidity that it can provide through its market-making activities;
- refrain from engaging in business opportunities that it might otherwise pursue;
- pay higher taxes, assessments, levies or other governmental charges, including in connection with the resolution of tax examinations;
- incur losses with respect to fraudulent transactions perpetrated against its customers;
- dispose of certain assets, and do so at times or prices that are disadvantageous;
- impose restrictions on certain business activities; or

- increase the prices that it charges for products and services, which could reduce the demand for them.

In particular, JPMorgan Chase's businesses and results of operations could be adversely impacted by changes in laws, rules and regulations, or changes in the application, interpretation or enforcement of laws, rules and regulations, that:

- proscribe or institute more stringent restrictions on certain financial services activities
- impose new requirements relating to the impact of business activities on environmental, social and governance ("**ESG**") concerns, the management of risks associated with those concerns and the offering of products intended to achieve ESG-related objectives; or
- introduce changes to antitrust or anti-competition laws, rules and regulations that adversely affect the business activities of JPMorgan Chase.

Differences in financial services regulation can be disadvantageous for JPMorgan Chase's businesses.

The content and application of laws, rules and regulations affecting financial services firms sometimes vary according to factors such as the size of the firm, the jurisdiction in which it is organised or operates, and other criteria. For example:

- larger firms such as JPMorgan Chase are often subject to more stringent supervision and regulation;
- financial technology companies and other non-traditional competitors may not be subject to banking regulation, or may be supervised by a national or state regulatory agency that does not have the same resources or regulatory priorities as the regulatory agencies which supervise more diversified financial services firms; or
- the financial services regulatory framework in a particular jurisdiction may favour financial institutions that are based in that jurisdiction.

These types of differences in the regulatory framework can result in JPMorgan Chase losing market share to competitors that are less regulated or not subject to regulation, especially with respect to unregulated financial products.

There can also be significant differences in the ways that similar regulatory initiatives affecting the financial services industry are implemented in the U.S. and in other countries and regions in which JPMorgan Chase does business. For example, when adopting rules that are intended to implement a global regulatory standard, a national regulator may introduce additional or more restrictive requirements, which can create competitive disadvantages for financial services firms, such as JPMorgan Chase, that may be subject to those enhanced regulations.

Legislative and regulatory initiatives outside the U.S. could require JPMorgan Chase to make significant modifications to its operations and legal entity structure in the relevant countries or regions in order to comply with those requirements. These include laws, rules and regulations that have been adopted or proposed relating to:

- the establishment of locally-based intermediate holding companies or operating subsidiaries;
- requirements to maintain minimum amounts of capital or liquidity in locally-based subsidiaries;
- the separation (or "ring fencing") of core banking products and services from markets activities;
- the resolution of financial institutions;

- requirements for executing or settling transactions on exchanges or through central counterparties ("**CCPs**");
- position limits and reporting rules for derivatives;
- governance and accountability regimes;
- conduct of business and control requirements; and
- restrictions on compensation.

These types of differences, inconsistencies and conflicts in financial services regulation have required and could in the future require JPMorgan Chase to:

- divest assets or restructure its operations;
- absorb increased operational, capital and liquidity costs;
- change the prices that it charges for its products and services;
- curtail the products and services that it offers to its customers and clients;
- curtail other business opportunities, including acquisitions or principal investments, that it otherwise would have pursued; or
- incur higher costs for complying with different legal and regulatory frameworks.

Any or all of these factors could harm JPMorgan Chase's ability to compete against other firms that are not subject to the same laws, rules and regulations or supervisory oversight, or harm JPMorgan Chase's businesses, results of operations and profitability.

Resolving regulatory investigations can subject JPMorgan Chase to significant penalties and collateral consequences, and could result in higher compliance costs or restrictions on its operations.

JPMorgan Chase's operations are subject to heightened oversight and scrutiny from regulatory authorities in many jurisdictions. JPMorgan Chase has paid significant fines, provided other monetary relief, incurred other penalties and experienced other repercussions in connection with resolving investigations and enforcement actions by governmental agencies. JPMorgan Chase could become subject to similar regulatory resolutions or other actions in the future, and addressing the requirements of any such resolutions or actions could result in JPMorgan Chase incurring higher operational and compliance costs, including devoting substantial resources to the required remediation, or needing to comply with other restrictions.

In connection with resolving specific regulatory investigations or enforcement actions, certain regulators have required JPMorgan Chase and other financial institutions to admit wrongdoing with respect to the activities that gave rise to the resolution. These types of admissions can lead to:

- greater exposure in litigation;
- damage to reputation;
- disqualification from doing business with certain clients or customers, or in specific jurisdictions; or
- other direct and indirect adverse effects.

Furthermore, U.S. government officials have demonstrated a willingness to bring criminal actions against financial institutions and have required that institutions plead guilty to criminal offences or admit other wrongdoing in connection with resolving regulatory investigations or

enforcement actions. Resolutions of this type can have significant collateral consequences for the subject financial institution, including:

- loss of clients, customers and business;
- restrictions on offering certain products or services; and
- losing permission to operate certain businesses, either temporarily or permanently.

JPMorgan Chase expects that:

- it and other financial services firms will continue to be subject to heightened regulatory scrutiny and governmental investigations and enforcement actions;
- regulators will continue to require that financial institutions be penalised for actual or deemed violations of law with formal and punitive enforcement actions, including the imposition of significant monetary and other sanctions, rather than resolving these matters through informal supervisory actions; and
- regulators will be more likely to pursue formal enforcement actions and resolutions against JPMorgan Chase to the extent that it has previously been subject to other governmental investigations or enforcement actions.

If JPMorgan Chase fails to meet the requirements of any resolution of a governmental investigation or enforcement action, or to maintain risk and control processes that meet the heightened standards and expectations of its regulators, it could be required to, among other things:

- enter into further resolutions of investigations or enforcement actions;
- pay additional regulatory penalties or enter into judgments; or
- accept material regulatory restrictions on, or changes in the management of, its businesses.

In these circumstances, JPMorgan Chase could also become subject to other sanctions, or to prosecution or civil litigation with respect to the conduct that gave rise to an investigation or enforcement action.

JPMorgan Chase can face greater risks of non-compliance and incur higher operational and compliance costs under laws, rules and regulations relating to anti-money laundering, economic sanctions, embargo programs and anti-corruption.

JPMorgan Chase must comply with laws, rules and regulations throughout the world relating to anti-money laundering, economic sanctions, embargo programs and anti-corruption which can increase its risks of non-compliance and costs associated with the implementation and maintenance of complex compliance programs. A violation of any of these legal and regulatory requirements could subject JPMorgan Chase, or individual employees, to regulatory enforcement actions as well as significant civil and criminal penalties. In addition, certain national and multi-national bodies and governmental agencies outside the U.S. have adopted laws, rules or regulations that conflict with or prohibit a firm such as JPMorgan Chase from complying with laws, rules and regulations to which it is otherwise subject, creating conflict of law issues that also increase its risks of non-compliance in those jurisdictions.

JPMorgan Chase's operations and financial results can be negatively impacted in countries with less predictable legal and regulatory frameworks.

JPMorgan Chase conducts existing and new business in certain countries in which the application of the rule of law is inconsistent or less predictable, including with respect to:

- the absence of a statutory or regulatory basis or guidance for engaging in specific types of business or transactions

- conflicting or ambiguous laws, rules and regulations, or the inconsistent application or interpretation of existing laws, rules and regulations
- uncertainty concerning the enforceability of contractual, intellectual property or other obligations
- difficulty in competing in economies in which the government controls or protects all or a portion of the local economy or specific businesses, or where graft or corruption may be pervasive, and
- the threat of arbitrary regulatory investigations, civil litigations or criminal prosecutions, the termination of licences required to operate in the local market or the suspension of business relationships with governmental bodies.

If the application of the laws, rules and regulations in a particular country is susceptible to producing inconsistent or unexpected outcomes, this can create a more difficult environment in which JPMorgan Chase conducts its business and could negatively affect JPMorgan Chase's operations and reduce its earnings with respect to that country. For example, conducting business could require JPMorgan Chase to devote significant additional resources to understanding, and monitoring changes in, local laws, rules and regulations, as well as structuring its operations to comply with local laws, rules and regulations and implementing and administering related internal policies and procedures.

There can be no assurance that JPMorgan Chase will always be successful in its efforts to fully understand and to conduct its business in compliance with the laws, rules and regulations of all of the jurisdictions in which it operates, and the risk of non-compliance can be greater in countries that have less predictable legal and regulatory systems.

Requirements for the orderly resolution of JPMorgan Chase could result in JPMorgan Chase having to restructure or reorganise its businesses and could increase its funding or operational costs or curtail its businesses.

JPMorgan Chase is required under Federal Reserve and FDIC rules to prepare and submit periodically to those agencies a detailed plan for rapid and orderly resolution in bankruptcy, without extraordinary government support, in the event of material financial distress or failure. The agencies' evaluation of JPMorgan Chase's resolution plan may change, and the requirements for resolution plans may be modified from time to time. Any such determinations or modifications could result in JPMorgan Chase needing to make changes to its legal entity structure or to certain internal or external activities, which could increase its funding or operational costs, or hamper its ability to serve clients and customers.

If the Federal Reserve and the FDIC were both to determine that a resolution plan submitted by JPMorgan Chase has deficiencies, they could jointly impose more stringent capital, leverage or liquidity requirements or restrictions on JPMorgan Chase's growth, activities or operations. The agencies could also require that JPMorgan Chase restructure, reorganise or divest assets or businesses in ways that could materially and adversely affect JPMorgan Chase's operations and strategy.

Holders of JPMorgan Chase & Co.'s debt and equity securities will absorb losses if it were to enter into a resolution.

Federal Reserve rules require that JPMorgan Chase & Co. (the "**Parent Company**") maintain minimum levels of unsecured external long-term debt and other loss-absorbing capacity with specific terms ("**eligible LTD**") for purposes of recapitalising JPMorgan Chase's operating subsidiaries if the Parent Company were to enter into a resolution either:

- in a bankruptcy proceeding under Chapter 11 of the U.S. Bankruptcy Code; or
- in a receivership administered by the FDIC under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("**Title II**").

If the Parent Company were to enter into a resolution, holders of eligible LTD and other debt and equity securities of the Parent Company will absorb the losses of the Parent Company and its subsidiaries.

The preferred "single point of entry" strategy under JPMorgan Chase's resolution plan contemplates that only the Parent Company would enter bankruptcy proceedings. JPMorgan Chase's subsidiaries would be recapitalised, as needed, so that they could continue normal operations or subsequently be divested or wound down in an orderly manner. As a result, the Parent Company's losses and any losses incurred by its subsidiaries would be imposed first on holders of the Parent Company's equity securities and thereafter on its unsecured creditors, including holders of eligible LTD and other debt securities. Claims of holders of those securities would have a junior position to the claims of creditors of JPMorgan Chase's subsidiaries and to the claims of priority (as determined by statute) and secured creditors of the Parent Company.

Accordingly, in a resolution of the Parent Company in bankruptcy, holders of eligible LTD and other debt securities of the Parent Company would realise value only to the extent available to the Parent Company as a shareholder of JPMorgan Chase Bank, N.A. and its other subsidiaries, and only after any claims of priority and secured creditors of the Parent Company have been fully repaid.

The FDIC has similarly indicated that a single point of entry recapitalisation model could be a desirable strategy to resolve a systemically important financial institution, such as the Parent Company, under Title II. However, the FDIC has not formally adopted a single point of entry resolution strategy.

If the Parent Company were to approach, or enter into, a resolution, none of the Parent Company, the Federal Reserve or the FDIC is obligated to follow JPMorgan Chase's preferred resolution strategy, and losses to holders of eligible LTD and other debt and equity securities of the Parent Company, under whatever strategy is ultimately followed, could be greater than they might have been under JPMorgan Chase's preferred strategy.

JPMorgan Chase faces significant legal risks from litigation and formal and informal regulatory and government investigations.

JPMorgan Chase is named as a defendant or is otherwise involved in many legal proceedings, including class actions and other litigation or disputes with third parties. Actions currently pending against JPMorgan Chase may result in judgments, settlements, fines, penalties or other sanctions adverse to JPMorgan Chase. Any of these matters could materially and adversely affect JPMorgan Chase's business, financial condition or results of operations, or cause serious reputational harm. As a participant in the financial services industry, it is likely that JPMorgan Chase will continue to experience a high level of litigation and regulatory and government investigations related to its businesses and operations.

Regulators and other government agencies conduct examinations of JPMorgan Chase and its subsidiaries both on a routine basis and in targeted exams, and JPMorgan Chase's businesses and operations are subject to heightened regulatory oversight. This heightened regulatory scrutiny, or the results of such an investigation or examination, may lead to additional regulatory investigations or enforcement actions. There is no assurance that those actions will not result in resolutions or other enforcement actions against JPMorgan Chase. Furthermore, a single event involving a potential violation of law or regulation may give rise to numerous and overlapping investigations and proceedings, either by multiple federal, state or local agencies and officials in the U.S. or, in some instances, regulators and other governmental officials in non-U.S. jurisdictions.

If another financial institution violates a law or regulation relating to a particular business activity or practice, this will often give rise to an investigation by regulators and other governmental agencies of the same or similar activity or practice by JPMorgan Chase.

These and other initiatives by U.S. and non-U.S. governmental authorities may subject JPMorgan Chase to judgments, settlements, fines, penalties or other sanctions, and may require JPMorgan Chase to restructure its operations and activities or to cease offering certain products

or services. All of these potential outcomes could harm JPMorgan Chase's reputation or lead to higher operational costs, thereby reducing JPMorgan Chase's profitability, or result in collateral consequences. In addition, the extent of JPMorgan Chase's exposure to legal and regulatory matters can be unpredictable and could, in some cases, exceed the amount of reserves that JPMorgan Chase has established for those matters.

Damage to JPMorgan Chase's reputation could harm its businesses.

Maintaining trust in JPMorgan Chase is critical to its ability to attract and retain clients, customers, investors and employees. Damage to JPMorgan Chase's reputation can therefore cause significant harm to JPMorgan Chase's business and prospects, and can arise from numerous sources, including:

- employee misconduct, including discriminatory behaviour or harassment with respect to clients, customers or employees, or actions that are contrary to JPMorgan Chase's goal of fostering a diverse and inclusive workplace;
- security breaches, including as a result of cyber attacks;
- failure to safeguard client, customer or employee information;
- failure to manage risks associated with its business activities or those of its clients, including those that may be unpopular among one or more constituencies;
- failure to fully discharge publicly-announced commitments to support social and sustainability initiatives;
- non-compliance with laws, rules, and regulations;
- operational failures;
- litigation or regulatory fines, penalties or other sanctions;
- actions taken in executing regulatory and governmental requirements during a global or regional health emergency;
- regulatory investigations or enforcement actions, or resolutions of these matters; and
- failure or perceived failure to comply with laws, rules or regulations by JPMorgan Chase or its clients, customers, counterparties or other parties, including newly-acquired businesses, companies in which JPMorgan Chase has made principal investments, parties to joint ventures with JPMorgan Chase, and vendors with which JPMorgan Chase does business.

JPMorgan Chase's reputation may be significantly damaged by adverse publicity or negative information regarding JPMorgan Chase, whether or not true, that may be published or broadcast by the media or posted on social media, non-mainstream news services or other parts of the internet. This latter risk can be magnified by the speed and pervasiveness with which information is disseminated through those channels.

Social and environmental activists are increasingly targeting financial services firms such as JPMorgan Chase with public criticism for their relationships with clients that are engaged in certain sensitive industries, including businesses whose products are or are perceived to be harmful to human health, or whose activities negatively affect or are perceived to negatively affect the environment, workers' rights or communities. Activists have also engaged in public protests at JPMorgan Chase's headquarters and other properties. Activist criticism of JPMorgan Chase's relationships with clients in sensitive industries could potentially engender dissatisfaction among clients, customers, investors and employees with how JPMorgan Chase addresses social and sustainability concerns in its business activities. Alternatively, yielding to activism targeted at certain sensitive industries could damage JPMorgan Chase's relationships with clients and customers, and with governmental or regulatory bodies in jurisdictions in which

JPMorgan Chase does business, whose views are not aligned with those of social and environmental activists. In either case, the resulting harm to JPMorgan Chase's reputation could:

- cause certain clients and customers to cease doing business with JPMorgan Chase;
- impair JPMorgan Chase's ability to attract new clients and customers, or to expand its relationships with existing clients and customers;
- diminish JPMorgan Chase's ability to hire or retain employees;
- prompt JPMorgan Chase to cease doing business with certain clients or customers;
- cause certain investors to divest from investments in securities of JPMorgan Chase; or
- attract scrutiny from governmental or regulatory bodies.

Actions by the financial services industry generally or individuals in the industry can also affect JPMorgan Chase's reputation. For example, the reputation of the industry as a whole can be damaged by concerns that:

- consumers have been treated unfairly by a financial institution; or
- a financial institution has acted inappropriately with respect to the methods used to offer products to customers.

If JPMorgan Chase is perceived to have engaged in these types of behaviours, this could weaken its reputation among clients or customers.

Failure to effectively manage potential conflicts of interest or to satisfy fiduciary obligations can result in litigation and enforcement actions, as well as damage JPMorgan Chase's reputation.

JPMorgan Chase's ability to manage potential conflicts of interest is highly complex due to the broad range of its business activities which encompass a variety of transactions, obligations and interests with and among JPMorgan Chase's clients and customers. JPMorgan Chase can become subject to litigation and enforcement actions, and its reputation can be damaged, by the failure or perceived failure to:

- adequately address or appropriately disclose conflicts of interest, including potential conflicts of interest that may arise in connection with providing multiple products and services in, or having one or more investments related to, the same transaction;
- deliver appropriate standards of service and quality;
- treat clients and customers with the appropriate standard of care;
- use client and customer data responsibly and in a manner that meets legal requirements and regulatory expectations;
- provide fiduciary products or services in accordance with the applicable legal and regulatory standards; or
- handle or use confidential information of customers or clients appropriately or in compliance with applicable data protection and privacy laws, rules and regulations.

A failure or perceived failure to appropriately address conflicts of interest or fiduciary obligations could result in customer dissatisfaction, litigation and regulatory fines, penalties or other sanctions, and heightened regulatory scrutiny and enforcement actions, all of which can lead to lost revenue and higher operating costs and cause serious harm to JPMorgan Chase's reputation.

(b) ***Political and Country Risks***

Economic uncertainty or instability caused by political developments can negatively impact JPMorgan Chase's businesses.

Political developments in the U.S. and other countries can cause uncertainty in the economic environment and market conditions in which JPMorgan Chase operates its businesses. Certain monetary, fiscal and other policy initiatives and proposals could significantly affect U.S. and global economic growth and cause higher volatility in the financial markets, including:

- monetary policies and actions taken by the Federal Reserve and other central banks or governmental authorities, including any sustained large-scale asset purchases or any suspension or reversal of those actions;
- fiscal policies, including with respect to taxation and spending;
- actions that governments take or fail to take in response to the effects of the COVID-19 pandemic, as well as the effectiveness of any actions taken;
- isolationist foreign policies;
- an outbreak or escalation of hostilities or other geopolitical instabilities;
- economic sanctions;
- the implementation of tariffs and other protectionist trade policies; or
- other governmental policies or actions adopted or taken in response to political or social pressures.

These types of political developments, and uncertainty about the possible outcomes of these developments, could:

- erode investor confidence in the U.S. economy and financial markets, which could potentially undermine the status of the U.S. dollar as a safe haven currency;
- provoke retaliatory countermeasures by other countries and otherwise heighten tensions in diplomatic relations;
- lead to the withdrawal of government support for agencies and enterprises such as the U.S. Federal National Mortgage Association and the U.S. Federal Home Loan Mortgage Corporation (together, the "**U.S. GSEs**");
- increase concerns about whether the U.S. government will be funded, and its outstanding debt serviced, at any particular time;
- result in periodic shutdowns of the U.S. government or governments in other countries;
- increase investor reliance on actions by the Federal Reserve or other central banks, or influence investor perceptions concerning government support of sectors of the economy or the economy as a whole;
- adversely affect the financial condition or credit ratings of clients and counterparties with which JPMorgan Chase does business; or
- cause JPMorgan Chase to refrain from engaging in business opportunities that it might otherwise pursue.

These factors could lead to:

- slower growth rates, rising inflation or recession;
- greater market volatility;

- a contraction of available credit and the widening of credit spreads;
- erosion of adequate risk premium on certain financial assets;
- diminished investor and consumer confidence;
- lower investment growth;
- large-scale sales of government debt and other debt and equity securities in the U.S. and other countries;
- reduced commercial activity among trading partners;
- the potential for a currency redenomination by a particular country;
- the possible departure of a country from, or the dissolution of, a political or economic alliance or treaty;
- potential expropriation or nationalisation of assets; or
- other market dislocations, including the spread of unfavourable economic conditions from a particular country or region to other countries or regions.

Any of these potential outcomes could cause JPMorgan Chase to suffer losses on its market-making positions or in its investment portfolio, reduce its liquidity and capital levels, increase credit risk, hamper its ability to deliver products and services to its clients and customers, and weaken its results of operations and financial condition.

An outbreak or escalation of hostilities between countries or within a country or region could have a material adverse effect on the global economy and on JPMorgan Chase's businesses within the affected region or globally.

Aggressive actions by hostile governments or groups, including armed conflict or intensified cyber attacks, could expand in unpredictable ways by drawing in other countries or escalating into full-scale war with potentially catastrophic consequences, particularly if one or more of the combatants possess nuclear weapons.

Depending on the scope of the conflict, the hostilities could result in:

- worldwide economic disruption;
- heightened volatility in financial markets;
- severe declines in asset values, accompanied by widespread sell- offs of investments;
- substantial depreciation of local currencies, potentially leading to defaults by borrowers and counterparties in the affected region;
- disruption of global trade; and
- diminished consumer, business and investor confidence.

Any of the above consequences could have significant negative effects on JPMorgan Chase's operations and earnings, both in the countries or regions directly affected by the hostilities or globally. Further, if the U.S. were to become directly involved in such a conflict, this could lead to a curtailment of any operations that JPMorgan Chase may have in the affected countries or region, as well as in any nation that is aligned against the U.S. in the hostilities. JPMorgan Chase could also experience more numerous and aggressive cyber attacks launched by or under the sponsorship of one or more of the adversaries in such a conflict.

JPMorgan Chase's business and operations in certain countries can be adversely affected by local economic, political, regulatory and social factors.

Some of the countries in which JPMorgan Chase conducts business have economies or markets that are less developed and more volatile or may have political, legal and regulatory regimes that are less established or predictable than other countries in which JPMorgan Chase operates. In addition, in some jurisdictions in which JPMorgan Chase conducts business, the local economy and business activity are subject to substantial government influence or control. Some of these countries have in the past experienced economic disruptions, including:

- extreme currency fluctuations;
- high inflation;
- low or negative growth; and
- defaults or reduced ability to service sovereign debt.

The governments in these countries have sometimes reacted to these developments by imposing restrictive policies that adversely affect the local and regional business environment, such as:

- price, capital or exchange controls, including imposition of punitive transfer and convertibility restrictions or forced currency exchange;
- expropriation or nationalisation of assets or confiscation of property, including intellectual property; and
- changes in laws, rules and regulations.

The impact of these actions could be accentuated in trading markets that are smaller, less liquid and more volatile than more-developed markets. These types of government actions can negatively affect JPMorgan Chase's operations in the relevant country, either directly or by suppressing the business activities of local clients or multi- national clients that conduct business in the jurisdiction.

In addition, emerging markets countries, as well as certain more developed countries, have been susceptible to unfavourable social developments arising from poor economic conditions or governmental actions, including:

- widespread demonstrations, civil unrest or general strikes;
- crime and corruption;
- security and personal safety issues;
- an outbreak or escalation of hostilities;
- overthrow of incumbent governments;
- terrorist attacks; and
- other forms of internal discord.

These economic, political, regulatory and social developments have in the past resulted in, and in the future could lead to, conditions that can adversely affect JPMorgan Chase's operations in those countries and impair the revenues, growth and profitability of those operations. In addition, any of these events or circumstances in one country can affect JPMorgan Chase's operations and investments in another country or countries, including in the U.S.

(c) ***Market and Credit Risks***

Economic and market events and conditions can materially affect JPMorgan Chase's businesses and investment and market-making positions.

JPMorgan Chase's results of operations can be negatively affected by adverse changes in any of the following:

- investor, consumer and business sentiment;
- events that reduce confidence in the financial markets;
- inflation or deflation;
- high unemployment or, conversely, a tightening labour market;
- the availability and cost of capital, liquidity and credit;
- levels and volatility of interest rates, credit spreads and market prices for currencies, equities and commodities, and the duration of any changes in levels or volatility;
- the economic effects of an outbreak or escalation of hostilities, terrorism or other geopolitical instabilities, cyber attacks, climate change, natural disasters, severe weather conditions, health emergencies, the spread of infectious diseases, epidemics or pandemics or other extraordinary events beyond JPMorgan Chase's control; and
- the health of the U.S. and global economies.

All of these are affected by global economic, market and political events and conditions, as well as regulatory restrictions.

In addition, JPMorgan Chase's investment portfolio and market- making businesses can suffer losses due to unanticipated market events, including:

- severe declines in asset values;
- unexpected credit events;
- unforeseen events or conditions that may cause previously uncorrelated factors to become correlated (and vice versa);
- the inability to effectively hedge market and other risks related to market-making and investment portfolio positions; or
- other market risks that may not have been appropriately taken into account in the development, structuring or pricing of a financial instrument.

If JPMorgan Chase experiences significant losses in its investment portfolio or from market-making activities, this could reduce JPMorgan Chase's profitability and its liquidity and capital levels, and thereby constrain the growth of its businesses.

JPMorgan Chase's consumer businesses can be negatively affected by adverse economic conditions and governmental policies.

JPMorgan Chase's consumer businesses are particularly affected by U.S. and global economic conditions, including:

- personal and household income distribution;
- unemployment or underemployment;
- prolonged periods of exceptionally low interest rates;
- housing prices;
- the level of inflation and its effect on prices for goods and services;

- consumer and small business confidence levels; and

- changes in consumer spending or in the level of consumer debt.

Heightened levels of unemployment or underemployment that result in reduced personal and household income could negatively affect consumer credit performance to the extent that consumers are less able to service their debts. In addition, sustained low growth, low or negative interest rates, inflationary pressures or recessionary conditions could diminish customer demand for the products and services offered by JPMorgan Chase's consumer businesses.

Adverse economic conditions could also lead to an increase in delinquencies, additions to the allowance for credit losses and higher net charge-offs, which can reduce JPMorgan Chase's earnings. These consequences could be significantly worse in certain geographies and industry segments where declining industrial or manufacturing activity has resulted in or could result in higher levels of unemployment, or where high levels of consumer debt, such as outstanding student loans, could impair the ability of customers to pay their other consumer loan obligations.

JPMorgan Chase's earnings from its consumer businesses could also be adversely affected by governmental policies and actions that affect consumers, including:

- policies and initiatives relating to medical insurance, education, immigration, employment status and housing; and

- policies aimed at the economy more broadly, such as higher taxes and increased regulation which could result in reductions in consumer disposable income.

In addition, governmental proposals to permit student loan obligations to be discharged in bankruptcy proceedings could, if enacted into law, encourage certain of JPMorgan Chase's customers to declare personal bankruptcy and thereby trigger defaults and charge-offs of credit card and other consumer loans extended to those customers.

Unfavourable market and economic conditions can have an adverse effect on JPMorgan Chase's wholesale businesses.

In JPMorgan Chase's wholesale businesses, market and economic factors can affect the volume of transactions that JPMorgan Chase executes for its clients or for which it advises clients, and, therefore, the revenue that JPMorgan Chase receives from those transactions. These factors can also influence the willingness of other financial institutions and investors to participate in capital markets transactions that JPMorgan Chase manages, such as loan syndications or securities underwritings. Furthermore, if a significant and sustained deterioration in market conditions were to occur, the profitability of JPMorgan Chase's capital markets businesses, including its loan syndication, securities underwriting and leveraged lending activities, could be reduced to the extent that those businesses:

- earn less fee revenue due to lower transaction volumes, including when clients are unwilling or unable to refinance their outstanding debt obligations in unfavourable market conditions; or

- dispose of portions of credit commitments at a loss, or hold larger residual positions in credit commitments that cannot be sold at favourable prices.

An adverse change in market conditions in particular segments of the economy, such as a sudden and severe downturn in oil and gas prices or an increase in commodity prices, or sustained changes in consumer behaviour that affect specific economic sectors, could have a material adverse effect on clients of JPMorgan Chase whose operations or financial condition are directly or indirectly dependent on the health or stability of those market segments or economic sectors, as well as clients that are engaged in related businesses. JPMorgan Chase could incur losses on its loans and other credit commitments to clients that operate in, or are dependent on, any sector of the economy that is under stress.

The fees that JPMorgan Chase earns from managing client assets or holding assets under custody for clients could be diminished by declining asset values or other adverse

macroeconomic conditions. For example, higher interest rates or a downturn in financial markets could affect the valuations of client assets that JPMorgan Chase manages or holds under custody, which, in turn, could affect JPMorgan Chase's revenue from fees that are based on the amount of assets under management or custody. Similarly, adverse macroeconomic or market conditions could prompt outflows from JPMorgan Chase funds or accounts, or cause clients to invest in products that generate lower revenue. Substantial and unexpected withdrawals from a JPMorgan Chase fund can also hamper the investment performance of the fund, particularly if the outflows create the need for the fund to dispose of fund assets at disadvantageous times or prices, and could lead to further withdrawals based on the weaker investment performance.

An economic downturn or sustained changes in consumer behaviour that results in shifts in consumer and business spending could also have a negative impact on certain of JPMorgan Chase's wholesale clients, and thereby diminish JPMorgan Chase's earnings from its wholesale operations. For example, the businesses of certain of JPMorgan Chase's wholesale clients are dependent on consistent streams of rental income from commercial real estate properties which are owned or being built by those clients. Sustained adverse economic conditions could result in reductions in the rental cash flows that owners or developers receive from their tenants which, in turn, could depress the values of the properties and impair the ability of borrowers to service or refinance their commercial real estate loans. These consequences could result in JPMorgan Chase experiencing increases in the allowance for credit losses, higher delinquencies, defaults and charge-offs within its commercial real estate loan portfolio and incurring higher costs for servicing a larger volume of delinquent loans in that portfolio, thereby reducing JPMorgan Chase's earnings from its wholesale businesses.

Changes in interest rates and credit spreads can adversely affect certain of JPMorgan Chase's revenue and income streams related to its traditional banking and funding activities.

In general, a low or negative interest rate environment may cause:

- net interest margins to be compressed, which could reduce the amounts that JPMorgan Chase earns on its investment securities portfolio to the extent that it is unable to reinvest contemporaneously in higher-yielding instruments;
- unanticipated or adverse changes in depositor behaviour, which could negatively affect JPMorgan Chase's broader asset and liability management strategy;
- JPMorgan Chase to reduce the amount of deposits that it accepts from customers and clients, which could result in lower revenues; and
- a reduction in the value of JPMorgan Chase's mortgage servicing rights ("**MSRs**") asset, thereby decreasing revenues.

When credit spreads widen, it becomes more expensive for JPMorgan Chase to borrow. JPMorgan Chase's credit spreads may widen or narrow not only in response to events and circumstances that are specific to JPMorgan Chase but also as a result of general economic and geopolitical events and conditions. Changes in JPMorgan Chase's credit spreads will affect, positively or negatively, JPMorgan Chase's earnings on certain liabilities, such as derivatives, that are recorded at fair value.

When interest rates are increasing, JPMorgan Chase can generally be expected to earn higher net interest income. However, higher interest rates can also lead to:

- fewer originations of commercial and residential real estate loans;
- losses on underwriting exposures;
- the loss of deposits, including in the event that JPMorgan Chase makes incorrect assumptions about depositor behaviour;
- unrealised mark-to-market losses on available-for-sale ("**AFS**") securities held in the investment securities portfolio;

- lower net interest income if central banks introduce interest rate increases more quickly than anticipated and this results in a misalignment in the pricing of short-term and long-term borrowings;

- less liquidity in the financial markets; and

- higher funding costs.

All of these outcomes could adversely affect JPMorgan Chase's earnings or its liquidity and capital levels. Higher interest rates can also negatively affect the payment performance on loans within JPMorgan Chase's consumer and wholesale loan portfolios that are linked to variable interest rates. If borrowers of variable rate loans are unable to afford higher interest payments, those borrowers may reduce or stop making payments, thereby causing JPMorgan Chase to incur losses and increased operational costs related to servicing a higher volume of delinquent loans.

JPMorgan Chase's results may be materially affected by market fluctuations and significant changes in the value of financial instruments.

The value of securities, derivatives and other financial instruments which JPMorgan Chase owns or in which it makes markets can be materially affected by market fluctuations. Market volatility, illiquid market conditions and other disruptions in the financial markets may make it extremely difficult to value certain financial instruments. Subsequent valuations of financial instruments in future periods, in light of factors then prevailing, may result in significant changes in the value of these instruments. In addition, at the time of any disposition of these financial instruments, the price that JPMorgan Chase ultimately realises will depend on the demand and liquidity in the market at that time and may be materially lower than their current fair value. Any of these factors could cause a decline in the value of financial instruments that JPMorgan Chase owns or in which it makes markets, which may have an adverse effect on JPMorgan Chase's results of operations.

JPMorgan Chase's risk management and monitoring processes, including its stress testing framework, seek to quantify and control JPMorgan Chase's exposure to more extreme market moves. However, JPMorgan Chase's hedging and other risk management strategies may not be effective, and it could incur significant losses, if extreme market events were to occur.

Ongoing effects of the COVID-19 pandemic could harm the global economy and negatively affect JPMorgan Chase's businesses.

On 11 March 2020, the World Health Organization declared the outbreak of a strain of novel coronavirus disease, COVID-19, to be a global pandemic. The COVID-19 pandemic and governmental responses to the pandemic, which included the institution of social distancing and shelter-in-place requirements in certain areas of the U.S. and other countries, resulted in adverse impacts on global economic conditions, including:

- significant disruption and volatility in the financial markets;

- significant disruption of global supply chains; and

- closures of many businesses, leading to loss of revenues and increased unemployment.

The adverse economic conditions caused by the pandemic have had a negative impact on certain of JPMorgan Chase's businesses and results of operations, including:

- reduction in demand for certain products and services from JPMorgan Chase's clients and customers, resulting in lower revenue; and

- increases in the allowance for credit losses during the early stages of the pandemic.

Although global economic conditions have been improving despite the continuation of the COVID-19 pandemic, any ongoing negative economic impacts arising from the pandemic or any prolongation or worsening of the pandemic, including as a result of additional waves or

variants of the COVID-19 disease or the emergence of other diseases that have similar outcomes, could have significant adverse effects on JPMorgan Chase's businesses, results of operations and financial condition, including:

- recognition of charge-offs and increases in the allowance for credit losses, including any delayed recognition of charge-offs due to the impact of government stimulus actions or payment assistance provided to clients and customers;
- material impacts on the value of securities, derivatives and other financial instruments which JPMorgan Chase owns or in which it makes markets;
- downgrades in JPMorgan Chase's credit ratings;
- constraints on liquidity or capital due to elevated levels of deposits, increases in risk-weighted assets ("**RWA**") related to supporting client activities, downgrades in client credit ratings, regulatory actions or other factors, any or all of which could require JPMorgan Chase to take or refrain from taking actions that it otherwise would under its liquidity and capital management strategies; and
- the possibility that significant portions of JPMorgan Chase's workforce are unable to work effectively, including because of illness, quarantines, shelter-in-place arrangements, government actions or other restrictions in connection with the pandemic.

The extent to which the COVID-19 pandemic negatively affects JPMorgan Chase's businesses, results of operations and financial condition, as well as its regulatory capital and liquidity ratios, will depend on future developments that are uncertain and cannot be fully predicted, including:

- the ultimate scope and duration of the pandemic;
- the effectiveness and acceptance of vaccines, and their availability in certain regions;
- actions taken by governmental authorities and other third parties in response to the pandemic; and
- the effect that the pandemic or any prolongation or worsening of the pandemic may have on the pace of economic growth, inflation, the strength of labour markets, particularly in light of the expiration of government assistance programs, and the potential for changes in consumer behaviour that could have longer-term impacts on certain economic sectors.

In addition, JPMorgan Chase's participation in U.S. government programs designed to support individuals, households and businesses impacted by the economic disruptions caused by the COVID-19 pandemic, whether directly or indirectly, including on behalf of customers and clients or by affiliated entities, newly-acquired businesses or companies in which JPMorgan Chase has made principal investments, could be criticised and subject JPMorgan Chase to:

- increased governmental and regulatory scrutiny;
- negative publicity; and
- increased exposure to litigation,

any or all of which could increase JPMorgan Chase's operational, legal and compliance costs and damage its reputation. To the extent that the COVID-19 pandemic adversely affects JPMorgan Chase's business, results of operations and financial condition, it may also have the effect of heightening many of the other risks described below.

JPMorgan Chase can be negatively affected by adverse changes in the financial condition of clients, counterparties, custodians and CCPs.

JPMorgan Chase routinely executes transactions with clients and counterparties such as corporations, financial institutions, asset managers, hedge funds, securities exchanges and government entities within and outside the U.S. Many of these transactions expose JPMorgan

Chase to the credit risk of its clients and counterparties, and can involve JPMorgan Chase in disputes and litigation if a client or counterparty defaults. JPMorgan Chase can also be subject to losses or liability where a financial institution that it has appointed to provide custodial services for client assets or funds becomes insolvent as a result of fraud or the failure to abide by existing laws and obligations.

A default by, or the financial or operational failure of, a CCP through which JPMorgan Chase executes contracts would require JPMorgan Chase to replace those contracts, thereby increasing its operational costs and potentially resulting in losses. In addition, JPMorgan Chase can be exposed to losses if a member of a CCP in which JPMorgan Chase is also a member defaults on its obligations to the CCP because of requirements that each member of the CCP absorb a portion of those losses. Furthermore, JPMorgan Chase can be subject to bearing its share of non-default losses incurred by a CCP, including losses from custodial, settlement or investment activities or due to cyber or other security breaches. As part of its clearing services activities, JPMorgan Chase is exposed to the risk of non-performance by its clients, which it seeks to mitigate by requiring clients to provide adequate collateral. JPMorgan Chase is also exposed to intra-day credit risk of its clients in connection with providing cash management, clearing, custodial and other transaction services to those clients. If a client for which JPMorgan Chase provides these services becomes bankrupt or insolvent, JPMorgan Chase may incur losses, become involved in disputes and litigation with one or more CCPs, the client's bankruptcy estate and other creditors, or be subject to regulatory investigations. All of the foregoing events can increase JPMorgan Chase's operational and litigation costs, and JPMorgan Chase may suffer losses to the extent that any collateral that it has received is insufficient to cover those losses.

Transactions with government entities, including national, state, provincial, municipal and local authorities, can expose JPMorgan Chase to enhanced sovereign, credit, operational and reputation risks. Government entities may, among other things, claim that actions taken by government officials were beyond the legal authority of those officials or repudiate transactions authorised by a previous incumbent government. These types of actions have in the past caused, and could in the future cause, JPMorgan Chase to suffer losses or hamper its ability to conduct business in the relevant jurisdiction.

In addition, local laws, rules and regulations could limit JPMorgan Chase's ability to resolve disputes and litigation in the event of a counterparty default or unwillingness to make previously agreed-upon payments, which could subject JPMorgan Chase to losses.

Disputes may arise with counterparties to derivatives contracts with regard to the terms, the settlement procedures or the value of underlying collateral. The disposition of those disputes could cause JPMorgan Chase to incur unexpected transaction, operational and legal costs, or result in credit losses. These consequences can also impair JPMorgan Chase's ability to effectively manage its credit risk exposure from its market activities, or cause harm to JPMorgan Chase's reputation.

The financial or operational failure of a significant market participant, such as a major financial institution or a CCP, or concerns about the creditworthiness of such a market participant, can have a cascading effect within the financial markets. JPMorgan Chase's businesses could be significantly disrupted by such an event, particularly if it leads to other market participants incurring significant losses, experiencing liquidity issues or defaulting, and JPMorgan Chase is likely to have significant interrelationships with, and credit exposure to, such a significant market participant.

JPMorgan Chase may suffer losses if the value of collateral declines in stressed market conditions.

During periods of market stress or illiquidity, JPMorgan Chase's credit risk may be further increased when:

- JPMorgan Chase fails to realise the fair value of the collateral it holds;
- collateral is liquidated at prices that are not sufficient to recover the full amount owed to it; or

- counterparties are unable to post collateral, whether for operational or other reasons.

Furthermore, disputes with counterparties concerning the valuation of collateral may increase in times of significant market stress, volatility or illiquidity, and JPMorgan Chase could suffer losses during these periods if it is unable to realise the fair value of collateral or to manage declines in the value of collateral.

JPMorgan Chase could incur significant losses arising from concentrations of credit and market risk.

JPMorgan Chase is exposed to greater credit and market risk to the extent that groupings of its clients or counterparties:

- engage in similar or related businesses, or in businesses in related industries;
- do business in the same geographic region; or
- have business profiles, models or strategies that could cause their ability to meet their obligations to be similarly affected by changes in economic conditions.

For example, a significant deterioration in the credit quality of one of JPMorgan Chase's borrowers or counterparties could lead to concerns about the creditworthiness of other borrowers or counterparties in similar, related or dependent industries. This type of interrelationship could exacerbate JPMorgan Chase's credit, liquidity and market risk exposure and potentially cause it to incur losses, including fair value losses in its market-making businesses and investment portfolios. In addition, JPMorgan Chase may be required to increase the allowance for credit losses with respect to certain clients or industries in order to align with directives or expectations of its banking regulators.

Similarly, challenging economic conditions that affect a particular industry or geographic area could lead to concerns about the credit quality of JPMorgan Chase's borrowers or counterparties not only in that particular industry or geography but in related or dependent industries, wherever located. These conditions could also heighten concerns about the ability of customers of JPMorgan Chase's consumer businesses who live in those areas or work in those affected industries or related or dependent industries to meet their obligations to JPMorgan Chase. JPMorgan Chase regularly monitors various segments of its credit and market risk exposures to assess the potential risks of concentration or contagion, but its efforts to diversify or hedge its exposures against those risks may not be successful.

JPMorgan Chase's consumer businesses can also be harmed by an excessive expansion of consumer credit by bank or non-bank competitors. Heightened competition for certain types of consumer loans could prompt industry-wide reactions such as significant reductions in the pricing or margins of those loans or the making of loans to less-creditworthy borrowers. If large numbers of consumers subsequently default on their loans, whether due to weak credit profiles, an economic downturn or other factors, this could impair their ability to repay obligations owed to JPMorgan Chase and result in higher charge-offs and other credit-related losses. More broadly, widespread defaults on consumer debt could lead to recessionary conditions in the U.S. economy, and JPMorgan Chase's consumer businesses may earn lower revenues in such an environment.

If JPMorgan Chase is unable to reduce positions effectively during a market dislocation, this can increase both the market and credit risks associated with those positions and the level of RWA that JPMorgan Chase holds on its balance sheet. These factors could adversely affect JPMorgan Chase's capital position, funding costs and the profitability of its businesses.

(d) ***Liquidity and Capital Risks***

JPMorgan Chase's ability to operate its businesses could be impaired if its liquidity is constrained.

JPMorgan Chase's liquidity could be impaired at any given time by factors such as:

- market-wide illiquidity or disruption;
- unforeseen liquidity or capital requirements, including as a result of changes in laws, rules and regulations;
- inability to sell assets, or to sell assets at favourable times or prices;
- default by a CCP or other significant market participant;
- unanticipated outflows of cash or collateral;
- unexpected loss of consumer deposits or higher than anticipated draws on lending-related commitments; and
- lack of market or customer confidence in JPMorgan Chase or financial institutions in general.

A reduction in JPMorgan Chase's liquidity may be caused by events over which it has little or no control. For example, during periods of market stress, low investor confidence and significant market illiquidity could result in higher funding costs for JPMorgan Chase and could limit its access to some of its traditional sources of liquidity.

JPMorgan Chase may need to raise funding from alternative sources if its access to stable and lower-cost sources of funding, such as deposits and borrowings from Federal Home Loan Banks, is reduced. Alternative sources of funding could be more expensive or limited in availability. JPMorgan Chase's funding costs could also be negatively affected by actions that JPMorgan Chase may take in order to:

- satisfy applicable liquidity coverage ratio and net stable funding ratio requirements;
- address obligations under its resolution plan; or
- satisfy regulatory requirements in jurisdictions outside the U.S. relating to the pre-positioning of liquidity in subsidiaries that are material legal entities.

More generally, if JPMorgan Chase fails to effectively manage its liquidity, this could constrain its ability to fund or invest in its businesses and subsidiaries, and thereby adversely affect its results of operations.

JPMorgan Chase & Co. is a holding company and depends on the cash flows of its subsidiaries to make payments on its outstanding securities.

JPMorgan Chase & Co. is a holding company that holds the stock of JPMorgan Chase Bank, N.A. and an intermediate holding company, JPMorgan Chase Holdings LLC (the "**IHC**"). The IHC in turn generally holds the stock of JPMorgan Chase's subsidiaries other than JPMorgan Chase Bank, N.A. and its subsidiaries. The IHC also owns other assets and provides intercompany lending to the holding company.

The holding company is obligated to contribute to the IHC substantially all the net proceeds received from securities issuances (including issuances of senior and subordinated debt securities and of preferred and common stock).

The ability of JPMorgan Chase Bank, N.A. and the IHC to make payments to the holding company is also limited. JPMorgan Chase Bank, N.A. is subject to regulatory restrictions on its dividend distributions, as well as capital adequacy requirements, such as the Supplementary Leverage Ratio ("**SLR**"), and liquidity requirements and other regulatory restrictions on its ability to make payments to the holding company. The IHC is prohibited from paying dividends or extending credit to the holding company if certain capital or liquidity thresholds are breached or if limits are otherwise imposed by JPMorgan Chase's management or Board of Directors.

As a result of these arrangements, the ability of the holding company to make various payments is dependent on its receiving dividends from JPMorgan Chase Bank, N.A. and dividends and borrowings from the IHC. These limitations could affect the holding company's ability to:

- pay interest on its debt securities;
- pay dividends on its equity securities;
- redeem or repurchase outstanding securities; and
- fulfil its other payment obligations.

These arrangements could also result in the holding company seeking protection under bankruptcy laws or otherwise entering into resolution proceedings at a time earlier than would have been the case absent the existence of the capital and liquidity thresholds to which the IHC is subject.

Reductions in JPMorgan Chase's credit ratings may adversely affect its liquidity and cost of funding.

JPMorgan Chase & Co. and certain of its principal subsidiaries are rated by credit rating agencies. Rating agencies evaluate both general and firm-specific and industry-specific factors when determining credit ratings for a particular financial institution, including:

- expected future profitability;
- risk management practices;
- legal expenses;
- ratings differentials between bank holding companies and their bank and non-bank subsidiaries;
- regulatory developments;
- assumptions about government support; and
- economic and geopolitical developments.

JPMorgan Chase closely monitors and manages, to the extent that it is able, factors that could influence its credit ratings. However, there is no assurance that JPMorgan Chase's credit ratings will not be lowered in the future. Furthermore, any such downgrade could occur at times of broader market instability when JPMorgan Chase's options for responding to events may be more limited and general investor confidence is low.

A reduction in JPMorgan Chase's credit ratings could curtail JPMorgan Chase's business activities and reduce its profitability in a number of ways, including:

- reducing its access to capital markets;
- materially increasing its cost of issuing and servicing securities;
- triggering additional collateral or funding requirements; and
- decreasing the number of investors and counterparties that are willing or permitted to do business with or lend to JPMorgan Chase.

Any rating reduction could also increase the credit spreads charged by the market for taking credit risk on JPMorgan Chase & Co. and its subsidiaries. This could, in turn, adversely affect the value of debt and other obligations of JPMorgan Chase & Co. and its subsidiaries.

The reform and replacement of benchmark rates could adversely affect financial instruments issued, funded, serviced or held by JPMorgan Chase and expose it to litigation and other disputes.

Interest rate, equity, foreign exchange rate and other types of indices which are deemed to be "benchmarks," including those in widespread and longstanding use, have been the subject of ongoing international, national and other regulatory scrutiny and initiatives for reform, including:

- changes to the rules and methodologies under which certain benchmarks are administered;
- initiatives designed to discourage or prohibit the use of certain benchmarks by market participants;
- the introduction of alternative reference rates to be used by market participants in lieu of certain benchmarks; and
- legislative proposals and actions providing for the replacement of reference rates under existing contracts and instruments that are linked to certain benchmarks with alternative reference rates.

Some of these reforms are already effective while others are still to be implemented or are under consideration. These and other reforms relating to benchmarks could:

- cause certain benchmarks to be substantially modified or to be permanently discontinued;
- lead to disruptions in the financial markets, including in connection with the transition to alternative reference rates;
- give rise to litigation and other disputes;
- cause reputational harm to the extent that operational and technology systems are not sufficiently prepared for the transition to alternative reference rates; or
- have other consequences which cannot be fully anticipated.

Any of these developments, and any future initiatives to regulate, reform or change the administration of benchmarks, could result in adverse consequences to the return on, value of and market for loans, mortgages, securities, derivatives and other financial instruments whose returns are linked to any such benchmark, including those issued, funded, serviced or held by JPMorgan Chase.

Changes in the manner in which certain benchmarks are administered, or the general increased regulatory scrutiny of those benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of those benchmarks and complying with regulations or requirements relating to those benchmarks. Such factors may have the effect of discouraging market participants from continuing to administer or contribute to certain benchmarks, trigger further changes in the rules or methodologies under which certain benchmarks are administered or lead to the discontinuation of certain benchmarks.

Regulators, industry bodies and other market participants in the U.S. and other countries continue to engage in initiatives to develop, introduce and encourage the use of alternative reference rates to replace certain benchmarks, and certain of these alternative rates have gained or are gaining acceptance among market participants. However, there is no assurance that:

- any of these new rates will be similar to, or produce the economic equivalent of, the benchmarks that they seek to replace;
- arrangements by market participants to prepare for the discontinuation of certain benchmarks and the transition to alternative reference rates will be fully effective; or

- a particular alternative reference rate will be widely accepted by market participants, or that market acceptance of that rate will not be hindered by the introduction of other reference rates.

If a particular benchmark were to be discontinued and an alternative reference rate has not been successfully introduced or widely accepted within the market, this could result in significant adverse effects on the financial markets. For example, vast amounts of loans, mortgages, securities, derivatives and other financial instruments are linked to the London Interbank Offered Rate ("**LIBOR**") benchmark. ICE Benchmark Administration, the administrator of LIBOR, has announced that the publication of the principal tenors of U.S. dollar LIBOR will cease after 30 June 2023, and significant progress has been made by regulators, industry bodies and market participants to introduce and implement the Secured Overnight Financing Rate ("**SOFR**") as a replacement rate for U.S. dollar LIBOR. However, if an alternative reference rate such as SOFR has not achieved sufficient market acceptance when the publication of the principal tenors of U.S. dollar LIBOR is discontinued, or if market participants have not otherwise implemented effective transitional arrangements to address that discontinuation, this could result in widespread dislocation in the financial markets, volatility in the pricing of securities, derivatives and other instruments, and the suppression of capital markets activities, all of which could have a negative impact on JPMorgan Chase's results of operations and on U.S. dollar LIBOR-linked securities, credit or other instruments which are issued, funded, serviced or held by JPMorgan Chase.

JPMorgan Chase could also become involved in litigation and other types of disputes with clients, customers, counterparties and investors as a consequence of the transition from U.S. dollar LIBOR and other benchmark rates to replacement rates, including claims that JPMorgan Chase has:

- treated clients, customers, counterparties or investors unfairly, or caused them to experience losses, higher financing costs or lower returns on investments;

- failed to appropriately communicate the effects of the transition from benchmark rates on the products that JPMorgan Chase has sold to its clients and customers, or failed to disclose purported conflicts of interest;

- made inappropriate product recommendations to or investments on behalf of its clients, or sold products that did not serve their intended purpose, in connection with the transition from benchmark rates;

- engaged in anti-competitive behaviour, or in the manipulation of markets or specific benchmarks, in connection with the discontinuation of or transition from benchmark rates; or

- disadvantaged clients, customers, counterparties or investors when interpreting or making determinations under the terms of agreements or financial instruments.

These types of claims could subject JPMorgan Chase to higher legal expenses and operational costs, require it to pay significant amounts in connection with resolving litigation and other disputes, and harm its reputation.

Maintaining the required level and composition of capital may impact JPMorgan Chase's ability to support business activities, meet evolving regulatory requirements and distribute capital to shareholders.

JPMorgan Chase is subject to various regulatory capital requirements, including leverage- and risk-based capital requirements. In addition, as a Globally Systemically Important Bank ("**GSIB**"), JPMorgan Chase is required to hold additional capital buffers, including a GSIB surcharge, a Stress Capital Buffer ("**SCB**"), and a countercyclical buffer, each of which is reassessed at least annually. The amount of capital that JPMorgan Chase is required to hold in order to satisfy these leverage-and risk-based requirements could increase at any given time due to factors such as:

- actions by banking regulators, including changes in laws, rules, and regulations;
- actions taken by the Federal Reserve or the U.S. government in response to the economic effects of systemic events, such as the actions taken in response to the COVID-19 pandemic which led to an expansion of the Federal Reserve balance sheet, growth in deposits held by JPMorgan Chase and other U.S. financial institutions and, consequently, an increase in leverage exposure and the GSIB surcharge;
- changes in the composition of JPMorgan Chase's balance sheet or developments that could increase risk weighted assets such as increased market risk, customer delinquencies, client credit rating downgrades or other factors; and
- increases in estimated stress losses as determined by the Federal Reserve under the Comprehensive Capital Analysis and Review, which could increase JPMorgan Chase's SCB.

Any failure by or inability of JPMorgan Chase to maintain the required level and composition of capital, or unfavourable changes in applicable capital requirements, could have an adverse impact on JPMorgan Chase's shareholders, such as:

- reducing the amount of common stock that JPMorgan Chase is permitted to repurchase;
- requiring the issuance of, or prohibiting the redemption of, capital instruments in a manner inconsistent with JPMorgan Chase's capital management strategy;
- constraining the amount of dividends that may be paid on common stock; or
- curtailing JPMorgan Chase's business activities or operations.

(e) ***Operational, Strategic, Conduct and People Risks***

JPMorgan Chase's businesses are dependent on the effectiveness of its operational systems and those of other market participants.

JPMorgan Chase's businesses rely on the ability of JPMorgan Chase's financial, accounting, transaction execution, data processing and other operational systems to process, record, monitor and report a large number of transactions on a continuous basis, and to do so accurately, quickly and securely. In addition to proper design, installation, maintenance and training, the effective functioning of JPMorgan Chase's operational systems depends on:

- the quality of the information contained in those systems, as inaccurate, outdated or corrupted data can significantly compromise the functionality or reliability of a particular system and other systems to which it transmits or from which it receives information; and
- the ability of JPMorgan Chase to appropriately maintain and upgrade its systems on a regular basis, and to ensure that any changes introduced to its systems are managed carefully to ensure security and operational continuity and adhere to all applicable legal and regulatory requirements.

JPMorgan Chase also depends on its ability to access and use the operational systems of its vendors, custodians and other market participants, including clearing and payment systems, CCPs, securities exchanges and data processing, security and technology companies (including those that provide cloud computing services).

The ineffectiveness, failure or other disruption of operational systems upon which JPMorgan Chase depends, including due to a systems malfunction, cyberbreach or other systems failure, could result in unfavourable ripple effects in the financial markets and for JPMorgan Chase and its clients and customers, including:

- delays or other disruptions in providing services, liquidity or information to clients and customers;

- the inability to settle transactions or obtain access to funds and other assets, including those for which physical settlement and delivery is required;
- failure to timely settle or confirm transactions;
- the possibility that funds transfers, capital markets trades or other transactions are executed erroneously, as a result of illegal conduct or with unintended consequences;
- financial losses, including due to loss-sharing requirements of CCPs, payment systems or other market infrastructures, or as possible restitution to clients and customers;
- higher operational costs associated with replacing services provided by a system that is unavailable;
- client or customer dissatisfaction with JPMorgan Chase's products and services;
- regulatory fines, penalties, or other sanctions against JPMorgan Chase;
- loss of confidence in the ability of JPMorgan Chase, or financial institutions generally, to protect against and withstand operational disruptions; or
- harm to JPMorgan Chase's reputation.

As the speed, frequency, volume, interconnectivity and complexity of transactions continue to increase, it can become more challenging to effectively maintain and upgrade JPMorgan Chase's operational systems and infrastructure, especially due to the heightened risks that:

- attempts by third parties to defraud JPMorgan Chase or its clients and customers may increase, evolve or become more complex, particularly during periods of market disruption or economic uncertainty;
- errors made by JPMorgan Chase or another market participant, whether inadvertent or malicious, cause widespread system disruption;
- isolated or seemingly insignificant errors in operational systems compound, or migrate to other systems over time, to become larger issues;
- failures in synchronisation or encryption software, or degraded performance of microprocessors, could cause disruptions in operational systems, or the inability of systems to communicate with each other; and
- third parties may attempt to block the use of key technology solutions by claiming that the use infringes on their intellectual property rights.

If JPMorgan Chase's operational systems, or those of newly-acquired businesses or of external parties on which JPMorgan Chase's businesses depend, are unable to meet the requirements of JPMorgan Chase's businesses and operations or bank regulatory standards, or if they fail or have other significant shortcomings, JPMorgan Chase could be materially and adversely affected.

A successful cyber attack affecting JPMorgan Chase could cause significant harm to JPMorgan Chase and its clients and customers.

JPMorgan Chase experiences numerous attempted cyber attacks on its computer systems, software, networks and other technology assets on a daily basis from various actors, including groups acting on behalf of hostile countries, cyber-criminals, "hacktivists" (i.e., individuals or groups that use technology to promote a political agenda or social change) and others. These cyber attacks can take many forms, including attempts to introduce computer viruses or malicious code, which are commonly referred to as "malware," into JPMorgan Chase's systems. These attacks are often designed to:

- obtain unauthorised access to confidential information belonging to JPMorgan Chase or its clients, customers, counterparties or employees;

- manipulate data;
- destroy data or systems with the aim of rendering services unavailable;
- disrupt, sabotage or degrade service on JPMorgan Chase's systems;
- steal money; or
- extort money through the use of so-called "ransomware."

JPMorgan Chase has also experienced significant distributed denial- of-service attacks which are intended to disrupt online banking services.

JPMorgan Chase has experienced security breaches due to cyber attacks in the past, and it is inevitable that additional breaches will occur in the future. Any such breach could result in serious and harmful consequences for JPMorgan Chase or its clients and customers.

A principal reason that JPMorgan Chase cannot provide absolute security against cyber attacks is that it may not always be possible to anticipate, detect or recognise threats to JPMorgan Chase's systems, or to implement effective preventive measures against all breaches. This is because:

- the techniques used in cyber attacks change frequently and are increasingly sophisticated, and therefore may not be recognised until launched;
- cyber attacks can originate from a wide variety of sources, including JPMorgan Chase's own employees, cyber-criminals, hacktivists, groups linked to terrorist organisations or hostile countries, or third parties whose objective is to disrupt the operations of financial institutions more generally;
- JPMorgan Chase does not have control over the cybersecurity of the systems of the large number of clients, customers, counterparties and third-party service providers with which it does business; and
- it is possible that a third party, after establishing a foothold on an internal network without being detected, might obtain access to other networks and systems.

The risk of a security breach due to a cyber attack could increase in the future due to factors such as:

- JPMorgan Chase's ongoing expansion of its mobile banking and other internet-based product offerings and its internal use of internet-based products and applications, including those that use cloud computing services;
- the acquisition of new businesses; and
- the increased use of remote access and third party video conferencing solutions to facilitate work-from-home arrangements for employees.

In addition, a third party could misappropriate confidential information obtained by intercepting signals or communications from mobile devices used by JPMorgan Chase's employees.

A successful penetration or circumvention of the security of JPMorgan Chase's systems or the systems of a vendor, governmental body or another market participant could cause serious negative consequences, including:

- significant disruption of JPMorgan Chase's operations and those of its clients, customers and counterparties, including losing access to operational systems;
- misappropriation of confidential information of JPMorgan Chase or that of its clients, customers, counterparties, employees or regulators;

- disruption of or damage to JPMorgan Chase's systems and those of its clients, customers and counterparties;
- the inability, or extended delays in the ability, to fully recover and restore data that has been stolen, manipulated or destroyed, or the inability to prevent systems from processing fraudulent transactions;
- violations by JPMorgan Chase of applicable privacy and other laws;
- financial loss to JPMorgan Chase or to its clients, customers, counterparties or employees;
- loss of confidence in JPMorgan Chase's cybersecurity and business resiliency measures;
- dissatisfaction among JPMorgan Chase's clients, customers or counterparties;
- significant exposure to litigation and regulatory fines, penalties or other sanctions; and
- harm to JPMorgan Chase's reputation.

The extent of a particular cyber attack and the steps that JPMorgan Chase may need to take to investigate the attack may not be immediately clear, and it may take a significant amount of time before such an investigation can be completed. While such an investigation is ongoing, JPMorgan Chase may not necessarily know the full extent of the harm caused by the cyber attack, and that damage may continue to spread. These factors may inhibit JPMorgan Chase's ability to provide rapid, full and reliable information about the cyber attack to its clients, customers, counterparties and regulators, as well as the public. Furthermore, it may not be clear how best to contain and remediate the harm caused by the cyber attack, and certain errors or actions could be repeated or compounded before they are discovered and remediated. Any or all of these factors could further increase the costs and consequences of a cyber attack.

JPMorgan Chase can be negatively affected if it fails to identify and address operational risks associated with the introduction of or changes to products, services and delivery platforms.

When JPMorgan Chase launches a new product or service, introduces a new platform for the delivery or distribution of products or services (including mobile connectivity, electronic trading and cloud computing), acquires or invests in a business or makes changes to an existing product, service or delivery platform, it may not fully appreciate or identify new operational risks that may arise from those changes, or may fail to implement adequate controls to mitigate the risks associated with those changes. Any significant failure in this regard could diminish JPMorgan Chase's ability to operate one or more of its businesses or result in:

- potential liability to clients, counterparties and customers;
- increased operating expenses;
- higher litigation costs, including regulatory fines, penalties and other sanctions;
- damage to JPMorgan Chase's reputation;
- impairment of JPMorgan Chase's liquidity;
- regulatory intervention; or
- weaker competitive standing.

Any of the foregoing consequences could materially and adversely affect JPMorgan Chase's businesses and results of operations.

JPMorgan Chase's operational costs and customer satisfaction could be adversely affected by the failure of an external operational system.

External operational systems with which JPMorgan is connected, whether directly or indirectly, can be sources of operational risk to JPMorgan Chase. JPMorgan Chase may be exposed not only to a systems failure or cyber attack that may be experienced by a vendor or market infrastructure with which JPMorgan Chase is directly connected, but also to a systems breakdown or cyber attack involving another party to which such a vendor or infrastructure is connected. Similarly, retailers, data aggregators and other external parties with which JPMorgan Chase's customers do business can increase JPMorgan Chase's operational risk. This is particularly the case where activities of customers or those parties are beyond JPMorgan Chase's security and control systems, including through the use of the internet, cloud computing services, and personal smart phones and other mobile devices or services.

If an external party obtains access to customer account data on JPMorgan Chase's systems, and that party experiences a cyberbreach of its own systems or misappropriates that data, this could result in a variety of negative outcomes for JPMorgan Chase and its clients and customers, including:

- heightened risk that external parties will be able to execute fraudulent transactions using JPMorgan Chase's systems;
- losses from fraudulent transactions, as well as potential liability for losses that exceed thresholds established in consumer protection laws, rules and regulations;
- increased operational costs to remediate the consequences of the external party's security breach; and
- reputational harm arising from the perception that JPMorgan Chase's systems may not be secure.

As JPMorgan Chase's interconnectivity with clients, customers and other external parties continues to expand, JPMorgan Chase increasingly faces the risk of operational failure or cyber attacks with respect to the systems of those parties. Security breaches affecting JPMorgan Chase's clients or customers, or systems breakdowns or failures, security breaches or human error or misconduct affecting other external parties, may require JPMorgan Chase to take steps to protect the integrity of its own operational systems or to safeguard confidential information, including restricting the access of customers to their accounts. These actions can increase JPMorgan Chase's operational costs and potentially diminish customer satisfaction and confidence in JPMorgan Chase.

Furthermore, the widespread and expanding interconnectivity among financial institutions, clearing banks, CCPs, payment processors, financial technology companies, securities exchanges, clearing houses and other financial market infrastructures increases the risk that the disruption of an operational system involving one institution or entity, including due to a cyber attack, may cause industry-wide operational disruptions that could materially affect JPMorgan Chase's ability to conduct business.

JPMorgan Chase's operations rely on its ability, and the ability of key external parties, to maintain appropriately-staffed workforces, and on the competence, trustworthiness, health and safety of employees.

JPMorgan Chase's ability to operate its businesses efficiently and profitably, to offer products and services that meet the expectations of its clients and customers, and to maintain an effective risk management framework is highly dependent on its ability to staff its operations appropriately and on the competence, integrity, health and safety of its employees. JPMorgan Chase is similarly dependent on the workforces of other parties on which JPMorgan Chase's operations rely, including vendors, custodians and financial markets infrastructures. JPMorgan Chase's businesses could be materially and adversely affected by:

- the ineffective implementation of business decisions;
- any failure to institute controls that appropriately address risks associated with business activities, or to appropriately train employees with respect to those risks and controls;

- staffing shortages, particularly in tight labour markets;
- a significant operational breakdown or failure, theft, fraud or other unlawful conduct; or
- other negative outcomes caused by human error or misconduct by an employee of JPMorgan Chase or of another party on which JPMorgan Chase's operations depend.

JPMorgan Chase's operations could also be impaired if the measures taken by it or by governmental authorities to help ensure the health and safety of its employees are ineffective, or if any external party on which JPMorgan Chase relies fails to take appropriate and effective actions to protect the health and safety of its employees.

JPMorgan Chase faces substantial legal and operational risks in safeguarding personal information.

JPMorgan Chase's businesses are subject to complex and evolving laws, rules and regulations, both within and outside the U.S., governing the privacy and protection of personal information of individuals. The protected parties can include:

- JPMorgan Chase's current, prospective and former clients and customers;
- clients and customers of JPMorgan Chase's clients and customers;
- current, prospective and former employees; and
- employees of JPMorgan Chase's vendors, counterparties and other external parties.

Ensuring that JPMorgan Chase's collection, use, sharing and storage of personal information comply with all applicable laws, rules and regulations in all relevant jurisdictions, including where the laws of different jurisdictions are in conflict, can:

- increase JPMorgan Chase's compliance and operating costs;
- hinder the development of new products or services, curtail the offering of existing products or services, or affect how products and services are offered to clients and customers;
- demand significant oversight by JPMorgan Chase's management; and
- require JPMorgan Chase to structure its businesses, operations and systems in less efficient ways.

Not all of JPMorgan Chase's clients, customers, vendors, counterparties and other external parties may have appropriate controls in place to protect the confidentiality of the information exchanged between them and JPMorgan Chase, particularly where information is transmitted by electronic means. JPMorgan Chase could be exposed to litigation or regulatory fines, penalties or other sanctions if personal information of clients, customers, employees or others were to be mishandled or misused, such as situations where such information is:

- erroneously provided to parties who are not permitted to have the information; or
- intercepted or otherwise compromised by unauthorised third parties.

Concerns regarding the effectiveness of JPMorgan Chase's measures to safeguard personal information, or even the perception that those measures are inadequate, could cause JPMorgan Chase to lose existing or potential clients and customers, and thereby reduce JPMorgan Chase's revenues. Furthermore, any failure or perceived failure by JPMorgan Chase to comply with applicable privacy or data protection laws, rules and regulations may subject it to inquiries, examinations and investigations that could result in requirements to modify or cease certain operations or practices, significant liabilities or regulatory fines, penalties or other sanctions. Any of these could damage JPMorgan Chase's reputation and otherwise adversely affect its businesses.

In recent years, well-publicised incidents involving the inappropriate collection, use, sharing or storage of personal information have led to expanded governmental scrutiny of practices relating to the safeguarding of personal information by companies in the U.S. and other countries. That scrutiny has in some cases resulted in, and could in the future lead to, the adoption of stricter laws, rules and regulations relating to the collection, use, sharing and storage of personal information. These types of laws, rules and regulations could prohibit or significantly restrict financial services firms such as JPMorgan Chase from sharing information among affiliates or with third parties such as vendors, and thereby increase compliance costs, or could restrict JPMorgan Chase's use of personal data when developing or offering products or services to customers. These restrictions could also inhibit JPMorgan Chase's development or marketing of certain products or services, or increase the costs of offering them to customers.

JPMorgan Chase's operations, results and reputation could be harmed by occurrences of extraordinary events beyond its control.

JPMorgan Chase's business and operational systems could be seriously disrupted, and its reputation could be harmed, by events or contributing factors that are wholly or partially beyond its control, including material instances of:

- cyber attacks;
- security breaches of its physical premises, including threats to health and safety;
- power, telecommunications or internet outages, or shutdowns of mass transit;
- failure of, or loss of access to, technology or operational systems, including any resulting loss of critical data;
- damage to or loss of property or assets of JPMorgan Chase or third parties, and any consequent injuries, including in connection with any construction projects undertaken by JPMorgan Chase
- effects of climate change;
- natural disasters or severe weather conditions;
- accidents such as explosions or structural failures;
- health emergencies, the spread of infectious diseases, epidemics or pandemics; or
- events arising from local or larger-scale civil unrest, any outbreak or escalation of hostilities or terrorist acts.

JPMorgan Chase maintains a firmwide resiliency program that is intended to enable it to recover critical business functions and supporting assets, including staff, technology and facilities, in the event of a business disruption, including due to the occurrence of an extraordinary event beyond its control. There can be no assurance that JPMorgan Chase's resiliency plans will fully mitigate all potential business continuity risks to JPMorgan Chase, its clients, and customers and third parties with which it does business, or that its resiliency plans will be adequate to address the effects of simultaneous occurrences of multiple business disruption events. In addition, JPMorgan Chase's ability to respond effectively to a business disruption event could be hampered to the extent that the members of its workforce, physical assets or systems and other support infrastructure needed to address the event are geographically dispersed, or conversely, if such an event were to occur in an area in which they are concentrated. Further, should extraordinary events or the factors that cause or contribute to those events become more chronic, the disruptive effects of those events on JPMorgan Chase's business and operations, and on its clients, customers, counterparties and employees, could become more significant and long-lasting.

Any significant failure or disruption of JPMorgan Chase's operations or operational systems, or the occurrence of one or more extraordinary events that are beyond its control, could:

- hinder JPMorgan Chase's ability to provide services to its clients and customers or to transact with its counterparties;
- require it to expend significant resources to correct the failure or disruption or to address the event;
- cause it to incur losses or liabilities, including from loss of revenue, damage to or loss of property, or injuries;
- disrupt market infrastructure systems on which JPMorgan Chase's businesses rely;
- expose it to litigation or regulatory fines, penalties or other sanctions; and
- harm its reputation.

Enhanced regulatory and other standards for the oversight of vendors and other service providers can result in higher costs and other potential exposures.

JPMorgan Chase must comply with enhanced regulatory and other standards associated with doing business with vendors and other service providers, including standards relating to the outsourcing of functions as well as the performance of significant banking and other functions by subsidiaries. JPMorgan Chase incurs significant costs and expenses in connection with its initiatives to address the risks associated with oversight of its internal and external service providers. JPMorgan Chase's failure to appropriately assess and manage these relationships, especially those involving significant banking functions, shared services or other critical activities, could materially adversely affect JPMorgan Chase. Specifically, any such failure could result in:

- potential harm to clients and customers, and any liability associated with that harm;
- regulatory fines, penalties or other sanctions;
- lower revenues, and the opportunity cost from lost revenues;
- increased operational costs; or
- harm to JPMorgan Chase's reputation.

JPMorgan Chase's risk management framework may not be effective in identifying and mitigating every risk to JPMorgan Chase.

Any inadequacy or lapse in JPMorgan Chase's risk management framework, governance structure, practices, models or reporting systems could expose it to unexpected losses, and its financial condition or results of operations could be materially and adversely affected. Any such inadequacy or lapse could:

- hinder the timely escalation of material risk issues to JPMorgan Chase's senior management and Board of Directors;
- lead to business decisions that have negative outcomes for JPMorgan Chase;
- require significant resources and time to remediate;
- lead to non-compliance with laws, rules and regulations;
- attract heightened regulatory scrutiny;
- expose JPMorgan Chase to regulatory investigations or legal proceedings;
- subject it to litigation or regulatory fines, penalties or other sanctions;

- lead to potential harm to customers and clients, and any liability associated with that harm;
- harm its reputation; or
- otherwise diminish confidence in JPMorgan Chase.

JPMorgan Chase relies on data to assess its various risk exposures. Any deficiencies in the quality or effectiveness of JPMorgan Chase's data gathering, analysis and validation processes could result in ineffective risk management practices. These deficiencies could also result in inaccurate risk reporting.

Many of JPMorgan Chase's risk management strategies and techniques consider historical market behaviour and to some degree are based on management's subjective judgment or assumptions. For example, many models used by JPMorgan Chase are based on assumptions regarding historical correlations among prices of various asset classes or other market indicators. In times of market stress, including difficult or less liquid market environments, or in the event of other unforeseen circumstances, previously uncorrelated indicators may become correlated. Conversely, previously-correlated indicators may become uncorrelated at those times. Sudden market movements and unanticipated market or economic movements could, in some circumstances, limit the effectiveness of JPMorgan Chase's risk management strategies, causing it to incur losses.

JPMorgan Chase could recognise unexpected losses, its capital levels could be reduced and it could face greater regulatory scrutiny if its models, estimations or judgments, including those used in its financial statements, prove to be inadequate or incorrect.

JPMorgan Chase has developed and uses a variety of models and other analytical and judgment-based estimations to measure, monitor and implement controls over its market, credit, capital, liquidity, operational and other risks. JPMorgan Chase also uses internal models and estimations as a basis for its stress testing and in connection with the preparation of its financial statements under U.S. generally accepted accounting principles ("**U.S. GAAP**").

These models and estimations are based on a variety of assumptions and historical trends, and are periodically reviewed and modified as necessary. The models and estimations that JPMorgan Chase uses may not be effective in all cases to identify, observe and mitigate risk due to a variety of factors, such as:

- reliance on historical trends that may not persist in the future, including assumptions underlying the models and estimations such as correlations among certain market indicators or asset prices;
- inherent limitations associated with forecasting uncertain economic and financial outcomes;
- historical trend information may be incomplete, or may not be indicative of severely negative market conditions such as extreme volatility, dislocation or lack of liquidity;
- sudden illiquidity in markets or declines in prices of certain loans and securities may make it more difficult to value certain financial instruments;
- technology that is introduced to run models or estimations may not perform as expected, or may not be well understood by the personnel using the technology;
- models and estimations may contain erroneous data, valuations, formulas or algorithms; and
- review processes may fail to detect flaws in models and estimations.

JPMorgan Chase may experience unexpected losses if models, estimates or judgments used or applied in connection with its risk management activities or the preparation of its financial statements prove to have been inadequate or incorrect. For example, where quoted market prices

are not available for certain financial instruments that require a determination of their fair value, JPMorgan Chase may make fair value determinations based on internally developed models or other means which ultimately rely to some degree on management estimates and judgment.

Similarly, JPMorgan Chase establishes an allowance for expected credit losses related to its credit exposures which requires difficult, subjective and complex judgments including forecasts of how economic conditions might impair the ability of JPMorgan Chase's borrowers and counterparties to repay their loans or other obligations. These types of estimates and judgments may not prove to be accurate due to a variety of factors, as noted above. In addition, certain models used by JPMorgan Chase as a basis for the determination of the allowance for expected credit losses experienced heightened performance risk in the economic environment during the early stages of the COVID-19 pandemic. These models are based on historical experience of internally-developed macroeconomic scenarios, and when the current and forecasted environment is significantly different from the scenarios underlying those models, JPMorgan Chase may need to apply a greater degree of judgment and analytics to inform any adjustments that it has made or may make to model outputs.

Some of the models and other analytical and judgment-based estimations used by JPMorgan Chase in managing risks are subject to review by, and require the approval of, JPMorgan Chase's regulators. These reviews are required before JPMorgan Chase may use those models and estimations for calculating market risk RWA, credit risk RWA and operational risk RWA under Basel III. If JPMorgan Chase's models or estimations are not approved by its regulators, it may be subject to higher capital charges, which could adversely affect its financial results or limit the ability to expand its businesses.

Lapses in controls over disclosure or financial reporting could materially affect JPMorgan Chase's profitability or reputation.

There can be no assurance that JPMorgan Chase's disclosure controls and procedures will be effective in every circumstance, or that a material weakness or significant deficiency in internal control over financial reporting will not occur. Any such lapses or deficiencies could result in inaccurate financial reporting which, in turn, could:

- materially and adversely affect JPMorgan Chase's business and results of operations or financial condition;
- restrict its ability to access the capital markets;
- require it to expend significant resources to correct the lapses or deficiencies;
- expose it to litigation or regulatory fines, penalties or other sanctions;
- harm its reputation; or
- otherwise diminish investor confidence in JPMorgan Chase.

If JPMorgan Chase's management fails to develop and execute effective business strategies, and to anticipate changes affecting those strategies, JPMorgan Chase's competitive standing and results could suffer.

JPMorgan Chase's business strategies significantly affect its competitive standing and operations. These strategies relate to:

- the products and services that JPMorgan Chase offers;
- the geographies in which it operates;
- the types of clients and customers that it serves;
- the businesses that it acquires or in which it invests;
- the counterparties with which it does business; and

- the methods and distribution channels by which it offers products and services.

If management makes choices about these strategies and goals that prove to be incorrect, do not accurately assess the competitive landscape and industry trends, or fail to address changing regulatory and market environments or the expectations of clients, customers, investors, employees and other stakeholders, then the franchise values and growth prospects of JPMorgan Chase's businesses may suffer and its earnings could decline.

JPMorgan Chase's growth prospects also depend on management's ability to develop and execute effective business plans to address these strategic priorities, both in the near term and over longer time horizons. Management's effectiveness in this regard will affect JPMorgan Chase's ability to develop and enhance its resources, control expenses and return capital to shareholders. Each of these objectives could be adversely affected by any failure on the part of management to:

- devise effective business plans and strategies;
- offer products and services that meet changing expectations of clients and customers;
- allocate capital in a manner that promotes long-term stability to enable JPMorgan Chase to build and invest in market-leading businesses, even in a highly stressed environment;
- allocate capital appropriately due to imprecise modelling or subjective judgments made in connection with those allocations;
- appropriately address concerns of clients, customers, investors, employees and other stakeholders, including with respect to social and sustainability matters;
- react quickly to changes in market conditions or market structures; or
- develop and enhance the operational, technology, risk, financial and managerial resources necessary to grow and manage JPMorgan Chase's businesses.

Furthermore, JPMorgan Chase may incur costs in connection with disposing of excess properties, premises and facilities, and those costs could be material to its results of operations in a given period.

JPMorgan Chase faces significant and increasing competition in the rapidly evolving financial services industry.

JPMorgan Chase operates in a highly competitive environment in which it must evolve and adapt to the significant changes as a result of changes in financial regulation, technological advances, increased public scrutiny and changes in economic conditions. JPMorgan Chase expects that competition in the U.S. and global financial services industry will continue to be intense. Competitors include:

- other banks and financial institutions;
- trading, advisory and investment management firms;
- finance companies;
- technology companies; and
- other nonbank firms that are engaged in providing similar products and services.

JPMorgan Chase cannot provide assurance that the significant competition in the financial services industry will not materially and adversely affect its future results of operations.

New competitors in the financial services industry continue to emerge. For example, technological advances and the growth of e-commerce have made it possible for non-depository institutions to offer products and services that traditionally were banking products. These

advances have also allowed financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities and cryptocurrency trading, payments processing and online automated algorithmic-based investment advice. Furthermore, both financial institutions and their non-banking competitors face the risk that payments processing and other products and services, including deposits and other traditional banking products, could be significantly disrupted by the use of new technologies, such as cryptocurrencies and other applications that use secure distributed ledgers, that require no intermediation. New technologies have required and could require JPMorgan Chase to spend more to modify or adapt its products to attract and retain clients and customers or to match products and services offered by its competitors, including technology companies. In addition, new technologies may be used by customers, or breached or infiltrated by third parties, in unexpected ways, which can increase JPMorgan Chase's costs for complying with laws, rules and regulations that apply to the offering of products and services through those technologies and reduce the income that JPMorgan Chase earns from providing products and services through those technologies.

Ongoing or increased competition may put pressure on the pricing for JPMorgan Chase's products and services or may cause JPMorgan Chase to lose market share, particularly with respect to traditional banking products. This competition may be on the basis of quality and variety of products and services offered, transaction execution, innovation, reputation and price. The failure of any of JPMorgan Chase's businesses to meet the expectations of clients and customers, whether due to general market conditions, under-performance, a decision not to offer a particular product or service, changes in client and customer expectations or other factors, could affect JPMorgan Chase's ability to attract or retain clients and customers. Any such impact could, in turn, reduce JPMorgan Chase's revenues. Increased competition also may require JPMorgan Chase to make additional capital investments in its businesses, or to extend more of its capital on behalf of its clients in order to remain competitive.

The effects of climate change could adversely impact JPMorgan Chase and its clients.

JPMorgan Chase operates in many regions, countries and communities around the world where its businesses, and the activities of its clients and customers, could be impacted by climate change. Climate change could manifest as a financial risk to JPMorgan Chase either through changes in the physical climate or from the process of transitioning to a low-carbon economy, including changes in climate policy or in the regulation of financial institutions with respect to risks posed by climate change.

Climate-related physical risks include acute weather events, such as hurricanes and floods, and chronic shifts in the climate, such as altered distribution and intensity of rainfall, prolonged droughts or flooding, increased frequency of wildfires, rising sea levels, or a rising heat index. Climate-related physical risks could have adverse financial and other impacts on JPMorgan Chase, both directly on its business and operations and as a result of impacts to its clients and customers, including:

- declines in asset values, including due to the destruction or degradation of property;
- reduced availability of insurance;
- significant interruptions to business operations, including supply chain disruption; and
- systemic changes to geographies, regional economies and sectors, and any resulting population migration or unemployment.

Transition risks arise from the process of adjusting to a low-carbon economy. In addition to possible changes in climate policy and financial regulation, potential transition risks may include economic and other changes engendered by the development of low-carbon technological advances (e.g., electric vehicles and renewable energy) and/or changes in consumer preferences towards low-carbon goods and services. Transition risks could be further accelerated by the occurrence of changes in the physical climate. The possible adverse impacts of transition risks to both JPMorgan Chase and its clients and customers include:

- sudden devaluation of assets, including unanticipated write-downs ("**stranded assets**");
- increased operational and compliance costs driven by changes in climate policy and/or regulations;
- negative consequences to business models, and the need to make changes in response to those consequences; and
- damage to JPMorgan Chase's reputation, including as a result of any perception that its business practices are contrary to public policy or stakeholder preferences.

Both physical risks and transition risks could have negative impacts on the revenues, financial condition or creditworthiness of JPMorgan Chase's clients and customers, and on its exposure to those clients and customers.

Conduct failure by JPMorgan Chase employees can harm clients and customers, impact market integrity, damage JPMorgan Chase's reputation and trigger litigation and regulatory action.

JPMorgan Chase's employees interact with clients, customers and counterparties, and with each other, every day. All employees are expected to demonstrate values and exhibit the behaviours that are an integral part of JPMorgan Chase's Code of Conduct and How We Do Business Principles, including JPMorgan Chase's commitment to "do first class business in a first class way." JPMorgan Chase endeavours to embed conduct risk management throughout an employee's life cycle, including recruiting, onboarding, training and development, and performance management. Conduct risk management is also an integral component of JPMorgan Chase's promotion and compensation processes.

Notwithstanding these expectations, policies and practices, certain employees have engaged in improper or illegal conduct in the past. These instances of misconduct have resulted in litigation, and resolutions of governmental investigations or enforcement actions involving consent orders, deferred prosecution agreements, non- prosecution agreements and other civil or criminal sanctions. There is no assurance that further inappropriate or unlawful actions by employees will not occur, lead to a violation of the terms of these resolutions (and associated consequences), or that any such actions will always be detected, deterred or prevented.

JPMorgan Chase's reputation could be harmed, and collateral consequences could result, from a failure by one or more employees to conduct themselves in accordance with JPMorgan Chase's expectations, policies and practices, including by acting in ways that harm clients, customers, other market participants or other employees. Some examples of this include:

- improperly selling and marketing JPMorgan Chase's products or services;
- engaging in insider trading, market manipulation or unauthorised trading;
- engaging in improper or fraudulent behaviour in connection with government relief programs;
- facilitating a transaction where a material objective is to achieve a particular tax, accounting or financial disclosure treatment that may be subject to scrutiny by governmental or regulatory authorities, or where the proposed treatment is unclear or may not reflect the economic substance of the transaction;
- failing to fulfil fiduciary obligations or other duties owed to clients or customers;
- violating antitrust or anti-competition laws by colluding with other market participants;
- using electronic communications channels that have not been approved by JPMorgan Chase;

- engaging in discriminatory behaviour or harassment with respect to clients, customers or employees, or acting contrary to JPMorgan Chase's goal of fostering a diverse and inclusive workplace;

- managing or reporting risks in ways that subordinate JPMorgan Chase's risk appetite to business performance goals or employee compensation objectives; and

- misappropriating property, confidential or proprietary information, or technology assets belonging to JPMorgan Chase, its clients and customers or third parties.

The consequences of any failure by one or more employees to conduct themselves in accordance with JPMorgan Chase's expectations, policies or practices could include litigation, or regulatory or other governmental investigations or enforcement actions. Any of these proceedings or actions could result in judgments, settlements, fines, penalties or other sanctions, or lead to:

- financial losses;

- increased operational and compliance costs;

- greater scrutiny by regulators and other parties;

- regulatory actions that require JPMorgan Chase to restructure, curtail or cease certain of its activities;

- the need for significant oversight by JPMorgan Chase's management;

- loss of clients or customers; and

- harm to JPMorgan Chase's reputation.

The foregoing risks could be heightened with respect to newly-acquired businesses if JPMorgan Chase fails to successfully integrate employees of those businesses or any of those employees do not conduct themselves in accordance with JPMorgan Chase's expectations, policies and practices.

JPMorgan Chase's ability to attract and retain qualified and diverse employees is critical to its success.

JPMorgan Chase's employees are its most important resource, and in many areas of the financial services industry, competition for qualified personnel is intense. JPMorgan Chase endeavours to attract talented and diverse new employees and retain, develop and motivate its existing employees. JPMorgan Chase's efforts to retain talented and diverse employees can be particularly challenging when members of its workforce are targeted for recruitment by competitors. If JPMorgan Chase were unable to continue to attract or retain qualified and diverse employees, including successors to the Chief Executive Officer, members of the Operating Committee and other senior leaders, JPMorgan Chase's performance, including its competitive position, could be materially and adversely affected.

Unfavourable changes in immigration or travel policies could adversely affect JPMorgan Chase's businesses and operations.

JPMorgan Chase relies on the skills, knowledge and expertise of employees located throughout the world. Changes in immigration or travel policies in the U.S. and other countries that unduly restrict or otherwise make it more difficult for employees or their family members to work in, or travel to or transfer between, jurisdictions in which JPMorgan Chase has operations or conducts its business could inhibit JPMorgan Chase's ability to attract and retain qualified employees, and thereby dilute the quality of its workforce, or could prompt JPMorgan Chase to make structural changes to its worldwide or regional operating models that cause its operations to be less efficient or more costly.

(f) ***JPMCFC is dependent on JPMorgan Chase & Co. and other J.P. Morgan affiliates but the insolvency or default of JP Morgan Chase & Co will not be an Event of Default under JPMCFC–issued Securities***

As a finance subsidiary JPMCFC has no independent operations and has limited assets

As a finance subsidiary of JPMorgan Chase & Co., JPMCFC has no independent operations beyond the issuance and administration of its securities. Aside from the initial capital contribution from an affiliate, substantially all of the assets of JPMCFC are expected to relate to obligations of one or more of its affiliates to make payments under loans made by JPMCFC or under other intercompany agreements with JPMCFC. As a result, JPMCFC's ability to make payments in respect of the Securities is limited. JPMCFC is dependent upon payments from one or more of its affiliates under intercompany loans and other intercompany agreements to meet its obligations under the Securities it issues. If these affiliates do not make payments to JPMCFC and JPMCFC fails to make payments on the Securities, Holders of the Securities issued by JPMCFC may have to seek payment under the related guarantee by JPMorgan Chase & Co. and that guarantee will rank pari passu with all other unsecured and unsubordinated obligations of JPMorgan Chase & Co.

It will not constitute an Event of Default under Securities issued by JPMCFC for a payment or other covenant default by JPMorgan Chase & Co. to occur or be continuing under the JPMorgan Chase & Co. Guarantee or for any event to occur or be continuing that is directly or indirectly related to JPMorgan Chase & Co. becoming subject to receivership, bankruptcy, insolvency, liquidation, resolution, reorganisation or other similar proceeding. Securities issued by JPMCFC will not have the benefit of any cross-default or cross-acceleration with any other indebtedness of JPMCFC or JPMorgan Chase & Co.

(g) ***JPMSP is partly dependent on other J.P. Morgan affiliates***

JPMSP is an indirect wholly owned subsidiary of JPMorgan Chase & Co. It is anticipated that JPMSP and will, for an issuance of Securities, enter into hedging arrangements with other J.P. Morgan affiliates, and that such arrangements will be sufficient to hedge its respective market risk for such issuance. Accordingly, the ability of JPMSP to perform its respective obligations under the Securities may be affected by any inability or failure to perform, pursuant to its respective hedging arrangements, by any other J.P. Morgan affiliate.

1.5 **Risks relating to recovery and resolution proceedings**

Regulators in the U.S., Europe and other jurisdictions continue to develop 'resolution and recovery' measures designed to ensure long term financial and economic stability and minimise costs to the public in the event of the potential failure of one or more large financial institutions. These measures include providing resolution authorities with extensive tools and powers to deal with a failing financial institution, including potentially the power to "bail-in" certain of its and its subsidiaries' liabilities by writing them down or converting them into equity. **You may lose some or all of your return on the Securities as a result of these measures.** Resolution and recovery measures are very recent and untested developments in the financial markets, and they introduce substantial new risks that investors should consider prior to investing in Securities. These risks include:

(a) ***In certain circumstances, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. could be subject to resolution proceedings***

U.S. requirements for the orderly resolution of JPMorgan Chase could require JPMorgan Chase to restructure or reorganise its business. Holders of Securities would be at risk of losing some or all of their investment if JPMorgan Chase were to enter into a resolution process, or even if such an outcome were suggested. See:

- Risk Factor 1.4(a) (*Regulatory, Legal and Reputation Risks*) and Risk Factor 1.4(d) (*Liquidity and Capital Risks*) above; and
- Risk Factor 1.6 (*U.S. insolvency and resolution considerations*) below.

(b) ***In certain circumstances, the Hedging Entity's or its counterparty to the related Underlying Hedge Transactions under the Securities could be subject to resolution proceedings***

In the event of a substantial deterioration in the Hedging Entity's or its counterparty's financial condition, the relevant resolution authority could take resolution action with respect to the Hedging Entity or its counterparty, including by exercising the "bail-in" tool or other resolution measures. As a result of any such resolution proceeding, the Issuer may terminate the Securities prior to their scheduled maturity, and for an amount that may be less than the original purchase price of the Securities. See Risk Factor 5.4 (*Where applicable, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of an Extraordinary Hedge Disruption Event*) below.

(c) ***Resolution proceedings in respect of a relevant institution may have a material negative effect on Securities linked to one or more Underlying Asset(s) affected by such proceedings.***

If your Securities are linked to one or more Underlying Asset(s), the commencement of resolution proceedings in respect of a relevant institution could have a material negative effect on your Securities. For example, where:

- for Securities linked to a share, the company which has issued the shares enters into resolution proceedings during the term of the Securities;
- for Securities linked to a depositary receipt, the company which has issued the underlying shares represented by the depositary receipts or the issuer of the depositary receipts enters into resolution proceedings during the term of the Securities;
- for Securities linked to an index, one or more issuers of the shares comprising the relevant index enters into resolution proceedings during the term of the Securities;
- for Securities linked to a share or a unit of an exchange traded fund or a mutual fund, one or more issuers of shares comprising the fund underlying benchmark or the management company enters into resolution proceedings during the terms of the Securities; and
- for Securities linked to the credit of a reference entity, the reference entity enters into resolution proceedings during the term of the Securities.

1.6 **U.S. insolvency and resolution considerations**

New York Law Notes constitute "loss-absorbing capacity" within the meaning of the final rules (the "**TLAC rules**") issued by the Federal Reserve on 15 December 2016 regarding, among other things, the minimum levels of unsecured external long-term debt and other loss-absorbing capacity that certain U.S. bank holding companies, including JPMorgan Chase & Co., are required to maintain. Such debt must satisfy certain eligibility criteria under the TLAC rules. If JPMorgan Chase & Co. were to enter into resolution, either in a proceeding under Chapter 11 of the U.S. Bankruptcy Code or into a receivership administered by the FDIC under Title II of the Dodd-Frank Act, holders of New York Law Notes and other debt and equity securities of JPMorgan Chase & Co. (including other Securities issued by JPMorgan Chase & Co.) would be at risk of absorbing the losses of JPMorgan Chase & Co. and its affiliates.

Under Title I of the Dodd-Frank Act and applicable rules of the Federal Reserve and the FDIC, JPMorgan Chase & Co. is required to submit periodically to the Federal Reserve and the FDIC a detailed plan (the "**resolution plan**") for the rapid and orderly resolution of JPMorgan Chase & Co. and its material subsidiaries under the U.S. Bankruptcy Code and other applicable insolvency laws in the event of material financial distress or failure. JPMorgan Chase & Co.'s preferred resolution strategy under its resolution plan contemplates that only JPMorgan Chase & Co. would enter bankruptcy proceedings under Chapter 11 of the U.S. Bankruptcy Code pursuant to a "single point of entry" recapitalisation strategy. JPMorgan Chase & Co.'s subsidiaries would be recapitalised as needed so that they could continue normal operations or subsequently be wound down in an orderly manner. As a result, JPMorgan Chase & Co.'s losses and any losses incurred by its subsidiaries would be imposed first on holders of JPMorgan Chase

& Co.'s equity securities and thereafter on unsecured creditors, including holders of New York Law Notes and other debt securities of JPMorgan Chase & Co. (including other Securities issued by JPMorgan Chase & Co.). Claims of holders of New York Law Notes and such other debt securities would have a junior position to the claims of creditors of JPMorgan Chase & Co.'s subsidiaries and to the claims of priority (as determined by statute) and secured creditors of JPMorgan Chase & Co. Accordingly, in a resolution of JPMorgan Chase & Co. under Chapter 11 of the U.S. Bankruptcy Code, holders of New York Law Notes and other debt securities of JPMorgan Chase & Co. (including other Securities issued by JPMorgan Chase & Co.) would realise value only to the extent available to JPMorgan Chase & Co. as a shareholder of JPMorgan Chase Bank, N.A. and its other subsidiaries and only after any claims of priority and secured creditors of JPMorgan Chase & Co. have been fully repaid. If JPMorgan Chase & Co. were to enter into resolution, none of JPMorgan Chase & Co., the Federal Reserve or the FDIC is obligated to follow JPMorgan Chase & Co.'s preferred resolution strategy under its resolution plan.

The FDIC has similarly indicated that a single point of entry recapitalisation model could be a desirable strategy to resolve a systemically important financial institution, such as JPMorgan Chase & Co., under Title II of the Dodd-Frank Act ("**Title II**"). Pursuant to that strategy, the FDIC would use its power to create a "bridge entity" for JPMorgan Chase & Co.; transfer the systemically important and viable parts of JPMorgan Chase & Co.'s business, principally the stock of JPMorgan Chase & Co.'s main operating subsidiaries and any intercompany claims against such subsidiaries, to the bridge entity; recapitalise those subsidiaries using assets of JPMorgan Chase & Co. that have been transferred to the bridge entity; and exchange external debt claims against JPMorgan Chase & Co. for equity in the bridge entity. Under a "single point of entry" recapitalisation of JPMorgan Chase & Co., the value of the stock of the bridge entity that would be redistributed to holders of New York Law Notes and other debt securities of JPMorgan Chase & Co. (including other Securities issued by JPMorgan Chase & Co.) may not be sufficient to repay all or part of the principal amount and interest on such New York Law Notes and other securities. It is also possible that the "single point of entry" recapitalisation of JPMorgan Chase & Co. under Title II could result in greater losses to holders of the Securities of JPMorgan Chase & Co. than the losses that would result from a different resolution strategy for JPMorgan Chase & Co. To date, the FDIC has not formally adopted a single point of entry resolution strategy, and it is not obligated to follow such a strategy in a Title II resolution of JPMorgan Chase & Co.

FACTORS WHICH ARE MATERIAL FOR THE PURPOSES OF ASSESSING THE MARKET RISKS IN RELATION TO THE SECURITIES

2. Risks related to the valuation, liquidity and offering of the Securities

2.1 The market value of the Securities on the Issue Date will likely be lower than their original issue price

As at the Issue Date, the issue price of the Securities will likely be more than the market value of such Securities, and more than the price, if any, at which the Dealer or any other person would be willing to purchase the Securities in secondary market transactions. In particular, (a) where permitted by applicable law, the Issue Price may take into account amounts with respect to commissions relating to the issue and sale of the Securities and (b) amounts relating to the hedging of the Issuer's obligations under such Securities, including the profits JPMorgan Chase expects to realise in consideration for assuming the risks inherent in providing such hedge. In addition, whilst the proprietary pricing models of the Dealer are based on well recognised financial principles, other market participants' pricing models may differ or produce a different result. Accordingly, the issue price of the Securities as at the issue date is likely to be more than the initial market value of the Securities, and this could result in a loss if you sell the Securities prior to their scheduled redemption.

2.2 **The market value and the price at which you may be able to sell your Securities prior to maturity may be at a substantial discount to the original issue price of the Securities, and you may lose some or up to all of your investment in any such secondary sale**

Any secondary market prices of the Securities will likely be lower than the original issue price of the Securities because, among other things, secondary market prices take into account the secondary market credit spreads of the Issuer (and, if applicable, the Guarantor) and, also, because secondary market prices (a) exclude selling commissions and (b) may exclude projected hedging profits, if any, and estimated hedging costs that are included in the original issue price of the Securities. As a result, the price, if any, at which the Dealer or any other person would be willing to buy Securities from you in secondary market transactions, if at all, is likely to be lower than the original issue price. Any sale of the Securities by you prior to their scheduled redemption could result in a substantial loss.

2.3 **Prior to their scheduled redemption, the value of the Securities will be influenced by many factors and cannot be predicted**

(a) ***Factors that may affect the value of the Securities***

Many economic and market factors will influence the value of the Securities. Generally, the value of the Reference Asset(s) on any day will likely affect the value of the Securities more than any other single factor. However, you should not expect the value of the Securities in the secondary market to vary in proportion to changes in the value of the Reference Asset(s). The value of the Securities will be affected by a number of other factors that may either offset or magnify each other, including, but not limited to:

- the creditworthiness of the Issuer and (if applicable) the Guarantor, including actual or anticipated downgrades in their respective credit ratings;
- the actual and expected frequency and magnitude of changes in the value of any Reference Asset(s) (i.e., volatility);
- the remaining time to maturity of the Securities;
- depending on the type of Reference Asset(s):
    - the dividend rate on a Share or on the equity securities underlying an Index (while not paid to holders of the Securities, dividend payments on a Share or on any equity securities underlying an Index may influence the value of the Reference Asset(s) and the market value of options on the Reference Asset(s) and therefore affect the market value of the Securities);
    - the occurrence of certain corporate events to a Share or shares represented by a Depositary Receipt (being, an American Depositary Receipt or a Global Depositary Receipt);
    - the occurrence of certain events to the shares of a mutual fund or an exchange traded fund that may or may not require an adjustment to the terms and conditions of the Securities;
    - supply and demand trends and market prices at any time for the relevant Commodities or the exchange-traded futures contracts on such Commodities;
    - interest and yield rates in the market generally as well as in the markets of a Share and the markets of the securities or other constituents included in an Index;
    - economic, financial, political, regulatory and judicial events that affect a Share, the equity securities underlying an Index or stock markets generally;
    - economic, financial, political, regulatory, geographical, agricultural, meteorological or judicial events that affect commodity markets generally;

- the financial condition and perceived creditworthiness of the Reference Entity, including actual or anticipated downgrades in its credit ratings;

- for Securities linked to a basket of Reference Assets, changes in correlation (the extent to which the value of the Reference Assets increase or decrease to the same degree at the same time) between the Reference Assets; and

- the exchange rates and the volatility of the exchange rates between the currency of denomination of the Securities and the currencies in which a Reference Asset(s) Share (with respect to a Reference Asset that is a Depositary Receipt) or the equity securities underlying an Index are traded, and, if an Index is calculated in one currency and the equity securities underlying that Index are traded in one or more other currencies, the correlation between those rates and the value of that Index.

Some or all of these factors will influence the price you will receive if you choose to sell your Securities prior to maturity. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. Any sale of Securities prior to their scheduled redemption may be at a substantial discount from the original purchase price and you may lose some or all of your investment.

(b) ***The market value of the Securities is also expected to be affected, in part, by the credit rating of JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co.***

The value of the Securities is expected to be affected, in part, by the general perceptions of investors of the creditworthiness of JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. Such perceptions may be influenced by the ratings accorded to outstanding securities of JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. by well-recognised rating agencies, such as Moody's Investors Service Inc., Fitch, Inc. and Standard & Poor's, a division of The McGraw Hill Companies, Inc.

The creditworthiness of JPMorgan Chase Bank, N.A. is more likely to affect the trading value of Securities issued by JPMorgan Chase Bank, N.A. and Securities issued by JPMSP, which are guaranteed by JPMorgan Chase Bank, N.A. The creditworthiness of JPMorgan Chase & Co. is more likely to affect the trading value of Securities issued by JPMorgan Chase & Co. and Securities issued by JPMCFC, which are guaranteed by JPMorgan Chase & Co.

The credit ratings of JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. may move independently of one another. JPMorgan Chase & Co. and its subsidiaries (other than JPMorgan Chase Bank, N.A.) are generally permitted to undertake a wider range of activities than JPMorgan Chase Bank, N.A. and its subsidiaries. As a result, while the credit rating of JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. are closely related, those credit ratings are usually different and, in the event of any change in those credit ratings, those ratings may move independently of each other. JPMorgan Chase Bank, N.A. is typically rated more highly than JPMorgan Chase & Co. but there is no assurance that this will always be the case and investors should check the relevant rating at the time of considering any investment in Securities.

A reduction in the rating, if any, or anticipated reduction or downgrade to outstanding securities of JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., by one of the rating agencies could result in a reduction in the trading value of the Securities and this could result in a loss if you sell the Securities prior to their scheduled redemption.

(c) ***The market value of Securities may be highly volatile***

The price, performance or investment return of the Reference Asset(s) may be subject to sudden, large and unpredictable changes over time and this degree of change is known as "volatility". The volatility of a Reference Asset may be affected by national and international financial, political, military or economic events, including governmental actions, or by the activities of participants in the relevant markets. Any of these events or activities could have a negative adverse impact on the value of and return on your Securities.

(d) ***There may be price discrepancies with respect to the Securities as between various dealers or other purchasers in the secondary market***

If at any time a third party dealer quotes a price to purchase Securities or otherwise values Securities, that price may be significantly different (higher or lower) from any price quoted by JPMorgan Chase. Also, if you sell your Securities, you will likely be charged a commission for secondary market transactions, or the price may reflect a dealer discount. Any sale of the Securities by you prior to their scheduled redemption could result in a substantial loss.

2.4 **Secondary market trading may be limited, and you may not be able to sell your Securities prior to scheduled maturity**

The Securities may have no established trading market when issued, and one may never develop. If a market does develop, it may not be very liquid and you may not be able to find a buyer. Therefore, you may not be able to sell your Securities or, if you can, you may only be able to sell them at a price which is substantially less than the original purchase price.

The Issuer may list the Securities on a stock exchange but, in such case, the fact that such Securities are listed will not necessarily lead to greater liquidity. If Securities are not listed or traded on any exchange, pricing information for such Securities may be more difficult to obtain and they may be more difficult to sell.

JPMorgan Chase may act as a market maker for the Securities, but is not required to do so (subject to the rules of any applicable securities exchange). As other market makers may not participate significantly in the secondary market for the Securities, the price at which you may be able to trade your Securities is likely to depend on the price, if any, at which JPMorgan Chase is willing to buy the Securities (as to which see Risk Factor 2.1 (*The market value of the Securities on the Issue Date will likely be lower than their original issue price* above). If at any time the Dealer or another agent does not act as a market maker, it is likely that there would be little or no secondary market for the Securities.

If JPMorgan Chase does make a market for the Securities, it may cease to do so at any time without notice (subject to the rules of any applicable securities exchange).

Securities are also subject to selling restrictions and purchaser representations and requirements and transfer restrictions that may limit your ability to resell or transfer them.

For these reasons, you should not assume that a secondary market will exist for the Securities, and you should be prepared to hold your Securities until their scheduled maturity. The availability of any secondary market may be limited or non-existent and, if you are able to sell your Securities, you may receive significantly less than you would otherwise receive by holding the Securities to their scheduled maturity.

3. **Risks related to the determination of interest or redemption amounts under the Securities**

3.1 **A leverage feature increases the potential loss (or gain) on the Securities**

Where a formula used to determine the amount payable and/or deliverable with respect to the Securities contains a "participation" level or other multiplier or leverage factor (whether implicit or explicit) greater than one, the percentage change in the value of the Securities will be greater than any positive and/or negative performance of the Reference Asset(s). A holder of such Securities may therefore participate disproportionately in any positive performance and/or may have a disproportionate exposure to any negative performance of the Reference Asset(s). Due to this multiplier or leverage factor, such Securities represent a very speculative and risky form of investment, since any loss in the value of the Reference Asset(s) carries the risk of a disproportionately higher loss on the Securities.

3.2 **A "participation" level of less than one means that you will not share in the full positive performance of the Reference Asset(s)**

Where a formula used to determine the amount payable and/or deliverable with respect to the Securities contains an explicit or implicit "participation" level or other multiplier or leverage

factor of less than one, then the percentage change in the value of the Security will be less than any positive and/or negative performance of the Reference Asset(s). A holder of such Securities will therefore not participate fully in the performance (whether positive or negative) of the Reference Asset(s). In such case, the return on the Securities will be disproportionately lower than any positive performance of the Reference Asset(s). Accordingly, in such case, your return on the Securities may be significantly less than if you had purchased the Reference Asset(s) directly or through another product.

3.3 **The potential return will be limited where the Securities include a cap**

Where a formula used to determine the amount payable and/or deliverable with respect to the Securities contains a cap, your ability to participate in any change in the value of the Reference Asset(s) over the term of the Securities will be limited, no matter how much the level, price, rate or other applicable value of the Reference Asset(s) may rise beyond the cap level over the life of the Securities. Accordingly, your return on the Securities may be significantly less than if you had purchased the Reference Asset(s) directly or through another product.

3.4 **There are risks where the Securities include an Issuer call option**

(a) ***Exercise of call option by the Issuer in its discretion with no obligation to consider the interests of holders of the Securities***

Where the terms and conditions of the Securities provide that the Issuer has the right to call for the early redemption or termination of the Securities, the determination by the Issuer of whether it will exercise this right will be made by the Issuer at its discretion, and the Issuer is under no obligation to consider the interests of the holders of the Securities. Any determination by the Issuer to exercise its call option will be conclusive and binding on all persons, including the holders of the Securities.

(b) ***Reinvestment Risk***

In determining whether or not to exercise its call option, the Issuer may take into account various factors, including (for example) the current level of the Reference Asset(s) and the perceived likelihood that such levels will be maintained, or will increase or decrease, in the future. The Issuer may consider whether the expected performance of the Reference Asset(s) could imply that a higher amount could be payable in the future under the Securities than the Optional Redemption Amount payable by it were it to exercise its call option. As a result, it is likely that the Issuer will exercise its call option at a time in which the redemption or termination of the Securities is least favourable to the holders, and when the holders would not be able to reinvest the redemption or termination proceeds at an effective return as high as the return on the Securities being redeemed or terminated. You should consider such reinvestment risk in light of other available investments at the time you consider purchasing the Securities.

(c) ***Limitation on the market value of the Securities***

An optional redemption or termination feature on the part of the Issuer of the Securities is likely to limit their market value. During any period when the Issuer may elect to redeem or terminate the Securities, the market value of the Securities generally will not rise above the value at which they can be redeemed or terminated, and this also may be the case prior to the beginning of any redemption or termination period.

(d) ***No further participation in any future positive performance of the Reference Asset(s)***

Where the terms and conditions of the Securities provide that the Issuer has the right to call for the early redemption or termination of the Securities, following any such exercise by the Issuer, you will lose the opportunity to participate any further through your Securities in the performance of the Reference Asset(s).

3.5 **There are risks where the Securities include an averaging feature**

If so provided in the applicable terms and conditions of the Securities, the amount payable (or deliverable) on the Securities (whether at maturity or otherwise) will be based on the arithmetic

average of the applicable levels, prices, rates or other applicable values of the Reference Asset(s) on each of the specified averaging dates, and not the simple performance of the Reference Asset(s) over the term of the Securities. In such case, if (for example) the applicable level, price, rate or other applicable value of the particular Reference Asset(s) dramatically surged on the last of the averaging dates, the amount payable on the Securities may be significantly less than it would have been had the amount payable been linked only to the applicable level, price, rate or other applicable value of the particular Reference Asset(s) on that last averaging date.

3.6 **There are risks where coupon amounts payable throughout the term of the Securities are conditional on certain performance criteria and may be deferred accordingly**

If so provided in the applicable terms and conditions of the Securities, the payment of any coupon amount throughout the term of the Securities will be conditional on the value or performance of the Reference Asset(s). The coupon amount payable will be zero on a Coupon Payment Date if the Reference Asset(s) does not perform in accordance with the terms of the Securities although such payment will be deferred to the next Coupon Payment Date. If the Reference Asset(s) meets the performance criteria, the coupon payable will be an amount for the current Coupon Payment Date plus any amounts deferred from previous Coupon Payment Dates where coupon was not paid. Investors in the Securities will not be paid any coupon or other allowance for the deferred payments of coupon and it is possible that the Reference Asset(s) never meets the performance criteria, meaning that investors will not receive any coupon at all for the lifetime of the Securities.

4. **Risks related to Securities which are linked to a floating rate of interest or to a swap rate and/or to a "benchmark" index**

4.1 **The floating rate of interest may decline over the terms of the Securities and the yield may be less than a comparable investment in a fixed rate security**

A key difference between floating rate Securities and fixed rate Securities is that interest income on floating rate Securities cannot be anticipated. Due to varying interest income, it is not possible to determine a definite yield of floating rate Securities at the time of investment, so that an investor's return on investment cannot be compared with that of investments having longer fixed interest periods. If the terms and conditions of the Securities provide for frequent interest payment dates, you will be exposed to reinvestment risk if market interest rates decline: that is, you may be able to reinvest the interest income paid to you only at the relevant lower interest rates then prevailing.

4.2 **If a floating rate or swap rate is discontinued, modified or declared unrepresentative, then the rate of interest or coupon will be calculated in a different way or the Securities may be redeemed**

If a floating rate (including, for example, GBP LIBOR or USD LIBOR) or a swap rate (including, for example, GBP ICE swap rate or USD ICE swap rate) were to be discontinued or modify its methodology or be declared unrepresentative by its administrator of the market or economic reality that it is intended to measure, the rate of interest or coupon on any Securities which reference such rate (such as Floating Rate Notes and Floating Rate Coupon Certificates) will be determined for the relevant period by the fallback provisions applicable to such Securities (as set out in General Condition 4.2 (*Interest on Floating Rate Notes*) and General Condition 8.3 (*Floating Rate Coupon*).

Depending on the manner in which the rate is to be determined under the terms and conditions of the relevant Securities, the Calculation Agent may determine to obtain the interest or coupon rate in accordance with the following methodologies:

(i) where the rate is a Compounded RFR, the rate shall be replaced by the applicable Recommended Fallback Rate. Where the Recommended Fallback Rate is used, the Calculation Agent may make such adjustments that it determines to be appropriate, if any, to any one or more of the Conditions or other terms of the Securities, including, without limitation, any Condition or term relevant to the settlement or payment under the

Securities, as the Calculation Agent determines appropriate to preserve the economics of the Securities and to otherwise account for such replacement;

(ii) where the rate is a Compounded Index, the rate shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the Underlying RFR, as provided by the administrator of the Underlying RFR for each day in respect of which the Underlying RFR is required for such determination;

(iii) where the rate is a Compounded Index and the Underlying RFR has been discontinued, the rate shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the rate that would apply for derivative transactions referencing the 2021 Definitions with respect to the applicable Underlying RFR;

(iv) where the rate is a Swap Rate, the rate shall be determined by the Calculation Agent by reference to the alternative rate of interest or coupon formally recommended by (in the following order):

(a) the central bank for the currency in which the rate is denominated; or

(b) if no such recommendation is made by such central bank, the central bank (if different) or other supervisor responsible for supervising (i) the rate, or (ii) the administrator of the rate; or

(c) if no such recommendation is made by such central bank or supervisor, any working group or committee officially endorsed or convened by any such central bank or supervisor, or any group thereof, or

(d) if no such recommendation is made in accordance with (a), (b) or (c), the Financial Stability Board or any part thereof, or

(e) if no such recommendation is made in accordance with (a), (b), (c) or (d), where such alternative rate of interest or coupon is substantially the same as the rate, the administrator,

provided that if the Calculation Agent determines that there is no such alternative rate of interest or coupon, the rate shall be determined by the Calculation Agent by reference to such other reference rate(s) and/or price source(s) and/or combination thereof that the Calculation Agent determines to be a commercially reasonable alternative to the rate.

Notwithstanding the above, where (a) the rate is not a rate in respect of which a determination methodology is specified in any of paragraphs (i), (ii), (iii) and (iv) above, or (b) the rate is a rate in respect of which a determination methodology is specified in any of paragraphs (i), (ii), (iii) and (iv) above and "Generic Permanent Fallback" is specified as applicable in the Pricing Supplement, the Calculation Agent shall determine the rate in respect of such Securities in good faith and in a commercially reasonable manner, after consulting any source it deems to be reasonable, as:

(i) a substitute or successor rate, index, benchmark or other price source that it has determined is the industry-accepted standard in any related market (including, without

limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source for the relevant rate; or

(ii) if it determines there is no such industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source, then a substitute or successor rate, index, benchmark or other price source that it determines is a commercially reasonable alternative to the rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market),

provided that (i) any such substitute or successor rate, index, benchmark or other price source may (without limitation) comprise a replacement rate which is determined on a backwards-looking compounding basis by reference to a "risk-free rate"; (ii) there may be more than one such substitute or successor rate, index, benchmark or other price source (which may be applied as of one or more effective dates); (iii) the replacement rate may include an adjustment factor or adjustment spread (which may be positive or negative); and (iv) the terms and conditions of the Securities may be subject to adjustment as described in the paragraph immediately below.

If the Calculation Agent determines the rate of interest or coupon in accordance with the above, it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the rate of interest or coupon, including in order to reduce or eliminate any change in the economic value of the Securities from such change to the method of determination of the rate of interest or coupon. Any such adjustment(s) may include an adjustment factor and/or adjustment spread together with any technical, administrative or operational changes.

If the Calculation Agent determines that the application of these provisions (i) would not achieve a commercially reasonable result (because it is not possible or commercially reasonable to identify a replacement or successor rate, index, benchmark or other price source, or relevant adjustments or for any other reason) and/or (ii) is or would be unlawful at any time under any applicable law or regulation or it would contravene any applicable licensing requirements to determine the interest or coupon amount upon in accordance with the terms of such provisions, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (subject to as provided in the terms and conditions of the relevant Securities). In such case, you may lose some or all of your investment. See Risk Factor 5.1(b) (*The 'Early Payment Amount' may be less than the original invested amount*).

If the rate is USD LIBOR and if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, then the rate of interest or coupon will be determined as described in Risk Factor 4.5 (*Risks relating to USD LIBOR*) below. Any such consequence as described above could have a material adverse effect on the value of and return on the Securities. See also the risk factors immediately below with regard to the risks in connection with the reform and potential replacement of the "IBORs" (including, for example, GBP LIBOR or USD LIBOR) and swap rates (including, for example, GBP ICE swap rate or USD ICE swap rate).

4.3 **Risks associated with benchmark reform and the discontinuance, loss of representativeness and replacement of "IBORs"**

A number of major interest rates, other rates, indices and other published benchmarks, including the London Interbank Offered Rate ("**LIBOR**") and the Euro Interbank Offered Rate ("**EURIBOR**") are the subject of ongoing national and international monitoring and regulatory reform. This has led to the discontinuation or modification of most LIBOR rates and may cause other benchmarks to be discontinued, to be modified, or to be subject to other changes in the future. Any such consequence could have a material adverse effect on the value of and return on Securities the payout of which is dependent on the performance of any such benchmark.

The EU Regulation 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the "**EU Benchmarks Regulation**") and the EU Benchmarks Regulation as it forms part of UK domestic law by virtue

of the European Union (Withdrawal) Act 2018 (as amended) and regulations made thereunder (the "**UK Benchmarks Regulation**", and together with the EU Benchmarks Regulation, the "Benchmarks Regulations") are a key element of the ongoing regulatory reform in, respectively, the EU and the UK.

In addition to "critical benchmarks" such as LIBOR and EURIBOR, other interest rates, foreign exchange rates, and indices, including equity, commodity and "proprietary" indices or strategies, will in most cases be within scope of one or both of the Benchmarks Regulations as "benchmarks" where they are used to determine the amount payable under, or the value of, certain financial instruments (including (i) in the case of the EU Benchmarks Regulation, Securities listed on an EU regulated market or an EU multilateral trading facility ("**MTF**") and (ii) in the case of the UK Benchmarks Regulation, Securities listed on a UK recognised investment exchange or a UK MTF), and in a number of other circumstances.

The EU Benchmarks Regulation applies to the contribution of input data to a benchmark, the administration of a benchmark, and the use of a benchmark in the EU. Amongst other things, the EU Benchmarks Regulation requires EU benchmark administrators to be authorised or registered as such and to comply with extensive requirements relating to benchmark administration. It also prohibits (subject to transitional provisions) certain uses by EU supervised entities of (a) benchmarks provided by EU administrators which are not authorised or registered in accordance with the EU Benchmarks Regulation and (b) benchmarks provided by non-EU administrators where (i) the administrator's regulatory regime has not been determined to be "equivalent" to that of the EU, (ii) the administrator has not been recognised in accordance with the EU Benchmarks Regulation, and (iii) the benchmark has not been endorsed in accordance with the EU Benchmarks Regulation.

The UK Benchmarks Regulation imposes substantially the same obligations and restrictions as the EU Benchmarks Regulation, but has a narrower geographical scope. The UK Benchmarks Regulation applies to the contribution of input data to a benchmark, the administration of a benchmark, and the use of a benchmark in the United Kingdom. In-scope entities include UK benchmark administrators and UK supervised entities.

The ESMA maintains a public register of EU-approved benchmark administrators and non-EU benchmarks pursuant to the EU Benchmarks Regulation (the "**ESMA Register**"). Benchmarks and benchmark administrators which were approved by the UK Financial Conduct Authority ("**FCA**") prior to 31 December 2020 were removed from the ESMA Register on 1 January 2021.

Since 1 January 2021, the FCA has maintained a separate public register of FCA-approved benchmark administrators and non-UK benchmarks pursuant to the UK Benchmarks Regulation (the "**UK Register**"). The UK Register includes benchmark administrators and benchmarks which were approved by the FCA prior to 31 December 2020.

The EU Benchmarks Regulation and/or the UK Benchmarks Regulation could have a material adverse impact on the value of and return on Securities linked to a benchmark. For example:

- a rate or index which is a "benchmark" within the meaning of the EU Benchmarks Regulation may not be used in certain ways by an EU supervised entity if (subject to applicable transitional provisions) its administrator does not obtain authorisation or registration from its EU competent authority (or, if a non-EU entity, does not satisfy the "equivalence" conditions and is not "recognised" by an EU competent authority, pending an equivalence decision, and does not have the relevant benchmark "endorsed" by an EU supervised entity). If the benchmark administrator does not obtain or maintain (as applicable) such authorisation or registration (or, if a non-EU entity, "equivalence" is not available and neither recognition nor endorsement is obtained) (this is referred to as an "**Administrator/Benchmark Event**"), then the Securities may be redeemed prior to maturity;

- similarly, a rate or index which is a "benchmark" within the meaning of the UK Benchmarks Regulation may not be used in certain ways by an UK supervised entity if (subject to applicable transitional provisions) its administrator does not obtain authorisation or registration from the FCA (or, if a non-UK entity, does not satisfy the

"equivalence" conditions and is not "recognised" by the FCA, pending an equivalence decision, and does not have the relevant benchmark "endorsed" by a UK supervised entity). If the benchmark administrator does not obtain or maintain (as applicable) such authorisation or registration (or, if a non-UK entity, "equivalence" is not available and neither recognition nor endorsement is obtained) (this is referred to as an "**Administrator/Benchmark Event**"), then the Securities may be redeemed prior to maturity;

- if the Reference Asset is a benchmark and it would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine the level or other value of such Reference Asset or make any other determination in respect of the Securities which it would otherwise be obliged to do so pursuant to the Conditions, then the Securities may be redeemed prior to maturity; and

- the methodology or other terms of the benchmark could be changed in order to comply with the requirements of the applicable Benchmarks Regulation, or mandatory substitution of a "critical" benchmark with a replacement benchmark could be imposed by statute, and such changes could reduce or increase the rate or level or affect the volatility of the published rate or level, and (depending on the type of the particular Securities) could lead to adjustments to the terms of the Securities including potentially determination by the Calculation Agent of the rate or level in its discretion.

Ongoing national and international regulatory reforms and the increased regulatory scrutiny of benchmarks generally could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any applicable regulations or requirements. Such factors may discourage market participants from continuing to administer or contribute to benchmarks, trigger changes in the rules or methodologies used in respect of benchmarks, and/or lead to the disappearance of benchmarks. This could result in (i) the substitution of replacement rates for such benchmark(s), (ii) adjustments to the terms of the relevant Securities, (iii) early redemption of the relevant Securities, (iv) discretionary valuation of the rate by the Calculation Agent, (v) delisting of the relevant Securities and/or (vi) other consequences for Securities linked to any such benchmark(s). Any such consequence could have a material adverse effect on the value of and return on any Securities linked to, referencing, or otherwise dependent (in whole or in part) upon, a benchmark.

4.4 **Discontinuance and/or loss of representativeness of Interbank Offered Rates and swap rates, transition of tough legacy contracts, and replacement with risk-free rates**

(a) ***Discontinuance and/or loss of representativeness of Interbank Offered Rates and swap rates***

Interbank Offered Rates

On 5 March 2021, ICE Benchmark Administration Limited, LIBOR's administrator, announced its intention to cease publication of all LIBOR rates on 31 December 2021, with the exception of certain US dollar LIBOR rates (as described below), which will continue to be published until 30 June 2023. On the same day, the FCA announced that:

(i) *the following rates will cease to be provided immediately after 30 June 2023*: overnight and twelve-month US dollar LIBOR;

(ii) *the following rates will cease to be representative of their underlying market from the date indicated below, and representativeness will not be restored*:

(A) *immediately after 31 December 2021*: one-month, three-month and six-month sterling LIBOR (the "**Sterling LIBOR Non-Representative Rates**"); and one-month, three-month and six-month Japanese yen LIBOR (the "**Japanese yen LIBOR Non-Representative Rate**s"); and

(B) *immediately after 30 June 2023*: one-month, three-month and six-month US dollar LIBOR (the "**US dollar LIBOR (June 2023) Non-Representative Rates**").

The FCA has exercised powers conferred on it under the UK Benchmarks Regulation to compel the continued publication of the Sterling LIBOR Non-Representative Rates and the Japanese yen LIBOR Non-Representative Rates for a period of time after 31 December 2021 on the basis of a "synthetic" methodology, comprising the applicable forward-looking term rate plus a fixed spread ("**Synthetic LIBOR**"). The FCA has confirmed that the Japanese yen LIBOR Non-Representative Rates will continue in the form of Synthetic LIBOR until the end of 2022, when they will be discontinued. The Sterling LIBOR Non-Representative Rates are expected to continue in the form of Synthetic LIBOR beyond 2022, but only for such time as is necessary to allow for their orderly wind-down.

Pursuant to the UK Benchmarks Regulation and the Critical Benchmarks (References and Administrators' Liability) Act 2021, use of sterling Synthetic LIBOR and Japanese yen Synthetic LIBOR is permitted in all in-scope legacy contracts (other than cleared derivatives) that have not transitioned to an alternative rate by 31 December 2021 until 31 December 2022. Restrictions on supervised entities' use of the Sterling LIBOR Non-Representative Rates may be imposed thereafter. Synthetic LIBOR rates may not be referenced in new financial instruments.

The FCA intends to consult in due course on the need to compel continued publication of the US dollar LIBOR (June 2023) Non-Representative Rates on a Synthetic LIBOR basis. Although overnight, one-month, three-month, six-month and twelve-month US dollar LIBOR will continue until 30 June 2023, use of these rates by UK supervised entities after the end of 2021 has been prohibited by the FCA, except in certain specific scenarios.

Accordingly, except in very limited circumstances, LIBOR rates may no longer be referenced in new financial instruments. Furthermore, you should anticipate that the continuing US dollar LIBOR rates will either be discontinued or cease to be representative immediately after 30 June 2023.

Swap Rates

On 31 December 2021, ICE Benchmark Administration ("**IBA**") ceased publication of the sterling LIBOR ICE Swap Rate for all tenors. Furthermore, IBA has announced that it expects to consult on the potential cessation of the US dollar LIBOR ICE Swap Rate in due course. As the US dollar LIBOR ICE Swap Rate is dependent on the availability of representative US dollar LIBOR, it is unlikely that the US dollar LIBOR ICE Swap Rate will continue to be published after 30 June 2023. In the event that it is continued, there is no guarantee that the calculation methodology will remain unchanged.

Moreover, if use restrictions imposed by the FCA on US dollar LIBOR (see above) cause liquidity in the US dollar LIBOR swap market underpinning the US dollar LIBOR ICE Swap Rate to dry up before US dollar LIBOR is officially discontinued or ceases to be representative, it is possible that the US dollar LIBOR ICE Swap Rate will be discontinued before June 2023.

In the event that the Securities reference a rate that is discontinued, investors should be aware that such rate will be replaced with an alternative rate that may differ significantly from the original rate. Consequently, Securities may perform differently (which may include payment of a lower interest linked amount) from how they would have performed if the original rate had continued to apply. See also "*Replacement of IBORs with risk-free rates*" below.

(b) ***Transition of 'tough legacy' contracts and instruments***

Legislators and regulators in the UK, the EU and the US have implemented legislative solutions to deal with the issue of so-called tough legacy contracts and instruments, being existing contracts and instruments that do not have appropriate fallback terms and which cannot practicably be amended or transitioned. These include:

(i) in the UK, conferring on the FCA the power to change the methodology of rates that are, or are at risk of becoming, unrepresentative and have been designated as "Article 23A rates" under the UK Benchmarks Regulation, to create Synthetic LIBOR for use in tough legacy contracts and instruments. This power has been exercised in respect of the Sterling

LIBOR Non-Representative Rates and the Japanese yen LIBOR Non-Representative Rates described above; and

(ii) in the EU and US, implementing legislation to replace relevant LIBOR rates in tough legacy contracts and instruments with a designated replacement rate by operation of law in certain circumstances.

These initiatives only apply to 'tough legacy' contracts and instruments (however so defined or described in the applicable legislation).

In the event that any LIBOR rate falls within the parameters of any such tough legacy legislation, such LIBOR rate may automatically and by operation of law transition to an alternative rate selected by an official body, committee or working group in the applicable jurisdiction. Any such alternative rate may have little, if any, historical track record. The level of any alternative rate during the term of the Securities may bear little or no relation to the historical actual or historical indicative data. Such alternative rates may have different calculation methodologies and other important differences from the rates that they replace.

(c) ***Replacement of IBORs with risk free rates***

Regulatory authorities and central banks are strongly encouraging the transition away from interbank offered rates, or "**IBORs**", and have identified risk-free rates to replace IBORs as primary benchmarks. This includes (amongst others):

(i) for sterling LIBOR, the Sterling Overnight Index Average ("**SONIA**"), which is now established as the primary sterling interest rate benchmark;

(ii) for US dollar LIBOR, the Secured Overnight Financing Rate ("**SOFR**"), to be established as the primary US dollar interest rate benchmark; and

(iii) for EONIA and EURIBOR, the Euro Short-Term Rate ("**€STR**") as the new euro risk-free rate.

The reform and replacement of IBORs with risk-free rates may cause the relevant IBOR to perform differently than in the past, to disappear entirely, or have other consequences that cannot be predicted. These risk-free rates have a different methodology and other important differences from the IBORs that they are to replace. Any of these developments could have a material adverse effect on the value of and return on Securities linked to any such rates.

In summary, as at the date of this Offering Circular with regard to the transition from IBORs to risk-free rates:

- GBP LIBOR (and GBP SONIA swap rate): As described above, GBP LIBOR is now only available in one-month, three-month and six-month tenors, on the basis of a Synthetic LIBOR methodology, and may only be used in legacy contracts. The Working Group on Sterling Risk-Free Rates, as mandated by the Bank of England and the FCA, has driven a broad-based transition to SONIA across sterling bond, loan and derivative markets, so that SONIA is now established as the primary sterling interest rate benchmark. On 14 December 2020, IBA launched the GBP SONIA ICE Swap Rate.

- USD LIBOR (and USD SOFR swap rate): As described above, certain USD LIBOR tenors are still being published but their use in new financial contracts is widely restricted. On 22 June 2017, the Alternative Reference Rates Committee (the "**ARRC**"), convened by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York (the "**FRBNY**"), identified SOFR, a broad US treasuries repurchase financing rate published by the FRBNY, as the rate that represents best practice for use in new US dollar derivatives and other financial contracts. SOFR is a broad measure of the cost of borrowing cash overnight collateralised by US treasury securities. On 8 November 2021, IBA launched the USD SOFR ICE Swap Rate.

- EURIBOR: EURIBOR has been reformed such that it is based on a hybrid methodology. On 13 September 2018, the Working Group on Euro Risk-Free Rates recommended

€STR as the new euro risk-free rate, and the European Central Bank began publishing €STR on 2 October 2019. In addition, in May 2021, the Working Group published a set of guiding principles for fallback provisions in new EURIBOR-referencing contracts and financial instruments (including bonds) to address, among other things, the potential future discontinuation of EURIBOR.

- Other IBORs: Similar initiatives are underway in respect of IBORs in various other currencies, including Japanese yen (TIBOR), Hong Kong dollar (HIBOR), Australian dollar (BBSW) Canadian dollar (CDOR), and Swiss franc (CHF LIBOR), which was discontinued at the end of 2021, to transition to identified alternative risk-free rates.

(d) ***Risks relating to the reform and eventual replacement of IBORs with 'risk-free rates'***

The 'risk-free rates' have different calculation methodologies and other important differences from the IBORs they will eventually replace. Market terms for Securities linked to such 'risk-free rates' may evolve over time, and trading prices of such Securities may be lower than those of later-issued Securities as a result. Furthermore, if the relevant 'risk-free rate' (such as, for example, SONIA or SOFR) fails to gain market acceptance or does not prove to be widely used in the capital markets, the trading price of Securities linked to 'risk-free rates' may be lower than those of Securities linked to rates that are more widely used and as a result, you may not be able to sell your Securities at all or may not be able to sell your Securities at prices that will provide you with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

To the extent that any Securities reference an IBOR, you should understand (i) what fallbacks might apply in place of such rate (if any), (ii) when those fallbacks will be triggered and (iii) what unilateral amending rights (if any) on the part of the Issuer or Calculation Agent (as applicable) apply under the terms and conditions of such Securities, as the effect of any of these could have a material adverse effect on the value of and return on Securities. See the risk factors set out below.

(e) ***Risks relating to differences in methodologies between IBORs and 'risk-free rates'***

'Risk-free rates' may differ from LIBOR, EURIBOR or other interbank offered rates in a number of material respects, including (without limitation) by being backwards-looking in most cases or being calculated on a compounded or weighted average basis, whereas such interbank offered rates are generally expressed on the basis of a forward-looking term and include a risk-element based on interbank lending. As such, you should be aware that LIBOR, EURIBOR and other interbank offered rates and any 'risk-free rates' may behave materially differently as interest reference rates for the Securities.

Interest or coupon on Securities which reference a backwards-looking 'risk-free rate' is not determined until near the end of the relevant interest or coupon calculation period. As a result, holders of such Securities will not know the total amount of interest or coupon payable with respect to each such interest or coupon calculation period until shortly prior to the related interest or coupon payment date and it may be difficult or impossible to reliably estimate the amount of interest or coupon which will be payable on each such coupon or payment date in respect of the Securities. Also, some investors may be unable or unwilling to trade such Securities without changes to their information technology or other operational systems to account for such backwards-looking calculation, which could adversely impact the liquidity of such Securities. Further, if the Securities become due and payable on a date which is not an Interest Payment Date or Coupon Payment Date (as applicable), the final Rate of Interest or Floating Rate Coupon payable in respect of such Securities shall be determined by reference to a shortened period ending immediately prior to the date on which the Securities become due and payable or are scheduled for redemption.

(f) ***Risks relating to the developing markets for SONIA, SOFR, €STR and TONA and potential impact on performance and returns***

The market continues to develop in relation to adoption of SONIA, SOFR, €STR and TONA as reference rates in the capital markets for sterling, U.S. dollar or euro bonds, respectively, and

their adoption as alternatives to the relevant interbank offered rates. The market or a significant part thereof may adopt an application of 'risk-free rates' that differs significantly from that set out in the Conditions and used in relation to Securities that reference such 'risk-free rates' issued hereunder. For example, market participants and relevant working groups are exploring alternative reference rates based on 'risk-free rates', including term SONIA, SOFR, €STR and TONA reference rates (which seek to measure the market's forward expectation of an average SONIA, SOFR, €STR or TONA over a designated term), and it is possible that market participants may seek to apply such compounded rate or term rates for capital markets issuances.

The Issuer may in the future also issue Securities referencing SONIA, SOFR, €STR, TONA or other 'risk-free rates' that differ materially in terms of interest or coupon determination when compared with any previous SONIA, SOFR, €STR, TONA or other risk-free rate referenced Securities issued by it hereunder.

The development of new 'risk-free rates' could result in reduced liquidity or increased volatility, or could otherwise affect the market price of any Securities that reference a 'risk-free rate' issued hereunder from time to time.

The new 'risk-free rates' may have no established trading market, and an established trading market may never develop or may not be very liquid. Market terms for Securities indexed to the new 'risk-free rates' may evolve over time, and may lead to impacts on trading prices and values, and such Securities may not be able to be sold or may not be able to be sold at prices that will provide a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

Similarly, the manner of adoption or application of 'risk-free rates' in the eurobond markets may differ materially compared with the application and adoption of 'risk-free rates' in other markets, such as the derivatives and loan markets. You should carefully consider how any mismatch between the adoption of such reference rates in the bond, loan and derivatives markets may impact any hedging or other financial arrangements which you may put in place in connection with any acquisition, holding or disposal of Securities referencing such 'risk-free rates'.

(g) ***Risks in connection with the differences between "Shift" and "Lag" methodologies and daily compounding versus a compounded index methodologies in respect of SONIA and SOFR***

Where SONIA Floating Rate Determination (Non-Index Determination) or SOFR Floating Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest or Floating Rate Coupon (as applicable) is to be determined and, in respect of SOFR Floating Rate Determination, Index Determination is specified to be not applicable in the applicable Pricing Supplement, either "Shift" or "Lag" will be specified as applicable. "Shift" and "Lag" have emerged as conventions for daily compounding of rates in arrears. The conventions differ in the period that each method uses when weighting each business day's overnight rate for the relevant risk-free rate. The "Shift" approach weights the relevant risk-free rate according to the relevant number of days that apply in a separate observation period which 'shadows' the Interest Period or Floating Rate Coupon Period (e.g. the observation period might start and end five business days preceding the relevant start and end of the Interest Period or Floating Rate Coupon Period). The "Lag" approach weights the relevant risk-free rate according to the number of days that apply in the relevant Interest Period or Floating Rate Coupon Period (as applicable). You should be aware that divergence between the "Shift" and "Lag" methodologies could lead to a difference in the interest or coupon being determined even where the relevant 'risk-free rate' is the same for the Securities and you may receive less interest or coupon for any particular depending on which approach is applicable.

The amount of interest or coupon payable in respect of Securities linked to SONIA or SOFR will be calculated by reference to (i) the rate of return of a daily compound interest investment (with the daily SONIA or SOFR, as applicable, as the reference rate for the calculation of interest); or (ii) where SONIA Floating Rate Determination (Index Determination) or Index Determination in respect of SOFR Floating Rate Determination applies, a screen rate, formula or value as may be published by the administrator of SONIA or SOFR, as applicable. You should be aware that divergence between these methodologies could lead to a difference in the interest or coupon being determined even where the relevant 'risk-free rate' is the same for the

Securities and you may receive less interest or coupon for any particular depending on which approach is applicable.

4.5 **Risks relating to USD LIBOR**

(a) ***USD LIBOR may be replaced by a successor or substitute interest rate***

If the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to USD LIBOR, then a Benchmark Replacement will be selected by the Calculation Agent in accordance with the provisions of the USD LIBOR Benchmark Transition Event Appendix. The selection of a Benchmark Replacement, and any decisions, determinations or elections made by the Calculation Agent or by the Issuer in connection with implementing a Benchmark Replacement with respect to the Securities in accordance with the provisions of the USD LIBOR Benchmark Transition Event Appendix, could result in adverse consequences to the relevant Rate of Interest or Floating Rate Coupon or rate of interest determined for the applicable interest determination date, as the case may be, on the Securities during the applicable Interest Period or Floating Rate Coupon Period, as the case may be, which could adversely affect the return on, value of and market for the Securities. Further, there is no assurance that the characteristics of any Benchmark Replacement will be similar to USD LIBOR, or that any Benchmark Replacement will produce the economic equivalent of USD LIBOR.

(b) ***The occurrence of a Benchmark Transition Event and the potential reliance on the Secured Overnight Financing Rate ("SOFR") to determine the Rate of Interest or Floating Rate Coupon may adversely affect the return on and the market value of the Securities***

Under the provisions of the USD LIBOR Benchmark Transition Event Appendix, if a Benchmark Transition Event and its related Benchmark Replacement Date occur with respect to USD LIBOR, and if the Calculation Agent cannot determine the relevant USD LIBOR rate by means of interpolating from other tenors of USD LIBOR, then the rate of interest or floating rate coupon on the Securities during the applicable Interest Period or Floating Rate Coupon Period or in respect of any determination date, as the case may be, will be determined based on SOFR (unless a Benchmark Transition Event and its related Benchmark Replacement Date also occur with respect to the Benchmark Replacements that are linked to SOFR, in which case the rate of interest or floating rate coupon will be based on the next-available Benchmark Replacement). In the following discussion of SOFR, references to SOFR-linked Securities shall mean the Securities at any time when the rate of interest or floating rate coupon on the Securities is or will be determined based on SOFR.

(c) ***Term SOFR has not yet been developed and therefore the consequence of the occurrence of a Benchmark Transition Event in relation to USD LIBOR-linked Securities is uncertain***

The Benchmark Replacements specified in the provisions of the USD LIBOR Benchmark Transition Event Appendix include Term SOFR, a forward-looking term rate which will be based on SOFR. Term SOFR is currently being developed under the sponsorship of the Federal Reserve Bank of New York ("**FRBNY**"), and there is no assurance that the development of Term SOFR will be completed. If a Benchmark Transition Event and its related Benchmark Replacement Date occur with respect to USD LIBOR, and if the Calculation Agent cannot determine the relevant USD LIBOR rate by means of interpolating from other tenors of USD LIBOR, and, at that time, a form of Term SOFR has not been selected or recommended by the Relevant Governmental Body, then the next-available Benchmark Replacement under the provisions of the USD LIBOR Benchmark Transition Event Appendix will be used to determine the amount of interest or coupon payable on the Securities during the applicable Interest Period or Floating Rate Coupon Period or in respect of the applicable interest determination date, as the case may be, for the next applicable Interest Period or Floating Rate Coupon Period or interest determination date, as the case may be, and all subsequent Interest Periods or Floating Rate Coupon Periods or interest determination dates, as the case may be (unless a Benchmark Transition Event and its related Benchmark Replacement Date occur with respect to that next-available Benchmark Replacement).

(d) ***SOFR differs fundamentally from, and may not be a comparable substitute for, USD LIBOR***

SOFR is published by the FRBNY and is intended to be a broad measure of the cost of borrowing cash overnight collateralised by Treasury securities. FRBNY reports that SOFR includes all trades in the Broad General Collateral Rate, plus bilateral Treasury repurchase agreement ("**repo**") transactions cleared through the delivery-versus-payment service offered by the Fixed Income Clearing Corporation (the "**FICC**"), a subsidiary of The Depository Trust & Clearing Corporation ("**DTCC**"). SOFR is filtered by FRBNY to remove a portion of the foregoing transactions considered to be "specials". According to FRBNY, "specials" are repos for specific-issue collateral which take place at cash-lending rates below those for general collateral repos because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

FRBNY reports that SOFR is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon, which currently acts as the clearing bank for the tri-party repo market, as well as General Collateral Finance Repo transaction data and data on bilateral Treasury repo transactions cleared through the FICC's delivery-versus-payment service. FRBNY notes that it obtains information from DTCC Solutions LLC, an affiliate of DTCC.

FRBNY currently publishes SOFR daily on its website at https://apps.newyorkfed.org/markets/autorates/sofr. FRBNY states on its publication page for SOFR that use of SOFR is subject to important disclaimers, limitations and indemnification obligations, including that FRBNY may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. Information contained in the publication page for SOFR is not incorporated by reference in, and should not be considered part of, this Offering Circular.

In June 2017, the ARRC announced the Secured Overnight Financing Rate as its recommended alternative to U.S. dollar LIBOR. However, because the Secured Overnight Financing Rate is a broad U.S. Treasury repo financing rate that represents overnight secured funding transactions, it differs fundamentally from the London Interbank Offered Rate. For example, the Secured Overnight Financing Rate is a secured overnight rate, while USD LIBOR is an unsecured rate that represents interbank funding over different maturities. In addition, because SOFR is a transaction-based rate, it is backward-looking, whereas USD LIBOR is forward-looking. Because of these and other differences, there can be no assurance that SOFR will perform in the same way as U.S. dollar LIBOR would have done at any time, and there is no guarantee that it is a comparable substitute for USD LIBOR.

(e) ***SOFR may fail to gain market acceptance***

SOFR was developed for use in certain U.S. dollar derivatives and other financial contracts as an alternative to USD LIBOR in part because it is considered to be a good representation of general funding conditions in the overnight U.S. Treasury repo market. However, as a rate based on transactions secured by U.S. Treasury securities, it does not measure bank-specific credit risk and, as a result, is less likely to correlate with the unsecured short-term funding costs of banks. This may mean that market participants would not consider SOFR to be a suitable substitute or successor for all of the purposes for which U.S. dollar LIBOR historically has been used (including, without limitation, as a representation of the unsecured short-term funding costs of banks), which may, in turn, lessen its market acceptance. Any failure of SOFR to gain market acceptance could adversely affect the return on, value of and market for SOFR-linked Securities.

(f) ***Any market for SOFR-linked Securities may be illiquid or unpredictable***

SOFR-linked Securities will likely have no established trading market when issued, and an established trading market for SOFR-linked Securities may never develop or may not be very liquid. Market terms for debt securities that are linked to SOFR, such as the spread over the base rate reflected in the interest rate provisions, may evolve over time, and as a result, trading prices of SOFR-linked Securities may be lower than those of later-issued debt securities that are linked to SOFR. Similarly, if SOFR does not prove to be widely used in debt securities that are similar or comparable to SOFR-linked Securities, the trading price of SOFR-linked Securities may be lower than those of debt securities that are linked to rates that are more widely used. Investors in SOFR-linked Securities may not be able to sell their SOFR-linked Securities at all or may not

be able to sell their SOFR-linked Securities at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The manner of adoption or application of reference rates based on SOFR in the bond markets may differ materially compared with the application and adoption of SOFR in other markets, such as the derivatives and loan markets. Investors should carefully consider how any potential inconsistencies between the adoption of reference rates based on SOFR across these markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of USD LIBOR or SOFR-linked Securities.

(g) ***Investors should not rely on indicative or historical data concerning SOFR***

FRBNY started publishing SOFR in April 2018. FRBNY has also started publishing historical indicative Secured Overnight Financing Rates dating back to 2014, although such historical indicative data inherently involves assumptions, estimates and approximations. Investors should not rely on such historical indicative data or on any historical changes or trends in SOFR as an indicator of the future performance of SOFR. Since the initial publication of SOFR, daily changes in the rate have, on occasion, been more volatile than daily changes in comparable benchmark or market rates, and SOFR over the term of the Securities may bear little or no relation to the historical actual or historical indicative data. In addition, the return on and value of the SOFR-linked Securities may fluctuate more than floating rate debt securities that are linked to less volatile rates.

(h) ***Changes in SOFR could adversely affect holder of Securities linked to such rate***

Because SOFR is published by the FRBNY based on data received from other sources, the relevant Issuer has no control over its determination, calculation or publication. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in SOFR-linked Securities. If the manner in which SOFR is calculated is changed, that change may result in a reduction of the amount of interest or coupon payable on the SOFR-linked Securities, which may adversely affect the trading prices of the SOFR-linked Securities. In addition, the interest rate on SOFR-linked Securities for any day will not be adjusted for any modification or amendment to the SOFR rate for that day that FRBNY may publish if the relevant interest rate for that day has already been determined prior to such publication. If the rate at which interest or coupon accrues on the Securities during the applicable Interest Period or Floating Rate Coupon Period, as the case may be, on any day or for any Interest Period or Floating Rate Coupon Period, as the case may be, or in respect of any interest determination date, declines to zero or becomes negative, no interest or coupon will be payable on the Securities with respect to that Interest Period or Floating Rate Coupon Period or the relevant payment date, as the case may be.

(i) ***The Calculation Agent will or could have authority to make determinations and elections that could affect the return on, value of and market for Securities linked to USD LIBOR***

If the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to USD LIBOR, then it may make certain determinations, decisions and elections with respect to the rate of interest on such Securities. The relevant Issuer will make any such determination, decision or election in its sole discretion, and any such determination, decision or election that such Issuer makes could affect the amount of interest payable on such Securities. For example, if the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, then it will determine, among other things, the Benchmark Replacement Conforming Changes. Any exercise of discretion by the Calculation Agent under the terms and conditions of the Securities, could present a conflict of interest. In making the determinations, decisions and elections, the Calculation Agent may have economic interests that are adverse to the interests of the holders of the Securities, and such determinations, decisions or elections could have a material adverse effect on the return on, value of and market for such Securities. All determinations, decisions or elections by the Calculation Agent under the terms and conditions of the Securities, will be conclusive and binding on all parties absent manifest error.

4.6 ***Risks related to Securities linked to SONIA and SOFR***

There are specific risks with regard to Securities linked to SONIA and SOFR. See the discussions in the following:

- Risk Factors 4.4(e) (*Risks relating to differences in methodologies between IBORs and 'risk-free rates'*) to 4.4(g) (*Risks in connection with the differences between "Shift" and "Lag" methodologies and daily compounding versus a compounded index methodologies in respect of SONIA and SOFR*); and

- Risk Factors 4.5(c) (*Term SOFR has not yet been developed and therefore the consequence of the occurrence of a Benchmark Transition Event in relation to USD LIBOR-linked Securities is uncertain*) to 4.5(h) (*Changes in SOFR could adversely affect holder of Securities linked to such rate*).

4.7 **Tax risks related to discontinuance of benchmarks**

Securities that reference a benchmark index are subject to certain fallback provisions in the event the relevant benchmark index becomes unavailable. U.S. Treasury regulations address modifications to obligations or contracts that reference an interbank offered rate in connection with the impending unavailability of such rates, and, among other things, whether a modification would be treated as an exchange of the obligation or contract for U.S. federal income tax purposes. For Securities that reference a benchmark index (including, for example, GBP LIBOR or USD LIBOR), it is possible that application of the fallback provisions or transition to a fallback rate may result in a deemed exchange of the Securities for U.S. federal income tax purposes. In such case, a U.S. holder may, among other consequences, be required to recognise taxable gain with respect to the deemed exchange of such Securities. U.S. holders should consult their tax advisors regarding the consequences of holding Securities that reference a benchmark index.

5. **Risks related to early redemption provisions and other terms of the Securities**

5.1 **The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment**

(a) ***Events or circumstances leading to early redemption or termination***

Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity including for any of the following reasons:

- the occurrence of a mandatory early redemption event (e.g., the price or level of the Reference Asset rises above or falls below a pre-determined barrier level), if specified in the terms and conditions of the Securities;

- the exercise by the Issuer of a call option, if specified to be applicable in the relevant Pricing Supplement (see Risk Factor 3.4 (*There are risks where the Securities include an Issuer call option*) below);

- the exercise by you of a put option, if specified to be applicable in the relevant Pricing Supplement;

- the occurrence of certain events outside of the control of the Issuer or other circumstances in relation to a Reference Asset at the discretion of the Calculation Agent (see the *Specific Product Provisions*) or in relation to the floating rate of interest or coupon rate;

- the Issuer determines that its performance under any Security has become unlawful in whole or in part for any reason (see General Condition 16 (*Early Redemption or Termination for Illegality*));

- in certain circumstances where the relevant Issuer determines that it will become subject to withholding tax on payments made to it as a result of Holders failing to provide information required by FATCA, there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA or there is a substantial likelihood that a series of Securities will be treated, for U.S. federal income tax purposes, as being in bearer form (see General Condition 18.3 (*Early Redemption or Termination for Taxation - FATCA*));

- the occurrence of certain taxation events with respect to the Securities or (if specified to be applicable in the relevant Pricing Supplement) with respect to the Issuer's (or its affiliates') underlying hedging transactions (see General Condition 18.4 (*Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions*));

- following an Event of Default (see General Condition 15 (*Events of Default*));

- following the occurrence of an Extraordinary Hedge Disruption Event (see General Condition 17 (*Extraordinary Hedge Disruption Event*) and Risk Factor 5.4 (*Where applicable, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of an Extraordinary Hedge Disruption Event*) below);

- following the occurrence of a Disruption Event (see General Condition 19 (*Disruption Event*) and Risk Factor 5.5 (*Where applicable, the terms and conditions of the Securities may be adjusted, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of a Disruption Event*); or

- if (i) it would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine the level or other value of a "benchmark" Reference Asset or make any other determination in respect of the Securities which it would otherwise be obliged to do so pursuant to the Conditions, or (ii) if the applicable benchmark administrator does not obtain or maintain (as applicable) such authorisation or registration or, if a non-EU entity, "equivalence" is not available and it is not recognised, then the Securities may be redeemed prior to maturity. See Risk Factor 4.3 (*Risks associated with benchmark reform and the discontinuance, loss of representativeness and replacement of "IBORs"*).

(b) ***The 'Early Payment Amount' may be less than the original invested amount***

On early redemption or termination in any of the unexpected circumstances described in Risk Factor 5.1(a)(*Events or circumstances leading to early redemption or termination*) above (i.e. any circumstances other than a mandatory early redemption event or the exercise of a put or call option), you will receive (subject in the case of an occurrence of an Event of Default to claims of other creditors and to the Securities having a Minimum Redemption Amount or unless otherwise provided in the relevant Pricing Supplement or the terms and conditions of the relevant Securities) the "Early Payment Amount" in full and final settlement of the Securities. Unless the relevant Pricing Supplement specifies the Early Payment Amount as "Early Payment Amount 3", or the Early Payment Amount is determined in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*), or an Event of Default has occurred and the Securities are New York Law Notes, the Early Payment Amount will be an amount representing the fair market value of the Securities determined by the Calculation Agent using its internal models and methodologies by reference to such factors as the Calculation Agent may consider to be appropriate (and where "Early Payment Amount 2" is specified to be applicable in the relevant Pricing Supplement) adjusted to account for all costs incurred by the Issuer and/or the Hedging Entity in connection with such early redemption or settlement, including, without limitation, any costs to the Issuer and/or the Hedging Entity associated with unwinding any funding relating to the Securities, any costs associated with unwinding any related Underlying Hedge Transactions, and all other expenses related, as determined by the Calculation Agent. If the relevant Pricing Supplement specifies the Early Payment Amount as "Early Payment Amount 3" or the Securities are New York Law Notes being redeemed as a result of an Event of Default, the Early Payment Amount will be the outstanding nominal amount of the Security,

including, if applicable, accrued interest to (but excluding) the date of redemption or settlement of the Securities. See Commonly Asked Question 25 (*How is the Early Payment Amount calculated?*) of the section entitled "Commonly Asked Questions" below. **The Early Payment Amount may be less than the original purchase price of the Securities and you could lose some or all of your investment.**

5.2 **There are foreign exchange risks where payments under your Securities are in a different currency from your home currency**

If the terms and conditions of your Securities provide that payment will be made in a currency which is different from your domestic currency then you are exposed to any adverse movement of the currency of the Securities relative to your domestic currency.

Foreign exchange rates can be highly volatile and are determined by various factors, including supply and demand for currencies in the international foreign exchange markets, economic factors including inflation rates in the countries concerned, interest rate differences between the respective countries, economic forecasts, international political factors, currency convertibility, safety of making financial investments in the currency concerned, speculation and measures taken by governments and central banks.

Foreign exchange fluctuations between your domestic currency and the currency in which payment under the Securities is due may affect you where you intend to convert gains or losses from the exercise or sale of Securities into your domestic currency and may lead to the loss of some or all of your initial investment.

5.3 **The occurrence of a Payment Disruption Event may lead to a delay and/or reduced payment or a payment in U.S. Dollars or a write down of payment obligations to zero**

A "Payment Disruption Event" is an event which (a) prevents, restricts or delays the Issuer from converting or delivering relevant currencies, (b) imposes capital or exchange controls, (c) implements changes to laws relating to foreign investments, or (d) otherwise prohibits or prevents the Issuer from making a payment or performing an obligation required of it as a result of war, catastrophe, governmental action or other event beyond its control. Where the Calculation Agent determines that a Payment Disruption Event has occurred or is likely to occur, then the next payment or settlement or exercise date (as applicable) under the Securities may be postponed to a date falling 14 calendar days after the date on which the Payment Disruption Event is no longer occurring. No interest shall accrue and no Event of Default will result on account of such postponement. In the event that a Payment Disruption Event is still continuing on the date which is one year after the last scheduled payment date for the Securities, then the outstanding payment obligations of the Issuer shall be fulfilled by payment on the following tenth Business Day of the relevant amount in an equivalent amount in U.S. Dollars based on the conversion from the affected currency to U.S. Dollars on the second Business Day immediately preceding the payment date, and the Issuer shall have no further obligations whatsoever under the Securities. In the event the Calculation Agent is unable to determine the equivalent amount in U.S. Dollars, the Holders will not receive any amounts. Thereafter, the Issuer shall have no obligations whatsoever under the Securities. Accordingly, the occurrence of a Payment Disruption Event may lead to a delay and/or reduced payment or a payment in U.S. Dollars or a write down of payment obligations to as low as zero.

5.4 **Where applicable, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of an Extraordinary Hedge Disruption Event**

An "Extraordinary Hedge Disruption Event" is one or more of the following events (in each case, if specified to be applicable in the relevant Pricing Supplement):

- an "Extraordinary Hedge Sanctions Event" - in broad terms, due to a change in law relating to financial sanctions and embargo programmes (or change in interpretation of such law), it becomes illegal or is likely to become illegal within the next 90 days for the Hedging Entity to perform its obligations under hedging transactions in relation to the relevant Securities;

- an "Extraordinary Hedge Bail-in Event" - in broad terms, the Hedging Entity or its counterparty becomes subject to a resolution regime and, as a result, the obligations of the Hedging Entity or its counterparties under hedging transactions in relation to the Securities are subject to the exercise of a "bail-in" or other resolution power by the relevant resolution authority (or it is likely that the resolution authority will exercise a "bail-in" or other resolution power within the next 90 days) or there is otherwise a material adverse effect on such hedging transactions; or

- an "Extraordinary Hedge Currency Disruption Event" - in broad terms, a governmental authority introduces, or is likely to introduce within the next 90 days, a new currency and/or capital controls and, as a result, the payment obligations under the hedge transactions relating to the Securities are redenominated into another currency and/or are subject to capital controls and/or such hedge transactions are otherwise materially adversely affected,

The Pricing Supplement of the relevant Securities will specify whether or not any of the three events described above is applicable or not in relation to those Securities. If an event may be both an Extraordinary Hedge Disruption Event and a "Payment Disruption Event" (as described in Risk Factor 5.3 (*The occurrence of a Payment Disruption Event may lead to a delay and/or reduced payment or a payment in U.S. Dollars or a write down of payment obligations to zero*) above) and the Issuer elects to early redeem or terminate (as applicable) the Securities, the consequences relating to Payment Disruption Events described in Risk Factor 5.3 (*The occurrence of a Payment Disruption Event may lead to a delay and/or reduced payment or a payment in U.S. Dollars or a write down of payment obligations to zero*) will not apply.

On early redemption or termination, as applicable, of the Securities following the occurrence of an Extraordinary Hedge Disruption Event, you will receive the 'Early Payment Amount' in full and final settlement of the Securities. The Early Payment Amount may be less than the original purchase price of the Securities and you could lose some or all of your investment. See Risk Factor 5.1(b) (*The 'Early Payment Amount' may be less than the original invested amount*) above.

5.5 **Where applicable, the terms and conditions of the Securities may be adjusted, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of a Disruption Event**

A "Disruption Event" is one or more of the following events (in each case, if (i) specified to be applicable in the relevant Pricing Supplement and (ii) the Specific Product Provisions are not applicable):

- a "Change in Law (Hedge)" – in broad terms, due to a change in any applicable law or regulation (including, without limitation, any tax law) (or change in interpretation of such law) (i) it becomes illegal or is likely to become illegal within the next 15 calendar days prior to the maturity of the Securities for the Hedging Entity to hold, acquire or dispose of any asset in relation to the Underlying Hedge Transactions, or (ii) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities

- a "Hedging Disruption" – in broad terms, the Hedging Entity is unable, after using commercially reasonable efforts, to hedge the risk (e.g. if the Hedging Entity is unable to enter into a hedge, substitute the hedge or to realise the proceeds of a hedge) of the Issuer issuing, entering into and performing its obligations under the Securities.

The Pricing Supplement of the relevant Securities will specify whether or not any of the two events described above is applicable or not in relation to those Securities.

If a "Disruption Event" occurs, the Issuer may adjust the terms and conditions of the securities, or may redeem or terminate the Securities (as applicable) earlier than the specified maturity or settlement date. On early redemption or termination (as applicable) of the Securities following the occurrence of a Disruption Event, you will receive the "Early Payment Amount" in full and final settlement of the Securities. The Early Payment Amount may be less than the original

purchase price of the Securities and you could lose some or all of your investment. See Risk Factor 5.1(b) (*The 'Early Payment Amount' may be less than the original invested amount*) above.

5.6 **There are specific risks with regard to Zero Coupon Securities**

Changes in market interest rates have a greater impact on the prices of zero coupon bonds than on the prices of ordinary bonds because the discounted issue prices may be substantially below par. If market interest rates increase, zero coupon bonds can suffer higher price losses than other bonds having the same maturity and credit rating. Due to their leverage effect, the price risk associated with zero coupon bonds is high.

5.7 **There are specific risks related to the structure of Credit Linked Note**s

In the event of the occurrence of an Event Determination Date specified in the relevant Pricing Supplement for Credit Linked Notes, the Issuer's obligation to pay principal may be replaced by an obligation to pay other amounts calculated by reference to the value of the Reference Entity (or Reference Entities). In addition, interest bearing Credit Linked Notes may cease to bear interest on or prior to the date of occurrence of such circumstances. The value, redemption amount and return to an investor in respect of such Notes may be dramatically affected by such credit linkage and/or the occurrence of an Event Determination Date in respect of any applicable Reference Entity.

There may at times exist only limited markets for the Credit Linked Notes and for the obligations of the Reference Entity to which the Notes are linked, resulting in low or non-existent volumes of trading in the Notes and such obligations, and therefore a lack of liquidity for and price volatility of the Notes and such obligations.

If the terms of the Credit Linked Notes so provide, credit losses may be determined on the basis of a market auction; such losses may be greater than the losses which would have been determined in the absence of such auction. In particular, the auction process may be affected by technical factors or operational errors which would not otherwise apply or may be the subject of actual or attempted manipulation. Auctions may be conducted by the International Swaps and Derivatives Association, Inc. or by a relevant third party. None of the Issuer, the Calculation Agent and any of their respective affiliates has any responsibility for verifying that any auction price is reflective of current market values for establishing any auction methodology or for verifying that any auction has been conducted in accordance with its rules. If the Issuer, the Calculation Agent or any of their respective affiliates participates in any auction for the purposes of such an auction, then it will do so without regard to the interests of the Holders. Such participation may have a material effect on the outcome of the relevant auction.

In making any selection in accordance with the terms of the Credit Linked Notes, the Calculation Agent is under no obligation to act in the interests of the Holders or any other person and provided that the relevant selection meets the criteria specified, the Calculation Agent will not be liable to account to the Holders or any other person for any profit or other benefit to it or any of its affiliates which may result directly or indirectly from any such selection.

In addition, the Issuer and its affiliates may, for their own account and for the account of customers, engage in any kind of transactions and other business directly or indirectly involving a Reference Entity and may act with respect to such business in the same manner as they would if the Notes had not been issued, regardless of whether any such action might have an adverse effect directly or indirectly on a Reference Entity. The Issuer and its affiliates may on the Issue Date of the Credit Linked Notes or at any time thereafter be in possession of information in relation to a Reference Entity that is or may be material in the context of the issue of Credit Linked Notes and that may not be publicly available or known to the investors. There is no obligation on the part of the Issuer or its affiliates to disclose to the Holders any such relationship or information. See the section entitled "Conflicts of Interest" below.

5.8 **There are specific risks with regard to Market Access Participation Notes and other "market access" Securities issued under the Programme**

Market Access Participation Notes are issued at a price linked to the value of the underlying shares on particular trading days during a fixing period. At maturity (or early redemption) a Holder will not receive the principal amount of its investment but instead will receive an amount calculated as a percentage of the weighted average sale price of the underlying shares over a valuation period (or such other price as may be specified in the relevant Pricing Supplement) less deductions for local taxes (if any) and other costs which would have been incurred had the underlying shares been held by such Holder (qualifying as a foreign or non-resident institutional investor) directly (unless otherwise set forth in the relevant Pricing Supplement). The valuation period will be the number of business days following the redemption date that would have been required for a holder of the underlying shares to complete the sale of the equivalent position on the stock exchange on which such shares are primarily traded. Generally, returns to investors in Market Access Participation Notes will be payable in U.S. Dollars or another currency other than the currency in which the shares are denominated. Changes in the rate of exchange between the currency in which the underlying shares are denominated and that in which returns are payable to Holders will affect your return. **There may be other types of such "market access" Securities issued under the Programme, which Securities will also be subject to such risks. Investors in Market Access Participation Notes (and other "market access" securities) may lose up to the entire value of their investment.**

5.9 **There are specific risks with regard to LEPW Securities**

(a) ***Risks relating to all LEPW Securities***

Each investor in any Securities that are Low Exercise Price Warrants ("**LEPWs**") will be required to represent that the purpose of the acquisition of such Securities is to secure a profit or minimise a loss by reference to fluctuations in the price of the underlying Reference Asset. Accordingly, each investor must agree that it is an express term of such LEPWs that (i) such investor does not acquire any interest in or right to acquire any underlying Reference Assets by virtue of holding any such LEPWs, (ii) none of such investor, the relevant Issuer, the relevant Guarantor (if applicable) or any other Hedging Entity is obliged to sell, purchase, hold, deliver, pledge, transfer or receive any underlying Reference Asset, (iii) the primary right of such investor and the primary obligation of the relevant Issuer under any such LEPWs is to receive or make the respective payments referred to in the relevant General Conditions and (iv) such investor will not in any way have any rights with respect to any underlying Reference Asset including, but not limited to, voting rights.

There are no regulations, published rulings or judicial decisions which address the characterisation for U.S. federal income tax purposes of securities with terms substantially the same as those of LEPWs. No assurance can be given that the U.S. Internal Revenue Service (the "**IRS**") will not assert a characterisation of the LEPWs that, if sustained, could cause the amount, timing, character or source of income, gain or loss on LEPWs to differ materially from that described in the section entitled "*Taxation—United States Federal Income Taxation—Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of U.S. Holders—U.S. Federal Income Tax Treatment of Securities Treated as other than Debt—Specific Considerations for U.S. Holders of LEPWs*".

Gains on the disposition (or certain deemed dispositions) of LEPWs, payments on which are calculated with reference to underlying shares of corporations which are, among other things, passive foreign investment companies may be treated as gain from "constructive ownership transactions" for U.S. federal income tax purposes. Part or all of this gain could be treated as ordinary income, and could be subject to an interest charge for the underpayment of tax for each taxable year during which the relevant LEPWs were held. See the section entitled "*Taxation—United States Federal Income Taxation—Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of U.S. Holders—U.S. Federal Income Tax Treatment of Securities Treated as other than Debt—Specific Considerations for U.S. Holders of LEPWs*" below.

(b) ***Additional risks relating to Saudi Arabia LEPWs***

If the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Provisions" are applicable:

- Only if the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Investor Agreement Letter" is applicable, each investor in such Warrants ("**Saudi Arabia LEPWs**") will be required to execute and deliver to the Dealer an investor agreement letter (the "**Saudi Arabia LEPW Investor Agreement Letter**") as a condition of any purchase of such instrument, including any prospective transferee of Saudi Arabia LEPWs. The Saudi Arabia LEPW Investor Agreement Letter will be in the form approved by the Dealer and will contain certain representations, warranties, consents, undertakings and indemnities that each purchaser is required to make for the benefit of JPMorgan, including the requirement to deliver certain information to JPMorgan on request. The requirement on all purchasers of Saudi Arabia LEPWs to provide such a letter may adversely affect the ability to transfer such Securities. Breach of any of the terms of the letter may lead to early termination of the Warrants (see immediately below) and/or the payment of an indemnity by the investor to JPMorgan. See "*Purchaser Representations and Requirements and Transfer Restrictions - Saudi Arabia LEPW Investor Agreement Letter*" below.

- The terms of the Warrants may be adjusted or the Warrants may be terminated prior to their scheduled maturity at the Early Payment Amount at the discretion of the Issuer (i) to give effect to any instruction given by the Saudi Arabian Capital Market Authority or (ii) only if the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Investor Agreement Letter" is applicable, if the investor is in breach of any of the agreements made in the Saudi Arabia LEPW Investor Agreement Letter, or any of the representations or warranties made by the investor therein are not or no longer true and accurate. On such early termination, an investor in a Saudi Arabia LEPW will receive the "Early Payment Amount" in full and final settlement of the Securities as described in Risk Factor 5.1(b) (*The 'Early Payment Amount' may be less than the original invested amount*).

See the sections entitled "*Annex 6 – Low Exercise Price Warrant Provisions" and "Purchaser Representations and Requirements and Transfer Restrictions - Saudi Arabia LEPW Investor Agreement Letter*" below.

5.10 **It may not be possible to use the Securities as a perfect hedge against the market risk associated with investing in a Reference Asset**

If you intend to invest in Securities to hedge against the market risk associated with investing in a Reference Asset, you should recognise the complexities of utilising Securities in this manner. For example, the value of the Securities may not exactly match the value of the Reference Asset. Due to fluctuating supply and demand for the Securities, there is no assurance that their value will match movements in the value of the Reference Asset. For these reasons, among others, it may not be possible to purchase or liquidate Securities in a portfolio at the prices used to calculate the value of any Reference Asset(s). Accordingly, due to the above factors, you may suffer a loss if you intend to invest in Securities to hedge against the market risk associated with investing in a Reference Asset.

5.11 **There are risks relating to "Inventory Securities" which have been issued prior to the date of their purchase**

In the case of Securities which have been issued prior to the date of their purchase which the Dealer or other JPMorgan Chase company) has been holding from time to time on its own account ("**Inventory Securities**"), disclosure in relation to the Reference Asset(s) to which the relevant Inventory Securities may be linked (if any) as set forth in the relevant Pricing Supplement will have been extracted by JPMorgan Chase from publicly available sources but will not have been prepared or verified by, or on behalf of, JPMorgan Chase. JPMorgan Chase disclaims any responsibility for such information. Such information will be out of date and no updated information thereon will be provided. If there has been any change in the Reference Asset(s) since the date of the relevant Pricing Supplement, this may have an adverse effect on the pay-out and/or value of the relevant Inventory Securities. Moreover, any change in the situation or condition of the Issuer and/or the Guarantor (if applicable) since the date of the relevant Pricing Supplement will not be disclosed and may have an adverse effect on the value of the relevant Inventory Securities held by you.

5.12 **There are risks in relation to Securities to be settled by way of physical delivery**

(a) ***You may be required to complete a notice and make certain representations, or else you may receive cash instead of physical delivery***

In order to receive the Reference Asset Amount in respect of a Security settled by way of Physical Settlement, you may be required to deliver or send to the Relevant Clearing System or to any Paying Agent (as applicable) a duly completed Reference Asset Transfer Notice on or prior to the relevant time on the Physical Settlement Cut-off Date and pay the relevant Delivery Expenses. If you fail to (a) make the relevant representations which are set out in the Reference Asset Transfer Notice in respect of the delivery of shares of a company (as described in "*Purchaser representations and requirements and transfer restrictions*" - "*Representations relating to Securities that may be settled by Physical Settlement of Shares*" below) or (b) make the required certification of non-U.S. beneficial ownership, the Issuer may pay what the Calculation Agent determines to be the fair market value of the Reference Assets instead of delivering the Reference Asset Amount.

(b) ***You may be required to pay certain expenses***

If your Securities are subject to Physical Settlement, you must pay all expenses relating to delivery of such Securities, including expenses, costs, charges, levies, tax, duties, withholding, deductions or other payments including without limitation, all depository, custodial, registration, transaction and exercise charges and all stamp, issues, registration or, securities transfer or other similar taxes or duties incurred by JPMorgan Chase in respect of the Issuer's obligations under the Securities and/or the delivery of the Reference Assets.

5.13 **The Issuer of the Securities may be substituted without your consent**

The Issuer of the Securities may be substituted as the Issuer of the Securities in favour of JPMorgan Chase & Co. or any of its subsidiaries, without the consent of the Holders or any right of the Holders to object to such substitution. In the case of Securities issued by JPMCFC or JPMSP, the right of substitution is subject to: (i) the Issuer or (if applicable) the relevant Guarantor having become obliged (due to a change in law) to pay Additional Amounts in accordance with General Condition 18.1 (*Obligation to pay Additional Amounts*) or (ii) the relevant Issuer or any affiliate(s) of the Issuer or any entity (or entities) acting on behalf of such Issuer incurring a materially increased cost with respect to taxes in performing its obligations in relation to underlying hedging transactions (due to a change in law). The right of substitution is conditional on certain terms, including that (a) the new issuer provides an indemnity in favour of the Holders of such Securities in relation to any additional tax or duties that become payable solely as a result of such substitution and (b) where the original issuer is JPMCFC or JPMSP, as the case may be, the Securities will remain guaranteed by the relevant Guarantor. See General Condition 28 (*Substitution*).

5.14 **Purchase of Securities which embed a short position in respect of European stocks and indices could be in contravention of any applicable Member State or UK prohibition and/or cause an investor to reach a threshold where disclosure of a net short position is required under the EU Short Selling Regulation or the UK Short Selling Regulation (as applicable)**

Reporting requirement

Under (i) Regulation (EU) No 236/2012, as amended (the "**EU Short Selling Regulation**") (ii) and for purposes of the UK only, the EU Short Selling Regulation as forms part of UK domestic law by virtue of the EUWA (as amended, the "**UK Short Selling Regulation**"), Holders of Securities holding a net short position in relation to a particular share to which the applicable regulation applies (as described below) or a debt instrument issued by a sovereign issuer to which the applicable regulation applies (as described below) in the case where the investor has reached a certain threshold in relation to such position, must make a disclosure thereof to the relevant competent authority. The Securities may include short positions in such shares and/or debt instruments and such short positions may fluctuate from time to time. Purchasing and holding the Securities may therefore, when taken together with the investor's other holdings of

relevant shares and/or debt instruments issued by a sovereign issuer, cause the Holder to reach one or more thresholds where disclosure, to a relevant competent authority, would be required under the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be. There is a similar requirement to make public disclosure of net short positions in relation to shares when the public disclosure thresholds under the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be, are met.

A net short position is the position remaining after deducting any long position held in relation to the shares or the debt instrument from any short position in relation to such shares or debt instrument, in accordance with the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be. For the purposes of the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be: (i) a short position will include (a) the short sale of a share or a debt instrument as well as (b) entering into a transaction which creates or relates to a financial instrument other than that referred to in (a) where the effect or one of the effects of the transaction is to confer a financial advantage on the person entering into that transaction in the event of a decrease in the price or value of the share or debt instrument; and (ii) a long position will include (a) the holding of a share or a debt instrument as well as (b) entering into a transaction which creates or relates to a financial instrument other than that referred to in (a) where the effect or one of the effects of the transaction is to confer a financial advantage on the person entering into that transaction in the event of an increase in the price or value of the share or debt instrument.

The calculation of a short or long position will include any position held by the relevant person indirectly, including through or by way of any index, basket of securities or any interest in any exchange traded fund or similar entity, determined by the person in question acting reasonably having regard to publicly available information as to the composition of the relevant index or basket of securities, or of the interests held by the relevant exchange traded fund or similar entity. Shares in relation to which the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be, applies are those which are admitted to trading in the EU or the UK, respectively, although there is an exemption where the primary listing is outside the EU or the UK, respectively (as determined by the relevant competent authority). Debt instruments in relation to which the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be, applies are those issued by EU sovereigns or the UK sovereign, respectively, including any special purpose vehicle ("**SPV**") established by such a sovereign, as well as the European Investment Bank and any EU bail–out fund.

The applicable threshold is subject to change from time to time as set by (i) in the case of the EU Short Selling Regulation, ESMA – see the ESMA web-site (www.esma.europa.eu) for the current applicable threshold and (ii) in the case of the UK Short Selling Regulation, HM Treasury – see the FCA web-site (www.fca.org.uk) for the current applicable threshold.

Prohibition

The EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be, establishes prohibitions on entering into transactions in uncovered short sales of relevant shares (as defined above), debt instruments on EU sovereign debt or UK sovereign debt, as the case may be, or credit default swaps on such EU debt within Member States or UK debt. The prohibition is subject to a number of exemptions, such as the natural or legal person has entered into an agreement to borrow the share or has another absolutely enforceable claim under contract or property law to be transferred ownership of a corresponding number of securities of the same class so that settlement can be effected when it is due.

Under certain circumstances and subject to certain conditions, the competent authorities of Member States and the UK, as the case may be, can introduce temporary prohibitions that extend the prohibition set out above. These temporary prohibitions can increase the scope of the instruments caught within the prohibition on uncovered short selling. For example, a Member State competent authority or the UK competent authority, as the case may be, can prohibit the entry into or increase in net short positions over shares (and other instruments, such as EU sovereign debt or UK sovereign debt, as the case may be) in respect of which it has the relevant market or is the competent authority for as defined by the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be. Such prohibition may extend to derivatives,

securities and other instruments which embed a short position on the relevant shares and may include indices on such instrument.

Global application

Both the reporting requirement, the prohibition and any Member State extensions or UK extensions, as the case may be, to these prohibitions which may be implemented from time to time under the EU Short Selling Regulation or UK Short Selling Regulation apply globally – i.e. they will apply to all investors of instruments which are in scope of the reporting requirements or prohibition regardless of whether or not the investor is resident in the EU or UK, as the case may be, or in another jurisdiction.

It is your responsibility to monitor your net short positions and to comply with the obligations applicable to you under the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be. Failure to do so could lead to sanctions against you under the EU Short Selling Regulation or the UK Short Selling Regulation, as the case may be.

5.15 **Securities may be amended without your consent or with the consent of only some of the Holders binding all of the Holders of Securities**

(a) ***All Securities other than French Securities and German Securities***

Subject as provided below, the terms and conditions of Securities (other than French Securities and German Securities) may be amended by the Issuer without the consent of the Holders if the amendment:

- is of a formal, minor or technical nature; or
- is made to cure a manifest or proven error; or
- is made to cure any ambiguity or is made to correct or supplement any defective provisions of the Securities or the Agency Agreement (as applicable); or
- is made to correct an error or omission such that, in the absence of such correction, the terms of the Securities would not otherwise represent the intended terms of the Securities on which the Securities were sold and have since traded; or
- will not materially and adversely affect the interests of the Holders of the Securities.

In addition, other changes may be made to the terms and conditions with the consent of the Holders, subject as provided below with respect to French Securities and German Securities. In order to make such changes, the Issuer requires the consent of at least 50 per cent. of the Holders (in the case of minor amendments) or at least 75 per cent. of the Holders (in the case of more fundamental amendments). If the amendment is approved, all Holders will be bound including those who did not attend or vote or who do not consent to the amendment. Therefore the Issuer may be able to make a change which certain Holders have voted against if 50 per cent. or 75 per cent. (as the case may be) of the Holders of the entire series of Securities have approved the change.

(b) ***French Securities***

In the case of French Notes, the terms of the French Notes can only be amended if there is a meeting of the Holders in accordance with French law. The positive vote of two-thirds or more of Holders will bind the remaining Holders in accordance with Article L. 228-65-II of the French *Code de commerce*. In the case of French Securities (other than French Notes), the terms of the French Securities can only be amended if there is a meeting of the Holders in accordance with French law. The positive vote of the majority of Holders will bind the remaining Holders.

In respect of French Notes which have a Specified Denomination of at least EUR 100,000 or which can be traded in amounts of at least EUR 100,000 (or its equivalent in the relevant

currency as of the Issue Date), the Issuer may amend the Conditions of the Securities without the consent of the Holders to correct a manifest error.

(c) ***German Securities***

In the case of German Securities, the terms and conditions of the Securities may be amended by the Issuer without the consent of the Holders, if the amendment is to correct any manifest clerical or calculation errors or similar manifest incorrectness. In addition, the Issuer may, without the consent of the Holders, amend or supplement at its reasonable discretion any contradictory or incomplete provisions of the terms and conditions of the Securities, provided that such amendments are reasonably acceptable to the Holders.

Furthermore, the Holders may agree to amendments to the terms and conditions of the Securities with regard to matters permitted by the German Bond Act of 2009 (*Schuldverschreibungsgesetz*) by resolution with the majority specified in General Condition 24.1(e)(ii) proposed by the Issuer. Majority resolutions shall be binding on all Holders.

In all other cases, the terms and conditions of German Securities can only be amended with the consent of all of the Holders of such Securities.

6. Risks related to Securities that are linked to one or more Reference Asset(s) and risks associated with specific types of Reference Assets

6.1 No legal or beneficial rights in the Reference Asset(s)

The Issuer has no obligation to hold the Reference Asset, and the Securities are unsecured. You will not have any legal or beneficial rights of ownership in the Reference Asset(s), including, any voting rights, any rights to receive dividends or other distributions or any other rights with respect to the Reference Asset(s). For example, you will have no claim against any index sponsor or share issuer or any other third party in relation to a Reference Asset, and such parties have no obligation to act in your interests. Accordingly, you may receive a lower return on the Securities than you would have received had you invested directly in the Reference Asset(s) or through another product.

6.2 The past performance of a Reference Asset is not indicative of future performance

Any information about the past performance of a Reference Asset should not be regarded as indicative of any future performance of such asset, or as an indication of the range of, or trends or fluctuations in, the price or value of such asset that may occur in the future. It is not possible to predict the future value of the Securities based on such past performance. Actual results will be different, and such differences may be material, and could have a negative impact on the value of and return on your Securities.

6.3 The market value or return on the Securities may not be comparable or directly proportionate to the change in value of such Reference Asset(s)

Unlike a direct investment in the relevant Reference Asset(s), Securities represent the right to receive payment and/or delivery of amounts which will be determined by reference to the performance of the relevant Reference Asset(s). Whilst the return on the Securities will be influenced (positively or negatively) by the Reference Asset(s), any change may not be comparable or directly proportionate to the change in value of such Reference Asset(s), and you may receive less or lose more than if you had invested in the Reference Asset(s) directly or through another product.

6.4 Risks related to baskets comprised of more than one Reference Asset

(a) ***A high correlation of basket constituents may have an exaggerated impact on the value of and return on the Securities***

Correlation of basket constituents indicates the level of interdependence among the individual basket constituents with respect to their performance. If, for example, all of the basket constituents originate from the same sector and the same country or region, a high positive

correlation may generally be assumed. Past rates of correlation may not be determinative of future rates of correlation. Although basket constituents may not appear to be correlated based on past performance, it may be that they suffer the same adverse performance following a general downturn or other economic or political event. Where the basket constituents are subject to high correlation, any move in the performance of the basket constituents will exaggerate the performance of the Securities, and this could have a highly negative (or positive) impact on the value of and return on the Securities.

(b) ***The negative performance of a single basket constituent may outweigh a positive performance of one or more other basket constituents***

Depending on the particular terms of the Securities, even in the case of a positive performance of one or more basket constituents, the performance of the basket as a whole may be negative if the performance of one or more of the other basket constituents is negative to a greater extent. In such case, the negative performance of one or more basket constituents could have a negative impact on the value of and return on your Securities.

(c) ***A small basket, or an unequally weighted basket, will generally leave the basket more vulnerable to changes in the value of any particular basket constituent***

The performance of a basket that includes a fewer number of basket constituents will generally, subject to the terms and conditions of the relevant Securities, be more affected by changes in the value of any particular basket constituent included therein than a basket that includes a greater number of basket constituents.

The performance of a basket that gives greater weight to some basket constituents will generally, subject to the particular terms of the Securities, be more affected by changes in the value of any such particular basket constituent included therein than a basket that gives relatively equal weight to each basket constituent.

Accordingly, if there are only a few Reference Assets and/or their weighting is not equal, the negative performance of only one (or only a few) Reference Asset(s) could have a disproportionate impact on the value of and return on the Securities.

(d) ***A change in composition of a basket may have an adverse effect on basket performance***

Where the Securities grant the Calculation Agent the right, in certain circumstances, to adjust the composition of the basket, you should be aware that any replacement basket constituent may perform differently from the original basket constituent, which may have an adverse effect on the performance of the basket and a negative impact on the value of and return on the Securities.

6.5 **Non-trading days or market disruption events may adversely affect the return on the Securities**

If the Calculation Agent determines that a scheduled valuation date falls on a day which is not a scheduled trading day or any other day which is subject to adjustment in accordance with the terms and conditions of the Securities, then the relevant valuation date may be postponed.

The Calculation Agent may determine that the markets have been affected in a manner that prevents it from properly determining the value of a Reference Asset on a scheduled valuation date. These events may include disruptions or suspensions of trading in the markets as a whole. In such case, the valuation date will be postponed and the return on the Securities could be adversely affected.

If any valuation date is postponed to the last possible day and the market disruption event is still occurring on that day or such day is not a trading day, the Calculation Agent will nevertheless determine the value of that Reference Asset(s) on such last possible day.

Any such determination by the Calculation Agent may have a negative impact on the value of and return on the Securities.

6.6 **Risks related to Securities that are linked to one or more Shares, ADRs, GDRs and ETFs as Reference Assets**

An investment in Securities that are linked to one or more Shares, ADRs, GDRs and/or ETFs entails significant risks in addition to those associated with investments in a conventional debt security, including as discussed below.

(a) ***The performance of the Share(s) will depend on many diverse and unpredictable factors***

The performance of common shares, American Depositary Receipts ("**ADRs**"), Global Depositary Receipts ("**GDRs**") and exchange traded funds ("**ETFs**") is dependent upon macroeconomic factors, such as interest and price levels on the capital markets, currency developments and political factors, and company-specific factors such as earnings position, market position, risk situation, market liquidity for the Shares, shareholder structure and dividend policy. Any one or a combination of such factors could adversely affect the performance of the Share(s) which, in turn, could have an adverse effect on the value of and return on your Securities.

(b) ***No claim against the Share Issuer or recourse to the Shares***

Share Linked Securities do not represent a claim against or an investment in any Share Issuer and you will not have any right of recourse under the Securities to any such company or the Shares. The Securities are not in any way sponsored, endorsed or promoted by any Share Issuer and such companies have no obligation to take into account the consequences of their actions on Holders of Securities. The issuer of a Share may take any actions in respect of such Share without regard to your interests as a Holder of Securities, and any of these actions could adversely affect the value of and return on the Securities.

(c) ***No right to participate in dividends or any other distributions***

Unless otherwise specified to be applicable in the terms and conditions, holders of Securities linked to common shares, ADRs, GDRs or ETFs will not participate in dividends or any other distributions paid on such Reference Assets. Therefore, the return on the Securities may be lower than holding such Reference Asset(s) directly or through another product.

(d) ***Determinations made by the Calculation Agent in respect of Potential Adjustment Events, Extraordinary Events, Additional Disruption Events and a Successor Index Event (ETF) (relating to shares of Exchange Traded Funds) may have an adverse effect on the value of the Securities***

Upon determining that a Potential Adjustment Event, Extraordinary Event or Additional Disruption Event has occurred in relation to an underlying Share or Share Issuer, or a Successor Index Event (ETF) has occurred in relation to a share of an Exchange Traded Fund, the Calculation Agent has discretionary authority under the terms and conditions of the Securities to make certain determinations to account for such event including to (i) make adjustments to the terms of the Securities and/or (ii) (in the case of an Extraordinary Event, an Additional Disruption Event or a Successor Index Event (ETF)) cause early redemption of the Securities, any of which determinations may have an adverse effect on the value of and return on the Securities.

- Potential Adjustment Events: these include (A) a sub-division, consolidation or re-classification of the Shares, (B) an extraordinary dividend, (C) a call of the Shares that are not fully paid, (D) a repurchase by the issuer, or an affiliate thereof, of the Shares, (E) a separation of rights from the Shares or (F) any event having a dilutive or concentrative effect on the value of the Shares.

- Extraordinary Events: these include (A) a delisting of the Shares on an exchange, (B) an insolvency (where all the Shares of the Share Issuer are transferred to a trustee, liquidator or similar official or may not be legally transferred) or bankruptcy of the issuer of the Shares, (C) a merger event entailing the consolidation of the Shares with those of another entity, (D) a nationalisation of the issuer of the Shares or transfer of the Shares to a governmental entity, (E) a tender offer or takeover offer that results in transfer of the

Shares to another entity, or (F) (in the case of shares of Exchange Traded Funds and if specified to be applicable in the relevant Pricing Supplement) a failure to publish the net asset value for more than a short period and/or which is non-temporary in nature and has a material effect on the Securities, or a permanent cancellation or material modification of the index underlying the Exchange Traded Fund.

- Additional Disruption Events: these include (A) a change in applicable law since the Issue Date that makes it illegal for any of the Issuer and/or the Guarantor and/or any of their respective affiliates to hold, acquire or dispose of the Shares or (if specified to be applicable in the relevant Pricing Supplement) more expensive for the Issuer to hedge its obligations under the relevant Securities or (B) if specified to be applicable in the relevant Pricing Supplement, (I) an insolvency or bankruptcy filing by or on behalf of the underlying Share Issuer or (II) a "Hedging Disruption", meaning that the hedging entity is unable, after using commercially reasonable efforts, to (1) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (2) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

- Successor Index Event (ETF): this is an event whereby the index underlying the Exchange Traded Fund is either calculated and announced by a successor sponsor or replaced by a successor index using the same or substantially similar calculation formula and method as the index.

It will generally not be possible to anticipate the occurrence of a Potential Adjustment Event, Extraordinary Event, Additional Disruption Event or a Successor Index Event (ETF), and the occurrence of any of these events could have an adverse effect on the value of and return on the Securities.

(e) ***Holders may receive physical settlement of Shares in lieu of payment of cash amounts***

Where the Securities include the right of the Issuer, subject to the fulfilment of a particular condition, to redeem the Securities at their maturity by delivering Shares to the investor in such Securities, you will receive such Shares rather than a monetary amount upon maturity. You should not assume that you will be able to sell such Shares for a specific price after the redemption of the Securities, or that the sale price of the Shares will be equivalent to the purchase price of the Securities. Under certain circumstances the Shares may only have a very low value or may, in fact, be worthless. You may also be subject to certain documentary or stamp taxes in relation to the delivery and/or disposal of such Shares. See also Risk Factor 5.12 (*There are risks in relation to Securities to be settled by way of physical delivery*) above.

(f) ***Additional Risks related to Securities that are linked to one or more American Depositary Receipts (ADRs) and Global Depositary Receipts (GDRs) as Reference Assets***

An investment in Securities linked to Depositary Receipts (comprising American Depositary Receipts or Global Depositary Receipts) entails significant risks in addition to those associated with Share Linked Securities (as described above) and with investments in a conventional debt security, including as discussed below.

(i) ***Depositary Receipts do not reflect a direct investment in the Underlying Shares***

There are important differences between the rights of holders of Depositary Receipts and the rights of holders of the stock of the Underlying Share Issuer represented by such Depositary Receipts. A Depositary Receipt is a security that represents capital stock of the relevant Underlying Share Issuer. The relevant deposit agreement for the Depositary Receipt sets forth the rights and responsibilities of the Depositary (being the issuer of the Depositary Receipt), the Underlying Share Issuer and holders of the Depositary Receipt which may be different from the rights of holders of the Underlying Shares. For example, the Underlying Share Issuer may make distributions in respect of its Underlying Shares that are not passed on to the holders of its Depositary Receipts. Any such differences between the rights of holders of the Depositary Receipts and holders of the Underlying

Shares of the Underlying Share Issuer may be significant and may materially and adversely affect the value of and return on the Securities.

(ii) ***Risk of non-recognition of beneficial ownership of the Underlying Shares***

The legal owner of the Underlying Shares is the custodian bank which at the same time is the issuing agent of the Depositary Receipts. Depending on the jurisdiction under which the Depositary Receipts have been issued and the jurisdiction to which the custodian agreement is subject, it is possible that the corresponding jurisdiction would not recognise the purchaser of the Depositary Receipts as the actual beneficial owner of the Underlying Shares. Particularly in the event that the custodian becomes insolvent or that enforcement measures are taken against the custodian following a default by it, it is possible that an order restricting free disposition could be issued with respect to the Underlying Shares or that such shares are realised within the framework of an enforcement measure against the custodian. If this is the case, the holder of the Depositary Receipt loses the rights under the Underlying Shares and the Securities would become worthless.

(iii) ***Distributions on the Underlying Shares may not be passed on to the Depositary Receipts***

An issuer of the Underlying Shares may make distributions in respect of its shares that are not passed on to holders of its Depositary Receipts. This could have a negative adverse effect on the value of and return on the Securities.

(g) ***Additional risks related to Securities that are linked to one or more Exchange Traded Funds (ETFs) as Reference Assets***

An investment in Securities linked to shares of ETFs entails significant risks in addition to those associated with Share Linked Securities (as described above) and with investments in a conventional debt security, including as described below.

(i) ***The performance of an ETF will depend on many diverse and unpredictable factors and there can be no assurance it will achieve its investment objectives***

An ETF may seek to track the performance of an index, a basket of assets or specific single assets (each, a "**fund underlying benchmark**"). The performance of an ETF may be dependent upon macroeconomic factors, such as interest and price levels on the capital markets, currency developments and political factors, and company-specific factors such as earnings position, market position, risk situation, market liquidity of the shares comprising the fund underlying benchmark, or the shareholder structure and dividend policy relating to the issuers of underlying shares of the fund underlying benchmark. As these factors are beyond the control of the management company, sponsor or trustee of the ETF, there can be no assurance that the management company, sponsor or trustee will achieve the investment objectives of the ETF.

The net asset value of a share of an ETF may be calculated from the prices of underlying shares relating to the fund underlying benchmark, without taking into account the value of dividends paid on the shares of the fund underlying benchmark. Therefore, an investment in Securities which are linked to a share of an ETF is not the same as a direct investment in the fund underlying benchmark and may result in a lower yield than a direct investment in such index or shares or in another product.

(ii) ***No claim against the management company, sponsor or trustee of an ETF or recourse to the ETF shares***

Securities linked to shares of an ETF do not represent a claim against or an investment in any management company, sponsor or trustee of the ETF and you will not have any right of recourse under the Securities to any such company, sponsor or trustee or the shares of the ETF. The Securities are not in any way sponsored, endorsed or promoted by any management company, sponsor or trustee of the ETF and such entities have no obligation to take into account the consequences of their actions on Holders of Securities.

Accordingly, the management company, sponsor or trustee of an ETF may take any actions in respect of shares of the ETF without regard to your interests as a Holder of Securities, and any of these actions could adversely affect the market value of and return on the Securities.

(iii) ***There may be conflicts of interest in relation to the ETF***

In the operation of an ETF certain conflicts of interest may arise that can have negative impacts on the performance of such fund. For persons involved in the fund management or advisory activities in relation to the ETF conflicts of interest can arise from retrocessions or other inducements. In addition, persons involved in the fund management or advisory activities to the ETF or their employees may provide services such as management, trading or advisory services for third parties at the same time. Although they will usually aim to distribute the investment opportunities equally to their clients, the fund portfolio and portfolios of other clients may differ even if their investment objectives are similar. Any of these persons might be induced to allocate lucrative assets first to a portfolio involving the highest fees. Persons providing management, trading or advisory services to the ETF may make recommendations or enter into transactions which are different to those of the ETF or may even compete with the ETF. Any such behaviour by persons involved in the fund management or advisory activities may adversely affect the performance of the ETF, which may in turn negatively affect the value of and return on Securities linked to such ETF.

(iv) ***The performance of an ETF may not correlate with the performance of its fund underlying benchmark and, particularly during periods of market volatility, the ETF share price performance may not correlate with its net asset value***

An ETF may not fully replicate its fund underlying benchmark and may hold securities different from those included in its fund underlying benchmark. Also, the performance of an ETF will in most cases reflect additional transaction costs and/or fees that are not included in the calculation of the level of its fund underlying benchmark. Further, corporate actions with respect to the equity securities underlying an ETF (such as mergers and spin-offs) may lead to variance between the performance of such ETF and that of its fund underlying benchmark. Any or all of these factors may lead to a lack of correlation between the performance of an ETF and that of its fund underlying benchmark.

Because the shares of an ETF are traded on an exchange and are therefore subject to market supply and investor demand, the share price of an ETF may differ from the net asset value of a share of the ETF. The share price performance of an ETF and its net asset value may also vary due to market volatility. For example, during periods of market volatility, the liquidity of the shares of an ETF may be adversely affected and market participants may be unable to accurately calculate the net asset value per share of the ETF. Market volatility may also impair the ability of market participants to issue new shares and redeem existing shares in the ETF. Further, market volatility may have a material adverse effect on the prices at which market participants are willing to buy and sell shares of the ETF. As a result, in circumstances of market volatility, the share price of an ETF may vary substantially from the net asset value per share of the ETF.

For all of these reasons, the performance of an ETF may not correlate with the performance of its fund underlying benchmark, and the share price performance of the ETF may vary substantially from its net asset value. This lack of correlation could have a material adverse effect on the return on and value of your Securities. You may receive a lower return on your Securities than if you had invested directly in the shares of the ETF or in another product.

(v) ***An ETF may involve varying degrees of risk depending on the tracking techniques employed by the management company***

For the purpose of tracking the performance of a fund underlying benchmark, the management company may use full replication (i.e. investing directly in all components

comprised in the fund underlying benchmark), synthetic replication (such as using a swap) or other tracking techniques (such as sampling). An ETF may involve varying degrees of risk depending on the tracking techniques employed by the management company.

When full replication or synthetic replication techniques are used, an ETF is exposed to an unlimited risk of the negative performance of the fund underlying benchmark. In addition, such ETF may not be able to acquire all components of its fund underlying benchmark or sell them at reasonable prices. This can affect the ETF's ability to replicate the fund underlying benchmark and may have a negative effect on the ETF's overall performance.

ETFs using swaps for synthetic replication of the fund underlying benchmark may be exposed to the risk of a default of their swap counterparties. See Risk Factor 6.6(g)(vi) (*Synthetic ETFs may involve additional risks due to the use of derivative instruments*).

ETFs replicating the fund underlying benchmark using sampling techniques may create portfolios of assets which are not components of the fund underlying benchmark at all or comprise only some components of the fund underlying benchmark. Therefore, the risk profile of such ETFs is not necessarily consistent with the risk profile of their fund underlying benchmark.

The value of and return on Securities linked to an ETF may in turn be adversely affected if the performance of such ETF is affected by the risks associated with the tracking techniques employed by the management company.

(vi) ***Synthetic ETFs may involve additional risks due to the use of derivative instruments***

Typically, synthetic ETFs follow a strategy of investing in swaps and derivative instruments with an aim to replicate the performance of a fund underlying benchmark. Investors investing in Securities linked to synthetic ETFs should consider the additional risks inherent in the use of swaps and derivative instruments:

***Counterparty risk*:** In addition to exposure to the Issuer's credit risk (and, if there is a Guarantor, the credit risk of the Guarantor) and the credit risk in respect of the underlying ETF, investors in Securities linked to synthetic ETFs are exposed to the credit risk of counterparties which have issued the swaps or derivative instruments that underlie synthetic ETFs ("**Derivatives Issuers**"). Derivatives Issuers are predominantly international financial institutions and there is a risk that the failure of one Derivatives Issuer could have a "knock-on" effect and lead to the insolvency of other Derivatives Issuers. Although Derivatives Issuers may have collateralised their obligations under the relevant derivative instruments, there is a residual risk that the market value of the collateral posted could have fallen substantially when the synthetic ETFs seeks to realise the collateral and could be worth less than the outstanding obligations under the relevant derivative instruments. In such case, the holders of Securities may suffer loss of their investment for the amount of the shortfall between the value of the collateral and the amounts due under the Securities linked to such synthetic ETFs.

***Management risk*:** Synthetic ETFs are managed in a "passive" manner. This means that investments are made in swap and derivative instruments relating to underlying indices or benchmarks without the possibility to acquire or dispose of assets on an active basis in accordance with economic, financial and market analysis and investment judgements made by the fund's investment adviser. Accordingly, there is a risk that the passive investment strategy of such fund's investment adviser may not produce the intended results. For instance, the synthetic ETF may not be able to reduce the downside of poorly performing investments through timely disposition of assets in the portfolio. This may have an adverse effect on the value of synthetic ETF and therefore on the value of and return on Securities linked to such synthetic ETFs.

***Liquidity risk*:** Synthetic ETFs are typically not liquid or not as liquid as other ETFs This is because swaps and derivative instruments may not be traded on the secondary market.

As a consequence of the limited liquidity wider bid-offer spreads may apply to such derivative instruments and this may result in increased operating costs and potential losses for the synthetic ETFs and accordingly the value of and return on Securities linked to such synthetic ETFs will be adversely affected.

***Tracking error*:** Although synthetic ETFs track the fund underlying benchmark, there is a risk that a discrepancy occurs between the value of the synthetic ETF and the value of the fund underlying benchmark. This could be the result of a failure of the tracking strategy of the synthetic ETF, currency differences between the ETF and/or the fund underlying benchmark, and/or fees and expenses charged in connection with the synthetic ETF. The occurrence of such discrepancy could have a material adverse effect on the value of and return on Securities linked to such synthetic ETF.

***Trading at a discount or a premium*:** There is a risk that synthetic ETFs are traded at a premium or discount of their net asset value. This may occur if the fund underlying benchmark is subject to restrictions or limitation for instance a limitation on foreign investment imposed in the jurisdiction to which the fund underlying benchmark relates. Investors that acquire Securities linked to a synthetic ETF at a premium are subject to the risk that they may not be able to recover the premium in the event of termination of underlying ETFs or the Securities, as this could have a negative impact on the value of and return on the Securities.

(h) ***An ETF may overly concentrate on a certain class of underlying assets or assets located in specific countries***

An ETF may in accordance with its fund rules concentrate its assets with a focus on certain countries, regions, asset classes or industry sectors while replicating the fund underlying benchmark. This can result in the ETF being subject to a higher volatility and further risks as compared to funds with a broader diversification as regards countries, regions or industry sectors. Such risks may include the risk of government interventions resulting in a total or partial loss of assets or of the ability to acquire or sell them at the management company's discretion. Such markets may not be regulated in a manner typically expected from more developed markets. If an ETF concentrates its assets in emerging markets, this may involve a higher degree of risk as exchanges and markets in these emerging market countries may be subject to stronger volatility than exchanges and markets in more developed countries. Political changes, foreign currency exchange restrictions, foreign exchange controls, taxes, restrictions on foreign investments and repatriation of invested capital can have a negative impact on the investment result and therefore the value of shares of the ETF.

(i) ***ETFs are subject to tax and currency risks, which may indirectly affect the value of Securities linked to such ETFs***

The tax status of ETFs in those jurisdictions in which they conduct their business and/or any change in taxation rules or treatment in such jurisdictions could affect the value of the assets of such ETFs or the ability of such ETFs to achieve their investment objectives. Consequently, this could adversely affect the value of Securities linked to such ETFs.

In addition, remittance of income and capital gains generated by underlying investments of ETFs in certain countries may be dependent on there being liquidity in the relevant local currency and the absence of foreign exchange controls which inhibit or prevent the repatriation of such gains. In any such circumstances, the value of the notional shares of ETFs may be adversely affected and as a result the relevant ETFs and the value of the Securities linked to such ETFs may be adversely affected.

6.7 **Risks related to Securities that are linked to one or more Indices as Reference Assets**

An investment in Index Linked Securities entails significant risks in addition to those associated with investments in a conventional debt security, including as described below.

(a) ***The performance of an Index will depend on many diverse and unpredictable factors***

Indices are comprised of a synthetic portfolio of shares or other assets, and as such, the performance of an Index is dependent upon the macroeconomic factors relating to the shares or other components that comprise such Index, which may include interest and price levels on the capital markets, currency developments, political factors and (in the case of shares) company-specific factors such as earnings position, market position, risk situation, market liquidity for the constituent shares, shareholder structure and dividend policy. Any one or a combination of such factors could adversely affect the performance of the relevant Index which, in turn, could have an adverse effect on the value of and return on your Securities.

(b) ***Returns on the Securities do not reflect direct investment in underlying shares or other constituents of the Index***

The return payable on Securities that reference one or more Indices may not be the same as the return you would realise if you actually owned the relevant assets comprising the components of the Index. For example, if the components of the Indices are shares, holders of Securities will not receive any dividends paid on those shares and will not participate in the return on those dividends, save where the relevant Index takes such dividends into account for purposes of calculating the relevant level. Similarly, holders of Securities will not have any voting rights in the underlying shares or any other assets which may comprise the components of the relevant Index. Accordingly, you may receive a lower return on Securities linked to Indices than you would have received if you had invested in the components of such Indices directly or in another product.

(c) ***The type and rules of the Index (or Indices) to which the Securities are linked may have an adverse effect on the value of and return on the Securities***

Price Return and Total Return Indices

The rules governing the composition and calculation of the relevant Index may stipulate that dividends paid on its components are included in the calculation of the index level (a "total return" index) or are not included in the calculation of the index level (a "price return" index).

Where Securities are linked to a "price return" index, holders of the Securities will not participate in dividends paid on the components comprising the Index. As a result, holders of Securities linked to such Index would lose the benefit of any dividends paid by the components of the Index and such Securities may not perform as well as a position where such holder had invested directly in such components or where they invested in a "total return" version of the Index, or in another product.

In the case of Securities linked to a "total return" index, net dividends (in the case of a "net total return" index) or gross dividends (in the case of a "gross total return" index) paid on its components are included in the calculation of the index level. In the case of a "net total return" index, dividends paid on its components may not be fully reinvested in the Index and accordingly, you may receive a lower return on Securities linked to such Index than you would have received if you had invested in the components of such Index directly or in another product.

Decrement Indices

If the Index has a "decrement" feature, the return on such Index will be calculated by reinvesting net dividends or gross dividends (depending on the type and rules of such Index) paid by its components and by subtracting on a daily basis a pre-defined amount (a "**Synthetic Dividend**"). The Synthetic Dividend may be defined as a percentage of the index level or as a fixed number of index points. Investors should note that any of the following factors, where applicable, could adversely affect the value of and return on Securities linked to a "decrement" index:

- An Index with a "decrement" feature will underperform a "total return" index that is used as a base index to calculate such Index since the latter is calculated without the deduction of a Synthetic Dividend. Similarly, where such Index tracks the performance of a single component security, the Index will underperform a direct investment in such component security as such investment would benefit from dividends paid by the component security without the deduction of a Synthetic Dividend.

- An Index with a "decrement" feature will underperform the corresponding "price return" index if the amount of dividends paid by the components of such Index is less than the amount of the Synthetic Dividend deducted. Where such Index tracks the performance of a single component security, the Index will underperform a direct investment in such component security as such investment would benefit from dividends paid by the component security without the deduction of a Synthetic Dividend.

- Where the Synthetic Dividend is defined as a fixed number of index points (as opposed to a percentage of the index level), the Synthetic Dividend yield (calculated as the ratio of the fixed index point decrement to the relevant decrement index level) will increase in a falling equities market as the Synthetic Dividend is a fixed amount. In such scenario, the fixed deduction will have a greater negative impact on the index level of the relevant Index than if the Synthetic Dividend was defined as a percentage of the index level. It is even possible that in a steeply falling market scenario the index level could become negative, since the amount of decrement expressed in index points will not vary with the level of the decrement index.

(d) ***The composition or methodology of the Index could adversely affect the market value of the Securities***

The sponsor of any Index may add, delete or substitute the components of such Index or make other methodological changes that could change the level of one or more components. The changing of components of any Index may affect the level of such Index as a newly added component may perform significantly worse or better than the component it replaces, which in turn may affect the payments made by the Issuer to you under the Securities. The sponsor of any such Index may also alter, discontinue or suspend calculation or dissemination of such Index. The sponsor of an Index will have no involvement in the offer and sale of the Securities and will have no obligation to any Holder of Securities. The sponsor of an Index may take any actions in respect of such Index without regard to the interests of the Holders of Securities, and any of these actions could have a material adverse impact on the value of and return on the Securities.

(e) ***Consequences of Index Modification, Index Cancellation, Index Disruption and Correction of Index levels***

The Calculation Agent has discretionary authority under the terms and conditions of the Securities to make certain determinations and adjustments following an Index Modification (broadly, changes in the methodology of the Index), Index Cancellation (permanent cancellation of the Index) and Index Disruption (failure to calculate and publish the level of the Index). The Calculation Agent may determine that the consequence of any such event is to make adjustments to the Securities, or to replace such Index with another or to cause early redemption of the Securities. The Calculation Agent may (subject to the terms and conditions of the relevant Securities) also amend the relevant Index level due to corrections in the level reported by the Index Sponsor. Any such determination may have a negative adverse effect on the value of and return on the Securities.

(f) ***Consequences of Additional Disruption Events***

Upon determining that an Additional Disruption Event has occurred in relation to the Components of the Index, the Calculation Agent has discretionary authority under the terms and conditions of the Securities to make certain determinations to account for such event including to (i) make adjustments to the terms of the Securities and/or (ii) cause early redemption of the Securities, any of which determinations may have an adverse effect on the value of the Securities.

Additional Disruption Events include (A) a change in applicable law since the Issue Date that makes it illegal for any of the Issuer and/or the Guarantor and/or any of their respective affiliates to hold, acquire or dispose of the Components of the Index or (if specified to be applicable in the relevant Pricing Supplement) more expensive for the Issuer to hedge its obligations under the relevant Securities or (B) if specified to be applicable in the relevant Pricing Supplement, a "Hedging Disruption", meaning that the hedging entity is unable, after using commercially

reasonable efforts, to (I) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (II) realise, recover or remit the proceeds of any such transaction(s) or asset(s). Any such determination may have a negative adverse effect on the value of and return on the Securities.

(g) ***There are additional risks in relation to "Proprietary Indices" or "Strategies"***

See "*Conflicts of Interest - A J.P. Morgan Chase affiliate may be the sponsor of an index or strategy which is referenced by a Security*" below.

(h) ***There are additional risks in relation to Commodity Indices***

See Risk Factor 6.8(d) (*Risks related to the "rolling" of commodity futures contracts (including commodity futures contracts which are Components of a Commodity Index))* below.

6.8 **Risks related to Securities that are linked to one or more Commodities and Commodity Indices as Reference Assets**

An investment in Commodity Linked Securities entails significant risks in addition to those associated with investments in a conventional debt security, including those described below.

(a) ***Factors affecting the performance of Commodities may adversely affect the value of the Securities; Commodity prices may be more volatile than other asset classes***

Trading in commodities is speculative and may be extremely volatile. Commodity prices are affected by a variety of factors that are unpredictable including, for example, changes in supply and demand relationships, weather patterns and extreme weather conditions, environmental disasters, governmental programmes and policies, national and international political, military, terrorist and economic events, fiscal, monetary and exchange control programmes and changes in interest and exchange rates. Commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, the participation of speculators and government regulation and intervention. These circumstances could also adversely affect prices of the relevant commodity. Therefore, commodity prices may be more volatile than other asset classes and investments in commodities may be riskier than other investments. Such volatility may have an adverse effect on the value of and return on Securities linked to commodities and commodity indices.

(b) ***Commodities may reference physical commodities or commodity contracts, and certain commodity contracts may be traded on unregulated or "under-regulated" exchanges***

Commodities comprise both (i) "physical" commodities, which need to be stored and transported, and which are generally traded at a "spot" price, and (ii) commodity contracts, which are agreements either to (a) buy or sell a set amount of an underlying physical commodity at a predetermined price and delivery period, or to (b) make and receive a cash payment based on changes in the price of the underlying physical commodity.

Commodity contracts may be traded on regulated specialised futures exchanges (such as futures contracts). Commodity contracts may also be traded directly between market participants "over-the-counter" on trading facilities that are subject to lesser degrees of regulation or, in some cases, no substantive regulation. Accordingly, trading in such "over-the-counter" contracts may not be subject to the same provisions as, and the protections afforded to, contracts traded on regulated specialised futures exchanges, and there may therefore be additional risks related to the liquidity and price histories of the relevant contracts, which risks may have an adverse effect on the value of and return on Securities linked to commodities and commodity indices.

(c) ***Commodity Linked Securities which are linked to commodity futures contracts may provide a different return than Commodity Linked Securities linked to the relevant physical commodity and will have other risks***

The price of a futures contract on a commodity will generally be at a premium or at a discount to the spot price of the underlying commodity. This discrepancy is due to such factors as (i) the need to adjust the spot price due to related expenses (e.g., warehousing, transport and insurance costs) and (ii) different methods being used to evaluate general factors affecting the spot and the futures markets. In addition, and depending on the commodity, there can be significant differences in the liquidity of the spot and the futures markets. Accordingly, Commodity Linked Securities which are linked to commodity futures contracts may provide a different return than Commodity Linked Securities linked to the relevant physical commodity.

Investments in futures contracts involve other risks, including liquidity risks. A holder of a futures position may find that such position becomes illiquid because certain commodity exchanges limit fluctuations in such futures contract prices pursuant to "daily limits". Once the price of a particular futures contract has increased or decreased by an amount equal to the daily limit, positions in the contract can neither be taken nor liquidated unless holders are willing to effect trades at or within the limit. This could prevent a holder from promptly liquidating unfavourable positions and subject it to substantial losses. Futures contract prices in various commodities occasionally have exceeded the daily limit for several consecutive days with little or no trading. Any such losses in such circumstances could have a negative adverse effect on the value of and return on Securities a Reference Asset of which is the affected futures contract.

In the case of a direct investment in commodity futures contracts, the invested capital may be applied in whole or in part by way of collateral in respect of the future claims of the respective counterparties under the commodity futures contracts. Such capital will generally bear interest, and the interest yield will increase the return of the investor making such direct investment. However, holders of Securities linked to the price of commodity futures contracts do not participate in such interest yields from the hypothetical fully collateralised investment in commodity futures contracts and, therefore, may realise a lower return than if they had invested directly in commodity futures contracts or another product.

(d) ***Risks related to the "rolling" of commodity futures contracts (including commodity futures contracts which are Components of a Commodity Index)***

Commodity contracts have a predetermined expiration date - i.e. a date on which trading of the commodity contract ceases. Holding a commodity contract until expiration will result in delivery of the underlying physical commodity or the requirement to make or receive a cash settlement. Alternatively, "rolling" the commodity contracts means that the commodity contracts that are nearing expiration (the "near-dated commodity contracts") are sold before they expire and commodity contracts that have an expiration date further in the future (the "longer-dated commodity contracts") are purchased. Investments in commodities apply "rolling" of the component commodity contracts in order to maintain an on-going exposure to such commodities.

"Rolling" can affect the value of an investment in commodities in a number of ways, including:

(i) ***The investment in commodity contracts may be increased or decreased through "rolling"***: Where the price of a near-dated commodity contract is greater than the price of the longer-dated commodity contract (the commodity is said to be in "backwardation"), then "rolling" from the former to the latter will result in exposure to a greater number of the longer-dated commodity contract being taken. Therefore, any loss or gain on the new positions for a given movement in the prices of the commodity contract will be greater than if one had synthetically held the same number of commodity contracts as before the "roll". Conversely, where the price of the near-dated commodity contract is lower than the price of the longer-dated commodity contract (the commodity is said to be in "contango"), then "rolling" will result in exposure to a smaller number of the longer-dated commodity contract being taken. Therefore, any gain or loss on the new positions for a given movement in the prices of the commodity contract will be less than if one had synthetically held the same number of commodity contracts as before the "roll".

(ii) ***Where a commodity contract is in contango (or, alternatively, backwardation) such may be expected to (though it may not) have a negative (or, alternatively, positive)***

effect over time: Where a commodity contract is in "contango", then the price of the longer-dated commodity contract will generally be expected to (but may not) decrease over time as it nears expiry. In such event, "rolling" is generally expected to have a negative effect on an investment in the commodity contract. Where a commodity contract is in "backwardation", then the price of the longer-dated commodity contract will generally be expected to (but may not) increase over time as it nears expiry. In such event, the investment in the relevant commodity contract can generally be expected to be positively affected.

In the case of Securities which are linked to a Commodity which is a commodity contract, the commodity contract will simply be changed without liquidating or entering into any positions in the commodity contracts. Accordingly, the effects of "rolling" described above do not apply directly to the Reference Asset and the Securities. As a result, a holder of such Securities will not participate directly in possible effects of "rolling". However, other market participants may act in accordance with the mechanism of "rolling" and such behaviour may have an indirect adverse impact on the value of the Reference Asset for the Securities.

Commodity indices are indices which track the performance of a basket of commodity contracts on certain commodities, depending on the particular index. The weighting of the respective commodities included in a commodity index will depend on the particular index, and is generally described in the relevant index rules of the index. Commodity indices apply "rolling" of the component commodity contracts in order to maintain an on-going exposure to such commodities. Specifically, as a commodity contract is required to be rolled pursuant to the relevant index rules, the commodity index is calculated as if exposure to the commodity contract was liquidated and exposure was taken to another (generally longer-dated) commodity contract for an equivalent exposure. Accordingly, the same effects as described above with regard to "rolling" on the value of a Commodity Reference Asset also apply with regard to the index level of a Commodity index, and such effect could have an indirect adverse impact on the value of the Reference Asset for the Securities.

(e) ***Legal and regulatory changes relating to the Commodities and derivatives may lead to an early redemption or termination***

Commodities and derivatives are subject to legal and regulatory regimes that may change in ways that could affect the ability of the Issuer (directly or through its affiliates) to hedge its obligations under the Securities. Such legal and regulatory changes could lead to the early redemption or termination of the Securities or to the adjustment of the terms and conditions of the Securities. Commodities and derivatives are subject to legal and regulatory regimes in the United States and, in some cases, in other countries that may change in ways that could adversely affect the value of the Securities.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "**Dodd-Frank Act**") includes numerous provisions with respect to the regulation of the futures and over-the-counter ("**OTC**") derivative markets. The Dodd-Frank Act requires regulators, including the Commodity Futures Trading Commission (the "**CFTC**"), to adopt regulations in order to implement many of the requirements of the legislation. On 15 October 2020, the CFTC announced that it approved three final rules (including rules regarding position limits for derivatives, margin requirements for uncleared swaps and exemption from registration for certain foreign intermediaries) completing the CFTC's major rulemakings related to implementation of the Dodd-Frank Act. However, while the CFTC has adopted the major final regulations, the ultimate nature and scope of all potentially relevant regulations cannot yet be determined. For example, there is often only limited interpretive guidance as to the precise meaning, scope and effect of many such regulations. Lastly, the U.S. Congress was previously considering further legislation, generally intended to "scale back" the scope of certain Dodd-Frank regulations. The ultimate scope of such legislation, and whether or not it ultimately becomes a law and the date(s) of applicability of its provisions, are currently impossible to predict. While the full impact of such regulations is not yet known, these regulatory changes are likely to restrict the ability of market participants to participate in the futures and swap markets and markets for other OTC derivatives on physical commodities to the extent and at the levels that they have in the past. These factors may have the effect of reducing liquidity and increasing costs in these markets as well as affecting the structure of the markets in other ways. In addition,

these legislative and regulatory changes have increased and are likely to further increase the level of regulation of markets and market participants, and therefore the costs of participating in the commodities, futures and OTC derivative markets. Amongst other things, these changes require many OTC derivative transactions to be executed on regulated exchanges or trading platforms and cleared through regulated clearing houses. Execution through clearing houses has already been mandated for certain index and rate swaps. Swap dealers are required to be registered with the CFTC and, in certain cases, the SEC, and are subject to various regulatory requirements, including capital and margin requirements. The various legislative and regulatory changes, and the resulting increased costs and regulatory oversight requirements, could result in market participants being required to, or deciding to, limit their trading activities, which could cause reductions in market liquidity and increases in market volatility. These consequences could adversely affect the prices of commodities, which could in turn adversely affect the return on and value of the Securities.

The adoption of regulations or other measures which may interfere with the ability of the Issuer to hedge its obligations under the Securities may result in the occurrence of any of a "Change in Law", a "Commodity Hedging Disruption" (unless specified to be "not applicable" in the relevant Pricing Supplement) and/or a "Hedging Disruption" (where specified to be applicable in the relevant Pricing Supplement). Following the occurrence of a "Change in Law" or "Hedging Disruption", the terms and conditions of the Securities may be adjusted to account for such event. Or, following the occurrence of any of a "Change in Law", "Commodity Hedging Disruption" or "Hedging Disruption", the Securities may be redeemed or terminated prior to scheduled maturity by payment of an Early Payment Amount. Such amount may be less than the purchase price of the Securities, and you may lose some or up to all of your investment. Further, if the payment on the Securities is made prior to scheduled maturity, you may not be able to reinvest the proceeds in an investment having a comparable return. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) above.

In addition, other regulatory bodies have proposed, or may in the future propose, legislation similar to that proposed by the Dodd-Frank Act or other legislation containing other restrictions that could adversely impact the liquidity of and increase costs of participating in the commodities markets. For example, under the recast Markets in Financial Instruments Directive ("**MiFID II**") and the accompanying Markets in Financial Instruments Regulation ("**MiFIR**"), which came into force on the 3 January 2018 (and were subsequently retained in the UK in modified form following Brexit, via (amongst other instruments) the European Union (Withdrawal) Act (2018)), there are requirements establishing position limits on trading commodity derivatives. These legislative frameworks and any future similar or modified frameworks could have an adverse effect on the prices of commodities and the return on and value of the Securities.

(f) ***The Securities will be early redeemed if no commodity reference price is determined by the Calculation Agent after applying application disruption fallback provisions***

The terms and conditions of the Securities may include certain disruption fallback provisions pursuant to which the Calculation Agent may determine the relevant commodity reference price when specified disruption scenarios occur. However, there can be no assurance that any of such provisions are feasible due to, for instance, the lack of alternate commodity reference price, the permanent cessation of trading in the relevant commodities, the lack of fallback reference dealers, etc. If the Calculation Agent determines that no commodity reference price could be determined by applying any of the applicable disruption fallbacks, it will not be able to calculate amount payable or quantity of commodities deliverable under the terms of the Securities. In such an event, the Calculation Agent will determine that the Securities shall be early redeemed, and the Issuer shall redeem the Securities in full following such a determination. Holders of the Securities may be unable to recover their investment in the Securities as a result.

6.9 **Risks related to Securities that are linked to one or more Foreign Exchange Rates as Reference Assets**

An investment in FX Linked Securities entails significant risks in addition to those associated with investments in a conventional debt security, including those described below.

(a) ***Foreign exchange rates depend on many diverse and unpredictable factors and can be volatile***

Foreign exchange rates can be highly volatile and are determined by various factors, including supply and demand for currencies in the international foreign exchange markets, economic factors including inflation rates in the countries concerned, interest rate differences between the respective countries, economic forecasts, international political factors, currency convertibility, safety of making financial investments in the currency concerned, speculation and measures taken by governments and central banks. Such measures include, without limitation, imposition of regulatory controls or taxes, issuance of a new currency to replace an existing currency, alteration of the exchange rate or exchange characteristics by devaluation or revaluation of a currency or imposition of exchange controls with respect to the exchange or transfer of a specified currency that would affect exchange rates as well as the availability of a specified currency. Such volatility may have an adverse effect on the value of and return on Securities linked to foreign rates of exchange.

Foreign exchange fluctuations between your domestic currency and the currency in which payment under the Securities is due may affect you where you intend to convert gains or losses from the exercise or sale of Securities into your domestic currency and may lead to the loss of some or all of your initial investment.

(b) ***The occurrence of FX Disruption Events may lead to a postponement of valuation and payment and/or alternative valuation***

If one or more FX Disruption Events occurs at any time and is continuing, the Calculation Agent may, depending on the particular terms of your Securities, specify and adopt an alternate fallback price source, obtain and use quotations provided by leading dealers in foreign exchange markets, postpone the relevant valuation date and/or specify and adopt a replacement of any one or more relevant currencies. Any consequential postponement of, or any alternative provisions for, valuation of an FX Rate may have an adverse effect on the value of and return on your Securities.

(c) ***The occurrence of an Additional Disruption Event may lead to an adjustment or the early redemption of your Securities***

Upon determining that an Additional Disruption Event has occurred the Calculation Agent may make adjustments to the terms of the Securities and cause the early redemption of the Securities. An Additional Disruption Event includes:

(i) a change in applicable law since the Issue Date that makes it illegal to hold, acquire or dispose of the relevant currency or assets or (if specified to be applicable in the relevant Pricing Supplement) more expensive for the Issuer to hedge its obligations under the relevant Securities; or

(ii) if specified to be applicable in the relevant Pricing Supplement, a "Hedging Disruption", meaning that the hedging entity is unable, after using commercially reasonable efforts, to acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or realise, recover or remit the proceeds of any such transaction(s) or asset(s).

It will generally not be possible to anticipate the occurrence of an Additional Disruption Event, and the determination by the Calculation Agent to adjust or redeem the Securities as a consequence of such event could lead to a loss of investment on the part of holders of the Securities.

(d) ***The discontinuance of a relevant currency could lead to its replacement and related adjustments or to the early redemption of the Securities***

If a relevant currency is discontinued or a relevant foreign exchange rate is no longer available, then depending on the particular terms of the Securities, the currency could be replaced or "rebased" with another currency (as determined by the Calculation Agent), and the Calculation Agent may make consequential amendments to the Securities. Any such replacement of a currency (and related adjustments) may cause the Securities to perform differently than prior to such replacement, and could have a material adverse impact on the value of and return on the Securities. Instead of a replacement, the Calculation Agent could determine that the Securities should be early redeemed; in such case, you may lose some or all of your investment.

6.10 **Risks related to Securities that are linked to one or more Funds as Reference Assets**

An investment in Fund Linked Securities entails significant risks in addition to those associated with investments in a conventional debt security, including those described below.

(a) ***Factors affecting the performance of a Fund may adversely affect the value of and return on the Securities***

Prospective investors should review the relevant fund offering document in respect of a Fund to which the Securities are linked, including the risk factors, prior to making an investment in the Securities. However, neither the Issuer, the Guarantor (if any) nor any of their affiliates has any responsibility for the accuracy or completeness of any fund offering documents.

The performance of the units or shares (the "**Fund Shares**") of a Fund to which the Securities are linked will affect the value of the investment return on the Securities. The performance of the Fund Shares of a Fund is dependent upon many factors, including macroeconomic factors (such as interest and price levels on the capital markets, currency developments including variation of exchange rates of foreign currencies, political, judicial or economic factors) and Fund-specific factors (such as the risk profile of the Fund, the expertise of its senior personnel and its shareholder structure and distribution policy). The investment objectives and policies employed by a Fund and the underlying components in which it invests may utilise various investment strategies which may also affect the performance of the Fund Shares of a Fund. In addition, a Fund may make investments in markets that are volatile and/or illiquid and it may be difficult or costly for investment positions to be opened or liquidated. Any one or a combination of such factors could adversely affect the performance of the Fund(s) which, in turn, could have an adverse effect on the value of and return on your Securities.

(b) ***Costs relating to Funds***

A Fund's performance will be affected by the fees and expenses which it incurs, as described in its offering documents. Such fees and expenses may include the investment management fees, performance fees and operating expenses typically incurred in connection with any direct investment in a Fund. A Fund will assess fees and incur costs and expenses regardless of its performance. High levels of trading could cause a Fund to incur increased trading costs. Holders of Fund Linked Securities will be exposed to a pro rata share of the fees and expenses of the relevant Fund(s) and such exposure could have a negative impact on the value of and return on the Securities than in the absence of such fees and expenses.

See also Risk Factor 6.10(e) (*Fee rebate arrangements*) below.

(c) ***No claim against a Fund or recourse to the Fund Shares***

Holders of the Securities will have no claim against any Fund, its management company or any fund service provider, and the Holders will not have any right of recourse under the Securities to any such entity or the Fund Shares of such Fund. The Securities are not in any way sponsored, endorsed or promoted by any Fund, its management company or any fund service provider, and such entities have no obligation to take into account the consequences of their actions in respect of any Holders. A Fund, its management company or any fund service provider may take any actions in respect of such Fund without regard to the interests of the Holders, and any of these actions could adversely affect the market value of and return on the Securities.

(d) ***Valuation risk in relation to a Fund***

The Calculation Agent will rely on the calculation and publication of the net asset value per Fund Share of a Fund by the relevant Fund itself (or another entity on its behalf). Any delay, suspension or inaccuracy in the calculation and publication of the net asset value per Fund Share of the Fund will impact on the calculation of the return on the Securities. The value of and return on the Securities may also be reduced if a Fund delays payments in respect of fund share redemptions – see Risk Factor 6.10(i) (*Funds may be subject to transfer restrictions and illiquidity*) and Risk Factor 6.10(p) (*Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event*) below.

The Fund Shares of a Fund and/or the investments made by a Fund may be valued only by administrators, custodians or other service provider of the Fund and may not be verified by an independent third party on a regular or timely basis. There is a risk that (i) the determinations of the Calculation Agent may not reflect the true value of the Fund Shares of a Fund at a specific time which could result in losses or inaccurate pricing and/or (ii) relevant values may not be available on a relevant date which could result in the Fund Shares of the Fund being determined by the Calculation Agent in its discretion.

Any such factors in relation to the valuation of the Fund Share could have a negative impact on the value of and return on the Securities.

(e) ***Fee rebate arrangements***

The Issuer and/or any Hedging Entity may receive rebates from the management company of a Fund in respect of the Fund Shares of such Fund or any other assets which the Issuer or such Hedging Entity may hold as a hedge to the Securities. Any material changes to such fee rebate arrangement may result in losses or increased costs to the Issuer or the Hedging Entity. If this occurs, the Calculation Agent may determine that a Fund Event has occurred, and may take one of the actions available to it to deal with such event. See Risk Factor 6.10(o) (*The Calculation Agent may adjust the Securities or take other actions following the occurrence of a Fund Event or Additional Disruption Event*) below.

For the avoidance of doubt, the terms of the Securities do not oblige the Issuer and/or any Hedging Entity to hedge the Securities or that any hedging activities be undertaken in any particular way.

(f) ***Trading in indices, financial instruments and currencies***

A Fund to which the Securities are linked may place an emphasis on trading indices, financial instruments and/or currencies. The effect of any governmental intervention may be particularly significant at certain times in currency and financial instrument futures and options markets. Such intervention (as well as other factors) may cause all of these markets to move rapidly in the same or varying directions which may result in sudden and significant losses, which losses could lead to losses to holders of the Securities.

(g) ***Strategies of a Fund may not be successful in achieving its investment objective***

No assurance can be given that the investment strategy of a Fund will be successful or that the investment objective of such Fund will be achieved, or that any analytical model used by the relevant management company will prove to be correct or that any assessments of the short-term or long-term prospects, volatility and correlation of the types of investments in which such Fund has invested or will invest will prove accurate. The analytical models utilised by a management company of a Fund and upon which investment decisions are based may be developed from historical analysis of the performance or correlation of historical analysis of the performance or correlations of certain companies, securities, industries, countries or markets. There can be no assurance that the historical performance that is used to determine such analytical models will be a good indicator of future performance, and if the future performance of a Fund varies significantly, the management company of such Fund may not achieve its intended investment performance.

No assurance can be given that the strategies to be used by a Fund will be successful under all or any market conditions. A Fund may utilise financial instruments such as derivatives for investment purposes and/or seek to hedge against fluctuations in the relative values of the Fund's portfolio positions as a result of changes in exchange rates, interest rates, equity prices and levels of yields and prices of other securities. Such hedging transactions may not always achieve the intended outcome and can also limit potential gains.

The management of a Fund may have broad discretion over its investment strategy, within specified parameters. A Fund could, for example, alter its investment focus within a prescribed market. Any shift in strategy could bear adverse consequences to a Fund's investment performance. Further, a Fund may have difficulty realising on any strategy initiatives that it undertakes. It may not sometimes be clear whether the Fund fulfils the investment criteria set out in its investment guidelines.

Any such issues with relation to a Fund's strategy or other factors described above could adversely affect the performance of the Fund(s) which, in turn, could have an adverse effect on the value of and return on your Securities.

(h) ***Regulatory and volatility risk***

The regulatory environment is evolving and changes therein may adversely affect the ability of a Fund to obtain the leverage it might otherwise obtain or to pursue its investment strategies. In addition, the regulatory or tax environment for derivative and related instruments is evolving and may be subject to modification by government or judicial action which may adversely affect the value of the investments held by a Fund. It is not possible to predict the effect of any future changes to applicable law or regulation or uncertainties such as international political developments, changes in government policies, taxation, restrictions or foreign investment and currency repatriation or fluctuations

Further, the markets in which a Fund invests may prove to be highly volatile from time to time as a result of, for example, sudden changes in government policies on taxation and currency repatriation or changes in legislation relating to the value of foreign ownership of assets held by a Fund, and this may affect the net asset value at which such Fund may liquidate positions to meet repurchase requests or other funding requirements and, in turn, the value of your Securities.

We may also determine that such circumstances have resulted in the occurrence of an Additional Disruption Event (which may include, amongst others, an adoption of or change in any applicable law in which the Hedging Entity (which may include the Issuer or any of its affiliates) will incur a materially increased cost or will be subject to materially increased regulatory capital requirements in performing its obligations under or execution of hedging transactions in relation to the Securities), and may take one of the actions available to us to deal with such event (see "*The Calculation Agent may adjust the Securities or take other actions following the occurrence of a Fund Event or Additional Disruption Event*" below).

Any such regulatory changes or market volatility could adversely affect the performance of the Fund(s) which, in turn, could have an adverse effect on the value of and return on your Securities.

(i) ***Funds may be subject to transfer restrictions and illiquidity***

There can be no assurance that the liquidity of a Fund will always be sufficient to meet redemption requests as, and when, made. Any lack of liquidity or restrictions on redemptions may affect the liquidity of the Fund Shares of a Fund and their value and could adversely affect the performance of the Securities.

A Fund may make investments for which no liquid market exists. The market values, if any, of such investments tend to be more volatile and a Fund may not be able to sell them when it desires to do so or to realise what it perceives to be their fair value in the event of a sale. Moreover, assets in which a Fund may invest may include those that are not listed on a securities exchange or traded on an over-the-counter market. As a result of the absence of a public trading market for these assets, they may be less liquid than, for example, publicly traded securities. A

Fund may encounter substantial delays in attempting to sell non-publicly traded assets or securities. Although these assets may be resold in privately negotiated transactions, the values realised from these sales could be less than those originally paid by a Fund and less than the values estimated for such assets by such Fund. Further, entities whose securities are not publicly traded are not subject to the disclosure and other investor protection requirements which would be applicable if their securities were publicly traded.

Trading in the assets held by a Fund may be limited to privately negotiated transactions, which could increase transaction costs relative to exchange trading and which could cause substantial lags in realising amounts from assets designated for sale. Any such issues with regard to redemptions, transfers and liquidity of the Fund(s) could have an adverse effect on the value of and return on your Securities.

See also Risk Factor 6.10(p) (*Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event*) below.

(j) ***Lack of control and reliance on the third party management company of a Fund***

Holders will have no right to participate in the management of a Fund or in the control of a Fund's business. Accordingly no person should purchase any Fund-linked Security unless the investor is willing to entrust all aspects of management of a Fund to the management company of such Fund. The investment return on the Securities may depend entirely on the efforts of the management company of a Fund and its principals.

The performance of a Fund is dependent on the performance of the management company in managing the investments of such Fund. The management company of a Fund may invest in and actively traded instruments with significant risk characteristics, including risks arising from the volatility of securities, financial futures, derivatives, currency and interest rate markets, the leverage factors associated with trading in such markets and instruments, and the potential exposure to loss resulting from counterparty defaults.

The Issuer will not have any role in the management of any Fund(s) to which the Securities are linked. Moreover, the Issuer will not have the opportunity to evaluate or be consulted in relation to any specific investments made by a Fund before they are made. The investment return on the Securities will depend primarily on the performance of the unrelated management company in managing the investments of a Fund and could be adversely affected by any unfavourable performance of such management company. Where a Fund is comprised of sub-funds the factors set out above in relation to the management company apply equally to the management company of the funds in which such Fund invests. This can result in a lack of transparency regarding the exposure of the Securities to any such sub-funds.

A Fund or its management company may also become involved in shareholder, insider trading or other litigation as a result of its investment activities. Any such dispute could adversely affect the performance of the Fund Shares of a Fund and consequently, of the Securities.

Any of the above described factors could have an adverse effect on the value of and return on your Securities.

(k) ***Reliance on key personnel***

The success of a Fund is dependent on the expertise of its management company and fund service providers. The loss of one or more investment personnel associated with such management company or fund service provider could have a material adverse effect on the ability of a management company or fund service provider, as applicable, to complete its obligations in respect of a Fund, resulting in losses for such Fund and a decline in the value of the Fund Shares of such Fund. Certain management companies and fund service providers may have only one principal personnel, without whom the relevant management company or fund service provider, as applicable, could not continue to operate. The loss of such principal personnel could adversely affect the performance of the Fund(s) which, in turn, could have an adverse effect on the value of and return on the Securities.

(l) ***A change in the composition or discontinuance of a Fund could adversely affect the market value of the Securities***

The management company of a Fund may, without regard to the interests of the Holders, add, remove or substitute the components of a Fund in which such Fund invests or make other methodological changes that could change the investment profile of a Fund, which could adversely affect the investment return on the Securities. The management company of a Fund may also determine to discontinue such Fund. If a Fund to which the Securities are linked is discontinued, the Calculation Agent may determine to substitute such Fund with another fund or an index (or a basket of funds or a basket of indices), or a cash index, or, if the Calculation Agent determines that no adjustment or substitution or replacement will produce a commercially reasonable result, the Securities may be redeemed early. Any such action could have a negative impact on the value of and return on the Securities. See also Risk Factor 6.10(o) (*The Calculation Agent may adjust the Securities or take other actions following the occurrence of a Fund Event or Additional Disruption Event*) below.

(m) ***Leverage***

A Fund may utilise leverage techniques, including the use of borrowed funds, repurchase agreements and other derivative financial instruments. While leverage presents opportunities for increasing a Fund's total return, it increases the potential risk of loss. Any event which adversely affects the value of an investment by a Fund is magnified to the extent that such investment is leveraged. Leverage can have a similar effect on assets in which such Fund invests. The use of leverage by a Fund could result in substantial losses by the Fund which would be greater than if leverage had not been used, and such losses could lead to losses to the holder of the Securities.

(n) ***Exposure to Potential Adjustment Events and correction of prices***

The Calculation Agent has discretionary authority under the terms and conditions of the Securities to make certain determinations and adjustments following the occurrence of a Potential Adjustment Event (which include, broadly, events which may have a diluting or concentrative effect on the Fund Shares in a Fund), or may (subject to the terms and conditions of the relevant Securities) determine the amount that is payable under the Securities to account for any correction in the price of the Fund Shares of a Fund which is used in the calculation or determination in connection with the Securities, to preserve as nearly as practicable the original economic objective and rationale of the Securities. Any such determination may have an adverse effect on the value of and return on the Securities.

(o) ***The Calculation Agent may adjust the Securities or take other actions following the occurrence of a Fund Event or Additional Disruption Event***

Upon determining that a Fund Event has occurred in relation to a Fund Share of a Fund (the "**Affected Fund**"), the Calculation Agent may take one of the following actions:

(i) make adjustments to the terms of the Securities, or

(ii) if no adjustments will produce a commercially reasonable result, and:

(A) if a pre-selected replacement fund is specified in the relevant Pricing Supplement, and such pre-selected replacement fund has not discontinued and is not subject to a disruption event, then the Calculation Agent will replace the Affected Fund with such replacement fund, or

(B) if no pre-selected replacement fund is specified in the relevant Pricing Supplement, or if such pre-selected replacement fund has discontinued or is subject to a disruption event, then:

(I) if a cash index is specified in the relevant Pricing Supplement, then the Calculation Agent shall replace the Affected Fund with such cash index, or

(II) if no cash index is specified in the relevant Pricing Supplement, then the Calculation Agent may select such replacement fund(s) or index(ices) to replace the Affected Fund, subject to certain selection criteria, in order to most closely replicate such Affected Fund; or

(III) if the Calculation Agent determines that no adjustments will achieve a commercially reasonable result, and it is unable, or it is not commercially practicable, or does not for any other reason, select a replacement fund(s), replacement index(ices) or cash index pursuant to paragraph (ii) above, then the Calculation Agent may determine to cause the early redemption of the Securities.

It is possible, therefore, that where no replacement fund is specified in the relevant Pricing Supplement, or such replacement fund is specified but is no longer available or is subject to disruption, and if a cash index is specified, then the Calculation Agent will not select another replacement fund(s) or replacement index(ices), and will replace the Affected Fund with such cash index.

Upon determining that an Additional Disruption Event has occurred in relation to a Fund Share of a Fund, the Calculation Agent has discretionary authority under the terms and conditions of the Securities to (i) make adjustments to the terms of the Securities, or (ii) cause the early redemption of the Securities.

Any of such adjustments or determinations by the Calculation Agent in respect of a Fund Event or Additional Disruption Event may have an adverse effect on the value of and return on the Securities. See also Risk Factor 7.1 (*JPMorgan Chase as Issuer and Calculation Agent has authority to make discretionary determinations under the Securities*) below.

- Fund Events include (A) insolvency in respect of a Fund, its management company or any of its fund service providers; (B) a merger event which affects a Fund, its management company or fund service provider, (C) termination of a Fund, (D) a nationalisation of a Fund, or (E) any fund extraordinary event (which includes, broadly, a modification of the relevant fund offering documents which would adversely affect a hypothetical investor in relation to its hedging activities in respect of the Securities, or any litigation or disputes involving a Fund, its management company or its fund service provider), events which affect the calculation of the net asset value and performance of a Fund (such as a decrease in asset under management or increase in volatility of the net asset value), events which affect the trading of a Fund (such as any mandatory redemption, a material change in strategy, a suspension on trading or increase in fees), any operational failures (including a change to the management company or fund service provider, or the failure to provide information in respect of a Fund to a holder of such Fund Shares (as is customary for such Fund)), or regulatory and legal constraints (including regulatory action in respect of a Fund, its management company or fund service providers, or the inability of a hypothetical investor in the Fund Shares of a Fund to redeem all or some of its holdings of Fund Shares in the Fund due to regulatory constraints).

- Additional Disruption Events include (A) a change in applicable law since the Issue Date that makes it illegal to hold, acquire or dispose of the Fund Shares or (if specified to be applicable in the relevant Pricing Supplement) more expensive for the Issuer to hedge its obligations under the relevant Securities, or (B) if specified to be applicable in the relevant Pricing Supplement, a "Hedging Disruption", meaning that the hedging entity is unable, after using commercially reasonable efforts, to (I) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (II) realise, recover or remit the proceeds of any such transaction(s) or asset(s), or (III) subscribe, redeem, realise, recover or remit the proceeds of any Fund Shares in a Fund where the inability has arisen due to any gating or restrictions or suspensions on subscriptions or redemptions in respect of such Fund Shares.

Any of the above-described determinations and actions by the Calculation Agent in respect of Fund Events and Additional Disruption Events may have an adverse effect on the value of and return on the Securities.

(p) ***Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event***

If the Calculation Agent determines that, in respect of the relevant Fund Shares, an Unpaid Redemption Proceeds Event (which means, broadly, a hypothetical investor holding the Fund Shares in a Fund would not receive in full (or substantially the full) the amount payable within the time limit specified in the relevant fund offering document if they were to apply for a redemption of such Fund Shares) has occurred and/or an In-kind Redemption Proceeds Event (which means, broadly, where a hypothetical investor holding Fund Shares in a Fund receives any in-kind distribution per Fund Share in full or part satisfaction of the amount payable upon application for a redemption of such Fund Shares) has occurred, and both (i) the Unpaid Redemption Event continues to subsist as of the second Business Day prior a relevant payment date under the Securities (the "**Payment Cut-off Date**"), and/or a hypothetical investor is not able (or would not be able) to realise and receive in full and in cash an amount equal to the sale proceeds of any in-kind redemption proceeds received from the redemption of the relevant fund shares on the Payment Cut-off Date, and (ii) the amount payable under the Securities on such relevant payment date (the "**Relevant Payment Amount**") is linked (in whole or in material part) to the performance of such fund shares, then:

(i) the Relevant Payment Amount payable on the scheduled relevant payment date shall be reduced by the Calculation Agent to take into account the amount of any unpaid redemption proceeds and/or in-kind redemption proceeds as of the Payment Cut-off Date (and which may be reduced to zero);

(ii) any unpaid Relevant Payment Amount (after the reduction referred to in (i) above) shall be payable on a date falling two business days after the later of (A) the day on which the Unpaid Redemption Proceeds Event has ceased to occur, and (B) the day on which a hypothetical investor holding such Fund Shares would be able to receive in full and in cash an amount equal to the proceeds of sale for all outstanding in-kind redemption proceeds, provided that:

(A) the Calculation Agent may determine that the Issuer shall make any further payment of some or all of the outstanding unpaid Relevant Payment Amount to reflect any cash redemption proceeds received and/or in-kind redemption proceeds realised by a hypothetical investor after the Payment Cut-off Date;

(B) if the Unpaid Redemption Proceeds Event is still continuing or a hypothetical investor would still be unable to realise any outstanding in-kind redemption proceeds a year after the relevant payment date, then any outstanding payment obligations of the Issuer in respect of the outstanding unpaid Relevant Payment Amount under the Securities shall be deemed to be fully discharged on such date without any further payment being made; and

(C) where the above adjustments and/or payments will not produce a commercially reasonable result, the Calculation Agent may make such other adjustments to the terms and conditions of the Securities as may be necessary to account for such Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event.

Such adjustment and determination by the Calculation Agent may have an adverse effect on the value of and return on the Securities.

6.11 **Risks related to Securities that are linked to one or more Bonds as Reference Assets**

An investment in Bond Linked Securities entails significant risks in addition to those associated with investments in a conventional debt security, including those described below.

(a) ***Dependence on the obligations of the Reference Entity and limited or no recourse against the Issuer, the Bond or the Reference Entity***

An investor will be taking the credit risk of the Reference Entity and the Bond. Any amount payable (which may be zero) in respect of the Securities is totally dependent on the performance by the Reference Entity of its obligations under the Bond. There can be no assurance that the Reference Entity will perform its obligations under the Bond in accordance with its terms. The Securities will not be secured and investors in the Securities will have no rights against the Reference Entity and no right, title, interest or voting rights in the Bond.

Recourse against the Issuer in respect of the Securities is limited to payments actually received by a Hypothetical Broker Dealer as of certain dates, and there is no recourse to the Bond or the Reference Entity or any additional recourse to the Issuer. Therefore, investors in the Securities are further exposed to the credit risk of the Reference Entity.

Investors are also exposed to the credit risk of the Issuer – see Risk Factor 1 (*The Securities are subject to the credit risk of the relevant Issuer and (if applicable) the relevant Guarantor and the risk of U.S. insolvency and resolution considerations as well as the risk relating to other recovery and resolution proceedings*) above.

(b) ***Exposure to the risks of sub-investment grade instruments***

Bond(s) may be a sub-investment grade or "high yield" instrument. High yield debt instruments are of speculative credit quality and are subject to heightened risk of non-payment or other default. Investors in the Securities should be willing and able to accept risks attendant to an investment in sub-investment grade debt securities.

(c) ***Lack of information in respect the Reference Entity***

No information (including current financial information) or other developments with respect to the Reference Entity has been or will be provided to Holders. No investigation of the Reference Entity (including, without limitation, any investigation as to its financial condition or creditworthiness) or of the Bond (including, without limitation, any investigation as to its ratings) has been made by the Issuer or the Dealer. Potential investors should obtain and evaluate the information concerning the Bond in the same way as they would obtain and evaluate it if they were investing directly in the Bond or other securities issued by the Reference Entity. None of the Issuer, the Guarantor (if applicable), the Dealer, the Calculation Agent or any of their affiliates make any representations as to any such information.

(d) ***Additional costs on payments will affect the return on the Securities***

Payments under the Securities will be subject to reduction for any additional costs including any costs arising as a result of an adjustment event (which events include, but are not limited to, the occurrence of any act or event at any time relating to withholding or deduction for or on account of tax in relation to the Bond) or an early redemption event and any such reduction will reduce the return on the Securities to Holders.

(e) ***Tax treatment of the Bond(s) or the Securities***

The tax laws, regulations and court practice of the relevant jurisdiction(s) in respect of the Bond(s) are subject to frequent change, varying interpretation and inconsistent and selective enforcement. None of the Issuer, the Guarantor (if applicable), the Dealer, the Calculation Agent or any of their affiliates make any representations as to the tax treatment of the Bond(s) or the Securities.

(f) ***The Securities may be issued at a discount and may not bear interest***

The Securities may be issued by the Issuer at a discount from their aggregate nominal amount. The Securities may not pay any coupons or interest to Holders of the Securities, and if so, Holders of the Securities should not expect to receive any coupons or interest in respect of the Securities (even if the Bond(s) pay coupons to its holders). If the Securities do not pay any coupons or interest then the only payment(s) that Holders of the Securities may expect to receive is the final redemption amount in respect of each Security held to maturity or, if there is an early redemption, the early redemption amount, or, if there is a partial redemption (if applicable), the partial redemption amount, or any such other amount as specified in the Pricing Supplement.

(g) ***Exposure to risks relating to early redemption events***

Action or lack of action taken by the Reference Entity or, if applicable, the government of the Reference Entity and changes in political, economic or social conditions in the jurisdiction of the Reference Entity could lead to the occurrence of an early redemption event and would affect the market conditions and price of the Bond. An early redemption event may also be caused by events such as, but not limited to, a barrier event. The occurrence of an early redemption event could be materially adverse to the interests of investors.

If an early redemption event occurs, then investors will receive the early redemption amount in a currency (the "**Specified Currency**") that may differ from the currency of the Bond or may face delays in payment. The early redemption amount may be determined by the Calculation Agent as of the early redemption valuation date by reference to a dealer poll for the Bond and may be calculated with reference to economic information, including, but not limited to yield curves denominated in the applicable foreign currency. The value of the Bond is, accordingly, liable to be affected by market conditions which will in turn affect the value of the early redemption amount. As a result, the early redemption amount may be valued at a considerable discount to the par value of the Securities. In addition, the early redemption amount will be reduced by any additional costs (which may include, but is not limited to, leverage amounts and funding costs) and may be converted into the Specified Currency using the relevant exchange rate. Upon redemption of the Securities in these circumstances, investors may not be repaid the full amount of their investment in the Securities, and the Securities may redeem at zero.

(h) ***Exposure to risks relating to foreign exchange rates and the applicable Reference Currency***

If the applicable currency of the Bond (the "**Reference Currency**") differs from the Specified Currency then the amount of any payment in the Specified Currency due under the Securities will be affected by the exchange rate of the Reference Currency to such Specified Currency, since the underlying amounts by reference to which amounts in the Specified Currency are determined are in the Reference Currency. The exchange rate between the Reference Currency and the Specified Currency will fluctuate during the term of the Securities. In recent years, the exchange rate of the Reference Currency to the Specified Currency may have been volatile and such volatility may occur in the future and could significantly affect the returns to Holders. In addition, for investors whose investment currency is in the Specified Currency, the movement of the exchange rates could result in any amount due under the Securities being less than the initial amount in the Specified Currency paid for the Securities. As a result, a Holder could lose a substantial amount of its investment in the Securities.

If a dealer poll is applicable in determining the exchange rate of the Reference Currency to such Specified Currency, the currency exchange market for the Reference Currency may be a relatively illiquid market and, at any time, there may be a very limited number of reference market dealers that are capable of providing a quotation for the purposes of the fixing rate (if any amounts payable under the Securities are determined by reference to a fixing rate and such fixing rate is determined by a dealer poll). Whilst additional reference market dealers may be capable of providing a quotation for the purposes of the fixing rate in respect of a particular reference date going forwards, the Calculation Agent may be aware that, as of the trade date of the Securities, there may only be one reference market dealer that is capable of providing a quotation for the purposes of the fixing rate. If on any reference date, the Calculation Agent is only able to obtain a quotation from one reference market dealer, then, unless otherwise specified in the relevant Pricing Supplement, such quotation shall be used to determine the fixing rate, which will be applied to calculate the relevant amount that is payable to the Holder of the Securities. If the Calculation Agent is unable to obtain a quotation in respect of the fixing rate from any reference market dealers on a reference date, then, unless otherwise specified in the relevant Pricing Supplement, the determination of the fixing rate may be postponed and, if the Calculation Agent is still unable to obtain a quotation in respect of the fixing rate for such reference date, the fixing rate will be determined by the Calculation Agent taking into consideration all available information that it deems relevant.

See "*Conflicts of Interest – J.P. Morgan Securities plc or another JPMorgan Chase entity, in their role as calculation agent, reference market dealer and/or reference dealer or custodian of*

the Bond in the case of Bond Linked Securities may have economic interests that are adverse to those of the Holders of the Securities" below.

Historical or prevailing rates of exchange of the Reference Currency to the Specified Currency should not be taken as an indication of the future exchange rate. No assurance can be given that the Reference Currency will not depreciate as against the Specified Currency thereby reducing the amount of any payment in the Specified Currency due to the Holders under the Securities.

The Reference Entity or, if applicable, the government of the Reference Entity may from time to time intervene in the foreign exchange market and these interventions or other governmental actions could adversely affect the value of the Securities, as well as the amount payable in the Specified Currency at maturity. Even in the absence of governmental action directly affecting the exchange rates, political or economic developments in the jurisdiction of the Reference Entity or elsewhere could lead to significant and sudden changes in the exchange rate of the Reference Currency to the Specified Currency. Unless an event results in an adjustment event, neither the Issuer nor the Calculation Agent will make any adjustment of or change to the terms of the Securities if exchange rates should become fixed, or in the event of any devaluation or revaluation or imposition of exchange or other regulatory controls or taxes (including, but not limited to, current withholding taxes), or in the event of other developments affecting the Specified Currency, the Reference Currency or any applicable foreign currency. These events could also lead to the occurrence of an early redemption event which may result in an early redemption of the Securities. Holders of the Securities will bear the risks relating to these events.

In relation to risks relating to adjustment events, see also Risk Factor 6.11(d) (*Additional costs on payments will affect the return on the Securities*) above. In relation to risks relating to early redemption events, see Risk Factor 6.11(g) (*Exposure to risks relating to early redemption events*) above.

The relevant exchange rate may be such that the resulting amount in the Specified Currency is zero and in such event, no amount in the Specified Currency or in the Reference Currency shall be payable under the Securities (though the amount payable may not be less than zero).

Where the Securities are denominated in a currency other than the investor's reference currency, changes in rates of exchange may have an adverse effect on the value of the investment in such reference currency.

See also Risk Factor 5.2 (*There are foreign exchange risks where payments under your Securities are in a different currency from your home currency*) above.

(i) ***Exposure to risks of emerging markets***

Emerging markets carry higher risks for investors who should therefore ensure that, before investing, they understand the risks involved and are satisfied that such investment is suitable. The investor must be aware that transactions involving emerging markets currencies bear substantial risks of loss.

Developments and the perception of risks in other countries, especially emerging market countries, may adversely affect the relevant exchange rate of the Reference Currency into the Base Currency or the value of the Bond(s).

Investments in debt securities linked to debt instruments and currencies of emerging market entities involve risks and special considerations not typically associated with investments in, for example, the United States or many other countries with highly developed economies and securities markets. These risks and special considerations include, but are not limited to, risks associated with high rates of inflation and interest and other economic uncertainties, currency devaluations, political and social uncertainties, less rigorous regulatory and accounting standards than those in the United States or such other developed markets, exchange control regulations, a history of government and private sector debt defaults, significant government influence on the economy, relatively less developed financial and market systems, and the limited liquidity and higher price volatility of the related securities markets.

Depending on the relevant Reference Entity in respect of the Securities, the jurisdiction of the Reference Entity may be generally considered by investors to be an emerging market country, and securities of the Reference Entity or of companies of the jurisdiction of the Reference Entity may have been, to varying degrees, influenced by economic and market conditions in other countries. Although economic conditions are different in each country, investors' reactions to developments in emerging market countries may materially affect the securities of issuers of the jurisdiction of the Reference Entity. Crises in emerging market countries may diminish investor interest in securities of issuers of the jurisdiction of the Reference Entity, including the Bond. This could adversely affect the value of the Bond, and therefore the early redemption amount an investor could receive upon early redemption.

Furthermore, certain relevant information relating to the jurisdiction of the Reference Entity (including its government and central bank) may not be as well-known or as rapidly or thoroughly reported in the mainstream media sources outside of the jurisdiction of the Reference Entity as comparable developments in such jurisdictions. Prospective purchasers of the Securities should be aware of the possible lack of availability of important information that can affect the value of the Reference Currency in relation to the Specified Currency and must be prepared to make special efforts to obtain such information on a timely basis.

(j) ***General risks relating to the Bond and the Reference Entity***

The investor assumes all risks relating to the Bond, including, but not limited to:

(i) all market, foreign exchange, credit, issuer, settlement (including through the central bank of the jurisdiction of the Reference Entity), payment (whether by the issuer or any paying agent in respect of the Bond) or default risk relating to the Bond;

(ii) any and all taxes assessed on the Bond, on any proceeds in any account that pertain to the Bond, on the owner of the Bond as a result of its ownership of the Bond, on the transfer of any amounts to the Issuer and/or on the transfer of any amounts to the investor;

(iii) any risk pertaining to the foreign exchange and exchange control laws and regulations now in force in the jurisdiction of the Reference Entity or as may later be passed and issued by the jurisdiction of the Reference Entity;

(iv) any risks with respect to any account or any bank used in connection with the Bond or any amounts with respect thereto, including, but not limited to, any inability to execute any forward agreement or spot rate exchange transaction, whether in whole or in part;

(v) any risk of change of law or regulation or interpretation thereof which affects the hedging transactions for the Securities; and

(vi) any risks arising from the fact that the Bond is governed by the laws of the jurisdiction of the Reference Entity and holders may suffer adverse consequences as a result of uncertainty or arbitrary changes in the application and effect of such laws.

Additionally, the Issuer accepts no liability whatsoever for any expense, loss or damage suffered by or occasioned to the Holder resulting from the general risks of investment in or the holding of assets, including the Bond, in the jurisdiction of the Reference Entity including, but not limited, to, losses arising from:

(i) nationalisation, moratorium, restructuring, refinancing expropriation or other governmental actions;

(ii) regulation of the banking or securities industries including changes in market rules, currency restrictions, devaluations or fluctuations;

(iii) market conditions affecting the execution or settlement of transactions or the value of assets; or

(iv) delays in registration or failure to register securities or delays in or failure to repatriate income, principal or any other amount arising from the Bond.

(k) ***Tax risks relating to Bond Linked Securities***

Unless otherwise provided in the applicable Pricing Supplement, payments under the Securities will be made subject to any applicable withholding taxes and the Issuer will not be required to pay any further amounts in respect of the Securities in the event that any taxes are levied on such payment.

The tax treatment of the Securities and consequences to Holders of the Securities may be uncertain. The applicable Pricing Supplement may specify the Issuer's intended treatment of the Securities for applicable tax purposes and Holders may be required to be bound by such treatment. Alternative characterisations of the Securities are possible and there are no assurances that a taxing authority will agree with such treatment. Holders should consult with their own tax advisors regarding the applicable tax consequences of an investment in the Securities.

The Securities may be redeemed early if certain tax events occur in the Relevant Source Jurisdiction and any Hedging Entity is or becomes subject to any taxes, withholdings or deductions in excess of the original withholding taxes of the Relevant Source Jurisdiction in respect of any hedging arrangements entered into in connection with the Securities, or if any Hypothetical Broker Dealer is obligated to make payments of additional amounts in excess of what it currently anticipates being obligated to pay.

Certain tax related events with respect to the Bond, jurisdiction of the Reference Entity, the Issuer or an entity related to the Issuer may be classified, in the determination of the Calculation Agent, as an early redemption event or an adjustment event, which may affect the return to Holders.

(l) ***Other market risks relating to Bond Linked Securities***

The Securities are illiquid. The Securities are not designed to be short-term trading instruments. The price at which a Holder will be able to sell its Securities may be at a substantial discount from the nominal amount of the Securities.

6.12 **Risks related to Securities that are Swiss Certificates (UBS-cleared)**

Swiss Certificates (UBS-cleared) are Securities which are cleared and settled through UBS Switzerland AG (and not SIX SIS AG), and no external clearing of such Securities is possible through any international or domestic clearing system. Each Holder of Swiss Certificates (UBS-cleared) is subject to the rules and procedures of UBS Switzerland AG with regard to the clearing and settlement of the Swiss Certificates (UBS-cleared) including with regard to effecting transfers, payments, redemptions, notices and modifications, and each prospective investor should satisfy itself before purchasing any Swiss Certificates (UBS-cleared) that such investor understands such rules and procedures and how they may differ if the Swiss Certificates (UBS-cleared) were cleared through a recognised clearing agency – See "*Book-entry Clearing Systems – Swiss Certificates (UBS-cleared) cleared through UBS*". UBS Switzerland AG is not licensed or regulated as a clearing house. Clearing houses typically have in place a comprehensive set of procedures and a robust risk management framework that includes substantial default resources, margin requirements which are monitored based on position limits to ensure there are sufficient funds to cover their risk, a guaranty fund that provides further protection in the event of a default and robust recovery and resolution plans. None of the relevant Issuer, Guarantor, Dealer, Product Provider or any of their respective affiliates will be responsible for the performance by UBS Switzerland AG of its obligations with regard to the clearing arrangements for Swiss Certificates (UBS-cleared), and none of them will have any liability for any losses suffered by investors in connection with such arrangements.

In addition, UBS Switzerland AG, (i) acts as issuing and paying agent, (ii) provides related custody services and (iii) acts as distributor by offering, selling or recommending the Securities to its customers, and investors will therefore be dependent on UBS Switzerland AG across multiple capacities. None of the relevant Issuer, Guarantor, Dealer, Product Provider or any of their respective affiliates will be responsible for the performance by UBS Switzerland AG of its respective obligations in respect of any of these capacities, and none of them will have any liability for any losses suffered by investors in connection with such activities.

(a) ***Exposure to the credit risk of UBS Switzerland AG***

In respect of Swiss Certificates (UBS-cleared), the relevant Issuer shall make all payments due under the Swiss Certificates (UBS-cleared) to UBS Switzerland AG as Swiss Certificates (UBS-cleared) Agent and, upon receipt by UBS Switzerland AG as Swiss Certificates (UBS-cleared) Agent of the due and punctual payment of such funds in Switzerland, shall be discharged from its obligations to the Holders under the Swiss Certificates (UBS-cleared). Accordingly, investors are therefore also dependent on UBS Switzerland AG's ability to pass on such funds to the Holders of the Swiss Certificates (UBS-cleared).

(b) ***Restrictions on the transferability of the Swiss Certificates (UBS-cleared)***

As described above, Swiss Certificates (UBS-cleared) are held with and cleared and settled through UBS Switzerland AG and not cleared through any clearing system. Swiss Certificates (UBS-cleared) may only be acquired by, transferred to and held by Holders having a securities account with UBS Switzerland AG or another UBS group entity (or through a securities account with an institution which, in turn, maintains a securities account with a UBS group entity). It is possible that this restriction could have a material adverse effect on the liquidity of the Swiss Certificates (UBS-cleared), and therefore investors may not be able to sell them in the secondary market or only do so for a price which is lower than what would otherwise be the case in the absence of such restriction.

(c) ***Additional events or circumstances leading to early termination of the Swiss Certificates (UBS-cleared)***

In the case of Swiss Certificates (UBS-cleared) only, if the Calculation Agent determines that any of the following have occurred, then the Calculation Agent may determine and UBS Switzerland AG shall (under the terms of the SPI Agreement) give notice to Holders that, the Securities shall be redeemed on a date determined by the Calculation Agent, in which event the Issuer shall redeem the Securities and cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount:

(i) any order shall be made by the Swiss Financial Market Supervisory Authority FINMA or any competent court or other authority or resolution passed for the dissolution or winding-up of UBS Switzerland AG or for the appointment of a liquidator, receiver or administrator of UBS Switzerland AG or of all or a substantial part of its respective assets, or anything analogous occurs, in any jurisdiction, to UBS Switzerland AG, other than in connection with a solvent reorganisation, reconstruction, amalgamation or merger which shall be material, as determined by the Calculation Agent, in the context of UBS Switzerland AG acting as issuing and paying agent and providing custody services under the SPI Agreement and/or the Custody Agreement; or

(ii) UBS Switzerland AG breaches its obligations (i) as issuing and paying agent and/or (ii) to provide custody services under the SPI Agreement and/or the Custody Agreement which are material in the context of the Swiss Certificates (UBS-cleared) as determined by the Calculation Agent.

The Early Payment Amount may be less than the original purchase price and you could lose some or all of your investment.

For the purposes of this risk factor, references to UBS Switzerland AG include any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable. References to the Product Provider mean J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

7. **Risks related to conflicts of interest of JPMorgan Chase and its discretionary powers as Issuer and Calculation Agent under the Securities**

7.1 **JPMorgan Chase as Issuer and Calculation Agent has authority to make discretionary determinations under the Securities**

Under the terms and conditions of your Securities, following the occurrence of certain events outside of its control, the Issuer or the Calculation Agent (as applicable) may exercise discretion to take one or more actions available to it in order to deal with the impact of such events on the Securities or (if applicable to the particular issue of Securities) the Issuer's hedging arrangements. Any such discretionary determination by the Calculation Agent or the Issuer could have a negative impact on the value of and return on the Securities and (amongst other things) could result in their early redemption.

7.2 **JPMorgan Chase may have economic interests that are adverse to those of the holders of the Securities as a result of JPMorgan Chase's hedging and other trading activities or other business activities**

(a) ***Hedging and other trading activities***

In anticipation of the sale of the Securities, the relevant Issuer expects to hedge its obligations under the Securities through certain JPMorgan Chase affiliates or unaffiliated counterparties by taking positions in instruments the value of which is derived from one or more Reference Assets or the constituents or components of such Reference Assets or other assets. The Issuer or the relevant hedging entity may also adjust its hedge by, among other things, purchasing or selling instruments the value of which is derived from one or more Reference Assets or the constituents or components of such Reference Assets or other assets at any time and from time to time, and close out or unwind our hedge by selling any of the foregoing on or before any valuation date under the Securities. Any such hedging activities may negatively affect the value of the Reference Asset(s) or the performance of the Securities.

This hedging activity may present a conflict of interest between your interest as a holder of the Securities and the interests that JPMorgan Chase entities have in executing, maintaining and adjusting hedge transactions. These hedging activities could also negatively (or positively) affect the price at which the Dealer (or an affiliate) is willing to purchase your Securities in the secondary market (if any).

The Dealer and other JPMorgan Chase entities are also likely to trade the Reference Assets or the constituents or components of any Reference Asset on a regular basis (taking long or short positions or both), for their accounts, for other accounts under their management and to facilitate transactions, including block transactions, on behalf of customers. While a particular outcome cannot be predicted, any of these hedging activities or other such trading activities could potentially reduce (or increase) the value of the Reference Asset(s) on a valuation date, which could have a material adverse impact on the value of and return on the Securities.

(b) ***JPMorgan Chase's business activities***

JPMorgan Chase may currently or from time to time engage in business with the issuer of a Reference Asset which is a Share or companies the equity securities of which are included in an Index, held by an ETF, included in a relevant Index, produce, trade or otherwise be active in relation to a commodity or constituent of a commodity index (the "**underlying companies**"). JPMorgan Chase may acquire non-public information about the underlying companies, and will not disclose any such information to you. In addition, JPMorgan Chase may publish research reports or otherwise express views about the underlying companies. These activities can give rise to specific conflicts of interest and therefore have a negative (or positive) impact on the value of the Securities.

Additionally, JPMorgan Chase may serve as issuer, agent or underwriter for issuances of other securities or financial instruments with returns linked or related to changes in the level or price, as applicable, of a Share, a Commodity, an Index, a Fund or an ETF, the securities included in an Index or the securities, commodities or futures contracts held by a Fund or an ETF. To the extent that JPMorgan Chase serves as issuer, agent or underwriter for these securities or financial instruments, JPMorgan Chase's interests with respect to these securities or financial instruments may be adverse to those of the holders of the Securities. By introducing competing products into the marketplace in this manner, JPMorgan Chase (including any JPMorgan Chase entities) could adversely affect the value of the Securities.

JPMorgan Chase may currently or from time to time engage in trading activities related to the currencies in which the equity securities underlying an Index, a Fund or an ETF are denominated. If currency exchange rate calculations are involved in the calculation of the closing levels of an Index or the net asset values or closing prices of a Fund or an ETF, these trading activities could potentially affect the exchange rates with respect to the currencies in which the equity securities underlying that Index, Fund or ETF are denominated, the closing levels of that Index or the net asset values or closing prices of that Fund or ETF and, accordingly, could negatively (or positively) impact the value of the Securities.

In the course of its currency trading activities, JPMorgan Chase may acquire material non-public information with respect to currency exchange rates, and will not disclose any such information to you. In addition, JPMorgan Chase may produce and/or publish research reports, or otherwise express views, with respect to expected movements in currency exchange rates. These activities can give rise to specific conflicts of interest and such activities could have a negative (or positive) impact on the value of the Securities.

8. Risks related to taxation

8.1 General

The tax overviews provided in "*Taxation*" below address only certain aspects of the taxation of income from Securities in a limited number of jurisdictions and are included in this Offering Circular solely for information purposes. These overviews cannot replace individual legal or tax advice or become a sole base for any investment decisions and/or assessment of any potential tax consequences thereof. The level and bases of taxation could change in the future, such changes may be applied retrospectively and the value of any reliefs will depend on your own particular circumstances.

8.2 Additional Amounts on account of withholding tax will not be payable on the Securities in certain circumstances

The Issuer will not pay "Additional Amounts" (as defined in General Condition 18.1 (*Obligation to pay Additional Amounts*) below) to Holders of Securities should withholding taxes become payable on payments of principal or interest by or within a Relevant Jurisdiction where:

- the Holder is a resident within that Relevant Jurisdiction; or
- "Gross up" is specified to be "not applicable" in the relevant Pricing Supplement; or
- if one or more customary or other exceptions (as detailed in General Condition 18.2 (*Circumstances in which Additional Amounts will not be paid*) below) to the "Gross up" obligation applies.

In addition to the above circumstances, the Issuer will not pay "Additional Amounts" to Holders of Securities:

- in respect of any withholding taxes imposed pursuant to FATCA; or
- in respect of U.S. withholding taxes on payments treated as "dividend equivalent" payments under Section 871(m) of the U.S. Internal Revenue Code of 1986 (as amended, the "**Code**") (see "*Taxation – United States Federal Income Taxation – Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A. – Taxation of Non-U.S. Holders - U.S. Withholding Taxes - U.S. Federal Income Tax Withholding on Dividend Equivalent Payments*" below) where:
    - o "Gross up" is specified to be "not applicable" in the relevant Pricing Supplement; or
    - o "Gross up" is specified to be "applicable" in the relevant Pricing Supplement, but "Exclude Section 871(m) Taxes from Gross Up" is also specified to be applicable in the relevant Pricing Supplement; or

- o in the reasonable determination of the Issuer, such withholding tax would not have been imposed but for the Holder or beneficial owner (or a related party thereof) engaging in one or more transactions (other than the mere purchase of the Security) whether or not in connection with the acquisition, holding or disposition of the Security that establishes the withholding obligation; or

- in respect of any withholding taxes imposed otherwise than by a Relevant Jurisdiction; or

- if one or more customary exceptions (as detailed in General Condition 18.2 (*Circumstances in which Additional Amounts will not be paid*) below) to the "Gross up" obligation applies.

Accordingly, in the above circumstances, the return on your Securities will be reduced by the amount being withheld. In all other circumstances, the Issuer will pay Additional Amounts should withholding taxes become payable on payments of principal or interest by or within a Relevant Jurisdiction.

8.3 **Payments to Holders in respect of the Securities and payments received by JPMSP may be subject to withholding taxes, which may give rise to a right for JPMSP to redeem or terminate the Securities early**

Under any of (a) U.S. tax legislation commonly known as the Foreign Account Tax Compliance Act, (b) analogous provisions of non-U.S. laws, (c) an intergovernmental agreement in furtherance of such legislation or laws, or (d) an individual agreement entered into with a taxing authority pursuant to such legislation or laws (collectively, "**FATCA**"), the Issuer or an intermediary may be required to withhold a withholding tax of 30 per cent. on payments made to certain Holders in respect of the relevant Securities. Withholding generally applies to payments of U.S. source interest, dividends (including payments treated as "dividend equivalents" under section 871(m) of the Code) and other passive income. Withholding on "foreign passthru payments" will apply no earlier than two years after the date on which final U.S. Treasury regulations defining foreign passthru payments are published. The withholding tax may apply to payments in respect of Securities made to a non-U.S. Holder or beneficial owner that is not in compliance with applicable reporting and withholding obligations or that fails to provide ownership certifications and identifying information or, if applicable, for waivers of any law prohibiting the disclosure of such information to a taxing authority (such Holders and beneficial owners, "**Recalcitrant Holders**"). In the event that the relevant Issuer or an intermediary is required to deduct a withholding tax under FATCA, no additional amounts will be paid to the Holder or beneficial owner of the Security.

Investors should be aware that the effective date for withholding on "foreign passthru payments" above reflects proposed U.S. Treasury regulations ("**Proposed FATCA Regulations**") which delay the effective date for withholding on foreign passthru payments. The Proposed FATCA Regulations also eliminate FATCA withholding on gross proceeds from, or final payments, redemptions, or other principal payments made in respect of, the disposition of an instrument that may produce U.S. source interest or dividends ("**U.S. Gross Proceeds**"). The U.S. Treasury have indicated that taxpayers may rely on the Proposed FATCA Regulations until final regulations are issued. The discussion above assumes that the Proposed FATCA Regulations will be finalised in their current form and that such final regulations will be effective retroactively. No assurance can be given that the Proposed FATCA Regulations will be finalised in their current form or that any such final regulations will be effective retroactively.

Under FATCA, JPMSP may also be subject to a withholding tax of 30 per cent. on certain payments made to it if it does not comply with the relevant requirements under FATCA. In the event JPMSP determines that there is a substantial likelihood that payments made to it would be subject to withholding tax under FATCA or if JPMSP otherwise determines that there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA, **it is possible that a portion or all Securities of a series issued by JPMSP will be redeemed or terminated at the Early Payment Amount (which amount may be less than the purchase price paid by the Holder, depending on the**

fair market value of the Securities at the relevant time and, where specified in the terms of the Securities, associated costs of the Issuer to be deducted).

It is anticipated that each Issuer will comply with any due diligence, reporting and withholding requirements under FATCA. Accordingly, the relevant Issuer may be required, among other things, to withhold 30 per cent. on payments made to Holders or beneficial owners of Securities. Should the relevant Issuer or intermediary withhold on payments pursuant to FATCA, there will be no "gross up" (or any other additional amount) payable by way of compensation to such Holders or beneficial owners for the amounts deducted.

See also "*Taxation – United States Federal Income Taxation – FATCA*", below.

8.4 **U.S. Federal Income Tax Reportable Transaction**

The U.S. Treasury Department and the U.S. Internal Revenue Service ("**IRS**") released a notice designating certain "basket contracts" and substantially similar transactions as "transactions of interest" subject to information reporting requirements as "reportable transactions" under Section 6011 of the Code. In general, the notice could apply to a Security linked to a basket of assets or financial index where a beneficial owner is (i) a United States person as defined under the Code, or (ii) a non-United States person whose income, gain or loss, if any, would be effectively connected with a U.S. trade or business (an "**ECI Holder**"), and such beneficial owner (or person acting on behalf of the beneficial owner) has the discretion to change the referenced assets or trading algorithm underlying the index. If a United States person or an ECI Holder becomes a beneficial owner of such a Security in contravention with the Security's selling restrictions (which prohibit sales to, or beneficial ownership by, United States persons or ECI Holders), such a United States person or ECI Holder may be required to report certain information to the IRS, as set forth in the applicable Treasury regulations regarding "reportable transactions". A Holder or beneficial owner that fails to disclose the transaction in accordance with the notice could be subject to penalties.

In addition to the potential reporting requirement discussed above, the relevant Issuer, or affiliates of the relevant Issuer, may be required to report the issuance of any such securities to the IRS to the extent the relevant Issuer cannot document the appropriate non-U.S. tax status of each beneficial owner. As the relevant Issuer does not expect to be able to document the U.S. tax status of each holder, the relevant Issuer currently expects to disclose the issuance of any such Securities to the IRS as a potential "transaction of interest".

CONFLICTS OF INTEREST

JPMorgan Chase is subject to various potential conflicts of interest in respect of the Securities, which could have an adverse effect on the Securities

An offering of Securities does not constitute an expression of the view of JPMorgan Chase, or a recommendation by JPMorgan Chase of, any Reference Asset or the constituents or components of any Reference Asset, including through an investment in the Securities.

You should not take this Offering Circular or any particular offering of Securities hereunder as an expression of the views of JPMorgan Chase about how any Reference Asset or the constituents or components of any Reference Asset will perform in the future or as a recommendation to invest (directly or indirectly, by taking a long or short position) in any Reference Asset or the constituents or components of any Reference Asset, including through an investment in the Securities. As a global financial institution, JPMorgan Chase (through various JPMorgan Chase entities) may, and often do, have positions (long, short or both) in one or more Reference Assets or constituents or components of any Reference Asset that conflict with an investment in the Securities. See "*JPMorgan Chase may have economic interests that are adverse to those of the Holders of the Securities as a result of JPMorgan Chase's hedging and other trading activities*" below. You should undertake an independent determination of whether an investment in the Securities is suitable for you in light of your specific investment objectives, risk tolerance and financial resources.

JPMorgan Chase may have economic interests that are adverse to those of the Holders of the Securities as a result of JPMorgan Chase's hedging and other trading activities.

In anticipation of the sale of the Securities, the relevant Issuer expects to hedge its obligations under the Securities through certain JPMorgan Chase affiliates or unaffiliated counterparties by taking positions in instruments the value of which is derived from one or more Reference Assets or the constituents or components of such Reference Assets or other assets. The Issuer or the relevant hedging entity may also adjust its hedge by, among other things, purchasing or selling instruments the value of which is derived from one or more Reference Assets or the constituents or components of such Reference Assets or other assets at any time and from time to time, and close out or unwind its hedge by selling any of the foregoing on or before any valuation date under the Securities. JPMorgan Chase cannot give you any assurances that its hedging activities will not negatively affect the value of the Reference Asset(s) or the performance of the Securities.

This hedging activity may present a conflict of interest between your interest as a Holder of the Securities and the interests that JPMorgan Chase entities have in executing, maintaining and adjusting hedge transactions. These hedging activities could also affect the price at which the Dealer (or an affiliate) willing to purchase your Securities in the secondary market (if any).

The hedging entities expect to make a profit. Because hedging the Issuer's obligations entails risk and may be influenced by market forces beyond JPMorgan Chase's control, this hedging may result in a profit that is more or less than expected, or it may result in a loss.

The Dealer and other JPMorgan Chase entities are also likely to trade the Reference Assets or the constituents or components of any Reference Asset on a regular basis (taking long or short positions or both), for their accounts, for other accounts under their management and to facilitate transactions, including block transactions, on behalf of customers. While a particular outcome cannot be predicted, any of these hedging activities or other such trading activities could potentially increase and/or decrease the value of the Reference Asset(s) on a valuation date, which could have a material adverse impact on the return on the Securities.

Also, JPMorgan Chase entities are or may be engaged in securities trading, securities brokerage and financing activities, as well as providing investment banking and financial advisory services. In the ordinary course of business, such affiliates may at any time hold long or short positions, and may trade or otherwise effect transactions, for their own account or the accounts of customers, in debt or equity securities of the issuer of a Reference Asset, its affiliates or other entities that may be involved in the transactions contemplated hereby.

It is possible that these hedging or trading activities could result in substantial returns for the relevant JPMorgan Chase hedging entity (or entities) while the value of the Securities declines.

JPMorgan Chase may have economic interests that are adverse to those of the Holders of the Securities as a result of JPMorgan Chase's business activities.

JPMorgan Chase may currently or from time to time engage in business with the issuer of a Reference Asset which is a Share or companies the equity securities of which are included in an Index, held by an ETF, included in a relevant Index, produce, trade or otherwise be active in relation to a commodity or constituent of a commodity index (the "**underlying companies**"), including extending loans to, making equity investments in or providing advisory services to the underlying companies, including merger and acquisition advisory services. In the course of this business, JPMorgan Chase may acquire non-public information about the underlying companies, and will not disclose any such information to you. In addition, JPMorgan Chase may publish research reports or otherwise express views about the underlying companies. Any prospective purchaser of Securities should undertake an independent investigation of each of the underlying companies as in its judgment is appropriate to make an informed decision with respect to an investment in the Securities. JPMorgan Chase does not make any representation or warranty to any purchaser of Securities with respect to any matters whatsoever relating to its business with the underlying companies.

Additionally, JPMorgan Chase may serve as issuer, agent or underwriter for issuances of other securities or financial instruments with returns linked or related to changes in the level or price, as applicable, of a Share, a Commodity, an Index, a Fund or an ETF, the securities included in an Index or the securities, commodities or futures contracts held by a Fund or an ETF. To the extent that JPMorgan Chase serves as issuer, agent or underwriter for these securities or financial instruments, JPMorgan Chase's interests with respect to these securities or financial instruments may be adverse to those of the Holders of the Securities. By introducing competing products into the marketplace in this manner, JPMorgan Chase (including any JPMorgan Chase entities) could adversely affect the value of the Securities.

JPMorgan Chase may currently or from time to time engage in trading activities related to the currencies in which the equity securities underlying an Index, a Fund or an ETF are denominated. If currency exchange rate calculations are involved in the calculation of the closing levels of an Index or the net asset values or closing prices of a Fund or an ETF, these trading activities could potentially affect the exchange rates with respect to the currencies in which the equity securities underlying that Index, Fund or ETF are denominated, the closing levels of that Index or the net asset values or closing prices of that Fund or ETF and, accordingly, the value of the Securities.

In the course of its currency trading activities, JPMorgan Chase may acquire material non-public information with respect to currency exchange rates, and will not disclose any such information to you. In addition, JPMorgan Chase may produce and/or publish research reports, or otherwise express views, with respect to expected movements in currency exchange rates. JPMorgan Chase does not make any representation or warranty to any purchaser of Securities with respect to any matters whatsoever relating to future currency exchange rate movements and any prospective purchaser of the Securities should undertake an independent investigation of the currencies in which securities underlying an Index or ETF are denominated and their related exchange rates as, in its judgment, is appropriate to make an informed decision with respect to an investment in the Securities.

J.P. Morgan Securities plc or another JPMorgan Chase entity, in their role as calculation agent, reference market dealer and/or reference dealer or custodian of the Bond in the case of Bond Linked Securities may have economic interests that are adverse to those of the Holders of the Securities.

J.P. Morgan Securities plc, an affiliate of the Issuers, will act as the calculation agent, unless otherwise stated in the relevant Pricing Supplement, but investors in the Securities should be aware that JPMorgan Chase and any affiliates may, from time to time, act in other capacities with regard to the Securities, including as, in the case of Bond Linked Securities, reference market dealer and/or reference dealer for providing pricing information (including, without limitation, for the purposes of determining the fixing rate and/or the final price or the foreign currency-denominated yield curve), or as custodian of the Bond. The calculation agent will make all determinations and exercise discretionary authorities under the terms and conditions of the Securities, as described in Risk Factor 7.1 (*JPMorgan Chase as Issuer and Calculation Agent has authority to make discretionary determinations under the Securities*) above. In performing these duties, J.P. Morgan Securities plc (or such other entity appointed as the calculation

agent, as the case may be) may have interests adverse to the interests of the Holders of the Securities, which may affect your return on the Securities.

JPMorgan Chase is or may be, in respect of the issuer of a Reference Asset and/or such Reference Asset, engaged in securities trading, securities brokerage and financing activities, as well as providing investment banking and financial advisory services to such issuer or its manager or investment advisors, dealers or distributors (as applicable).

Potential conflicts of interest may exist between the calculation agent, which is an affiliate of the Issuer and the Guarantor, and the Holders of the Securities, including with respect to certain determinations and judgments that the calculation agent must make as to the amount (if any) due on redemption of the Securities. The terms of the Securities entitle the calculation agent to exercise discretion including without limitation in determining an applicable exchange rate or the market value of a Reference Asset. Any such determination may have adverse effects on the market prices, rates or other market factors underlying the Securities. In addition, different dealers may arrive at different rates or prices. Consequently, the calculation agent cannot and does not represent to investors that the rates determined by the calculation agent will be the most favourable rates to investors or the rates that are available in the market generally.

JPMorgan Chase may have published research, expressed opinions or provided recommendations that are inconsistent with investing in or holding the Securities, and may do so in the future. Any such research, opinions or recommendations could affect the value of any relevant Reference Asset, and, therefore, the market value of the Securities.

JPMorgan Chase publish research from time to time on underlying companies, financial markets and other matters that may influence the value of the Securities, or express opinions or provide recommendations that are inconsistent with purchasing or holding the Securities. JPMorgan Chase may have published or may publish research or other opinions that call into question the investment view implicit in an investment in the Securities. Any research, opinions or recommendations expressed by JPMorgan Chase may not be consistent with each other and may be modified from time to time without notice. Investors should make their own independent investigation of the merits of investing in the Securities and any Reference Asset to which the Securities are linked.

A JPMorgan Chase affiliate may be the sponsor of an index or strategy which is referenced by a Security.

A JPMorgan Chase proprietary index or strategy will generally be developed, owned, calculated and maintained by a JPMorgan Chase affiliate, which would be responsible for the composition, calculation and maintenance of such index or strategy. In such circumstances, the index or strategy sponsor would be under no obligation to take into account the interests of the Holders of any Securities referenced by such index or strategy. In such capacity as index sponsor, JPMorgan Chase will have the authority to make determinations that could materially and adversely affect the value of the Securities. See also Risk Factor 7.1 (*JPMorgan Chase as Issuer and Calculation Agent has authority to make discretionary determinations under the Securities*).

JPMorgan Chase entities may engage in business with issuers of various Reference Assets and may not disclose information about such issuers to Holders of the Securities.

JPMorgan Chase entities may currently or from time to time engage in business with issuers of various Reference Assets, underwrite securities for such issuers or may provide advisory services to such issuers. In the course of this business, JPMorgan Chase entities (including the Guarantor, the Dealer or the calculation agent) may acquire non-public information about these issuers, and such information will not be disclosed to Holders of the Securities. In addition, JPMorgan Chase entities may publish research reports about such issuers. Any prospective purchaser of Securities should undertake such independent investigation of these issuers in its judgment as to whether an investment in the Securities is appropriate.

DOCUMENTS INCORPORATED BY REFERENCE

This document should be read and construed in conjunction with each supplement to this Offering Circular and the documents incorporated by reference into this Offering Circular. The information set forth under II. (*Information*) below contained in the documents set forth under I. (*Documents*) below which, in respect of (i) to (xlviii) below, is hereby incorporated by reference into this Offering Circular and deemed to form a part of this Offering Circular:

I. **Documents**

(i) the Registration Document dated 20 April 2022 of JPMSP (the "**JPMSP Registration Document**");

(ii) the Registration Document dated 20 April 2022 of JPMorgan Chase Bank, N.A. (the "**JPMorgan Chase Bank, N.A. Registration Document**");

(iii) Supplement No. 1 dated 17 May 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase Bank, N.A. ("**Supplement No. 1 to the JPMorgan Chase Bank, N.A. Registration Document**");

(iv) Supplement No. 2 dated 28 July 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase Bank, N.A. ("**Supplement No. 2 to the JPMorgan Chase Bank, N.A. Registration Document**");

(v) Supplement No. 3 dated 17 August 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase Bank, N.A. ("**Supplement No. 3 to the JPMorgan Chase Bank, N.A. Registration Document**");

(vi) the Registration Document dated 20 April 2022 of JPMorgan Chase & Co. (the "**JPMorgan Chase & Co. Registration Document**", and the JPMSP Registration Document, the JPMorgan Chase Bank, N.A. Registration Document and the JPMorgan Chase & Co. Registration Document are together referred to as the "**Registration Documents**", each of which has been approved for the purposes of the EU Prospectus Regulation);

(vii) Supplement No. 1 dated 17 May 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase & Co. ("**Supplement No. 1 to the JPMorgan Chase & Co. Registration Document**");

(viii) Supplement No. 2 dated 28 July 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase & Co. ("**Supplement No. 2 to the JPMorgan Chase & Co. Registration Document**");

(ix) Supplement No. 3 dated 17 August 2022 to the Registration Document dated 20 April 2022 of JPMorgan Chase & Co. ("**Supplement No. 3 to the JPMorgan Chase & Co. Registration Document**");

(x) the Offering Circular dated 21 April 2022 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**April 2022 Offering Circular**");

(xi) the Offering Circular dated 22 April 2021 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2021 Offering Circular**");

(xii) the Offering Circular dated 30 October 2020 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**October 2020 Offering Circular**");

(xiii) the Offering Circular dated 23 April 2020 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company

LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**April 2020 Offering Circular**");

(xiv) the Offering Circular dated 24 April 2019 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2019 Offering Circular**");

(xv) the Offering Circular dated 25 April 2018 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2018 Offering Circular**");

(xvi) the Offering Circular dated 13 December 2017 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**December 2017 Offering Circular**");

(xvii) the Offering Circular dated 26 April 2017 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**April 2017 Offering Circular**");

(xviii) the Offering Circular dated 27 April 2016 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2016 Offering Circular**");

(xix) the Offering Circular dated 28 April 2015 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2015 Offering Circular**");

(xx) the Offering Circular dated 29 April 2014 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., J.P. Morgan Indies SRL, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2014 Offering Circular**");

(xxi) the Offering Circular dated 3 May 2013 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., J.P. Morgan Bank Dublin plc, J.P. Morgan Indies SRL, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2013 Offering Circular**");

(xxii) Supplement No. 1 dated 18 May 2022 to the April 2022 Offering Circular (the "**April 2022 Offering Circular Supplement No. 1**");

(xxiii) Supplement No. 2 dated 27 July 2021 to the 2021 Offering Circular (the "**2021 Offering Circular Supplement No. 2**");

(xxiv) Supplement No. 6 dated 18 November 2021 to the 2021 Offering Circular (the "**2021 Offering Circular Supplement No. 6**");

(xxv) Supplement No. 7 dated 9 December 2021 to the 2021 Offering Circular (the "**2021 Offering Circular Supplement No. 7**");

(xxvi) Supplement No. 3 dated 14 January 2021 to the October 2020 Offering Circular (the "**October 2020 Offering Circular Supplement No. 3**");

(xxvii) Supplement No. 5 dated 11 March 2021 to the October 2020 Offering Circular (the "**October 2020 Offering Circular Supplement No. 5**");

(xxviii) Supplement No. 3 dated 2 July 2019 to the 2019 Offering Circular (the "**2019 Offering Circular Supplement No. 3**");

(xxix) Supplement No. 1 dated 11 May 2018 to the 2018 Offering Circular (the "**2018 Offering Circular Supplement No. 1**");

(xxx) Supplement No. 8 dated 13 March 2019 to the 2018 Offering Circular (the "**2018 Offering Circular Supplement No. 8**");

(xxxi) Supplement No. 1 dated 22 December 2017 to the December 2017 Offering Circular (the "**December 2017 Offering Circular Supplement No. 1**");

(xxxii) Supplement No. 1 dated 22 May 2017 to the April 2017 Offering Circular (the "**April 2017 Offering Circular Supplement No. 1**");

(xxxiii) Supplement No. 3 dated 16 August 2017 to the April 2017 Offering Circular (the "**April 2017 Offering Circular Supplement No. 3**");

(xxxiv) Supplement No. 8 dated 28 November 2017 to the April 2017 Offering Circular (the "**April 2017 Offering Circular Supplement No. 8**");

(xxxv) Supplement No. 1 dated 20 May 2016 to the 2016 Offering Circular (the "**2016 Offering Circular Supplement No. 1**");

(xxxvi) Supplement No. 9 dated 14 December 2016 to the 2016 Offering Circular (the "**2016 Offering Circular Supplement No. 9**");

(xxxvii) Supplement No. 2 dated 8 July 2015 to the 2015 Offering Circular (the "**2015 Offering Circular Supplement No. 2**");

(xxxviii) Supplement No. 5 dated 22 September 2015 to the 2015 Offering Circular (the "**2015 Offering Circular Supplement No. 5**");

(xxxix) Supplement No. 10 dated 14 April 2016 to the 2015 Offering Circular (the "**2015 Offering Circular Supplement No. 10**");

(xl) Supplement No. 5 dated 11 November 2014 to the 2014 Offering Circular (the "**2014 Offering Circular Supplement**");

(xli) the base prospectus dated 11 May 2012 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., J.P. Morgan Bank Dublin plc, J.P. Morgan Indies SRL, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2012 Base Prospectus**");

(xlii) Supplement No. 7 dated 23 November 2012 to the 2012 Base Prospectus (the "**2012 Base Prospectus Supplement**");

(xliii) the base prospectus dated 13 May 2011 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., J.P. Morgan Bank Dublin plc, J.P. Morgan Indies SRL, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2011 Base Prospectus**");

(xliv) Supplement No. 8 dated 15 March 2012 to the 2011 Base Prospectus (the "**2011 Base Prospectus Supplement**");

(xlv) the base prospectus dated 14 May 2010 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., J.P. Morgan Bank Dublin plc, J.P. Morgan Indies SRL, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2010 Base Prospectus**");

(xlvi) Supplement No. 1 dated 4 June 2010 to the 2010 Base Prospectus (the "**2010 Base Prospectus Supplement**");

(xlvii) the base prospectus dated 14 May 2009 relating to issues of non-equity securities under the Programme by J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (the "**2009 Base Prospectus**"); and

(xlviii) Supplement No. 6 dated 28 October 2009 to the 2009 Base Prospectus (the "**2009 Base Prospectus Supplement**").

II. Information

The table below sets out the relevant page references for the information incorporated into this Offering Circular by reference. The Documents, or copies thereof, will be available, during normal business hours on any working day in Luxembourg, free of charge, at the office of the Paying Agent in Luxembourg.

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[*]The auditor's report contained in the JPMSP 2021 Annual Report incorporated by reference into this Offering Circular from the JPMSP Registration Document is the original auditor's report that was issued on 13 April 2022 with respect to the JPMSP 2021 Annual Report. The paragraph headed "European Single Electronic Format (ESEF)" on page 8 of the auditor's report relates to the official 2021 annual report of JPMSP (as prepared in XHTML format) in accordance with the applicable Regulatory Technical Standards (RTS) on ESEF, and is not applicable for the financial information and format as set out in the JPMSP Registration Document.

[**]The JPMorgan Chase Bank, N.A. Audited Financial Statements as of December 31, 2021 and 2020 and for each of the three years in the period ended December 31, 2021 and the corresponding Report of Independent Auditors are incorporated by reference into this Offering Circular from the JPMorgan Chase Bank, N.A. Registration Document and supersedes the JPMorgan Chase Bank, N.A. audited financial statements as of December 31, 2020 and 2019 and for each of the three years in the period ended

December 31, 2020, previously incorporated by reference from the JPMorgan Chase Bank, N.A. Registration Document in its entirety.

[***]The JPMorgan Chase & Co. Form 10-K for the fiscal year ended December 31, 2021, which includes the consolidated audited financial statements as of December 31, 2021 and 2020 and for each of the three years in the period ended December 31, 2021 and the corresponding Report of Independent Registered Public Accounting Firm, is incorporated by reference into this Offering Circular from the JPMorgan Chase & Co. Registration Document and supersedes the JPMorgan Chase & Co. Form 10-K for the fiscal year ended December 31, 2020, previously incorporated by reference from the JPMorgan Chase & Co. Registration Document in its entirety.

Investors who have not previously reviewed the information contained in the above documents should do so in connection with their evaluation of any Securities. Any statement contained in a document, all or the relevant portion of which is incorporated by reference into this Offering Circular, shall be deemed to be modified or superseded for the purpose of this Offering Circular to the extent that a statement contained in this Offering Circular or in any supplement to this Offering Circular, including any documents incorporated therein by reference, modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). The documents incorporated by reference will be available on the Luxembourg Stock Exchange's website (www.bourse.lu).

GENERAL DESCRIPTION OF THE PROGRAMME

1. **Issuers and the Guarantors**

JPMorgan Chase Financial Company LLC ("**JPMCFC**"), J.P. Morgan Structured Products B.V. ("**JPMSP**"), JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (each an "**Issuer**" and together, the "**Issuers**") may from time to time under the Programme, subject to compliance with all relevant laws, regulations and directives, issue (i) Notes and (ii) Warrants or Certificates (together, the "**Securities**"). Securities issued by JPMCFC are guaranteed by JPMorgan Chase & Co. (the "**JPMCFC Guarantor**") and Securities issued by JPMSP are guaranteed by JPMorgan Chase Bank, N.A. (the "**JPMSP Guarantor**") (the JPMCFC Guarantor and JPMSP Guarantor, each a "**Guarantor**" and together, the "**Guarantors**"). Securities issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. are not the subject of a guarantee.

2. **Types of Securities**

The Securities may be securities where the interest payment, the redemption amount or amount to be paid or delivered on settlement is linked to:

- a share or a depositary receipt representing a share or a basket of shares or depositary receipts ("**Share Linked Securities**");
- an equity index or a basket of equity indices ("**Index Linked Securities**");
- a commodity, a basket of commodities, a commodity index or a basket of commodity indices ("**Commodity Linked Securities**");
- a foreign exchange rate or a basket of foreign exchange rates ("**FX Linked Securities**");
- the credit of a reference entity such as a company or a sovereign, or a basket of reference entities ("**Credit Linked Securities**");
- a share or a unit of a Fund, or a basket of funds ("**Fund Linked Securities**");
- a bond or a basket of bonds of a reference entity such as a company or a sovereign ("**Bond Linked Securities**"); or
- any other underlying asset or reference rate ("**Other Variable Linked Securities**") or any combination of any of the above.

In addition, the Securities may be "market access" participation Notes ("**Market Access Participation Notes**"), linked to an underlying share or a basket of shares, or "low exercise price Warrants" ("**Low Exercise Price Warrants**"), linked to an underlying share or basket of shares.

3. **Issuance of Securities**

The general conditions of the Securities are set out on pages 190 to 339 (the "**General Conditions**"). In relation to:

- any Share Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the Share Linked Provisions (the "**Share Linked Provisions**");
- any Index Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the Index Linked Provisions (the "**Index Linked Provisions**");
- any Commodity Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the Commodity Linked Provisions (the "**Commodity Linked Provisions**");

- any FX Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the FX Linked Provisions (the "**FX Linked Provisions**");

- any Market Access Participation Notes, the General Conditions will be completed and/or amended by the additional conditions set out in the Market Access Participation Notes Provisions (the "**Market Access Participation Provisions**");

- any Fund Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the Fund Linked Provisions (the "**Fund Linked Provisions**");

- any Bond Linked Securities, the General Conditions will be completed and/or amended, if so specified in the relevant Pricing Supplement, by the additional conditions set out in the Bond Linked Provisions (the "**Bond Linked Provisions**");

- any Low Exercise Price Warrants, the General Conditions will be completed and/or amended by the additional conditions set out in the Low Exercise Price Warrant Provisions (the "**LEPW Provisions**"); and

- any Other Variable Linked Interest Notes, the General Conditions will be completed and/or amended by the additional conditions set out in the Rate Linked Provisions (the "**Rate Linked Provisions**" and, together with the Share Linked Provisions, the Index Linked Provisions, the Commodity Linked Provisions, the FX Linked Provisions, the Market Access Participation Provisions, the Fund Linked Provisions, the Bond Linked Provisions and the LEPW Provisions, the "**Specific Product Provisions**").

Securities issued under the Programme are issued in series (each, a "**Series**"), and each Series may comprise one or more tranches ("**Tranches**" and each, a "**Tranche**") of Securities. One or more Tranches of Securities will be the subject of a pricing supplement (each, a "**Pricing Supplement**"), a copy of which may be obtained free of charge from the Specified Office of the Relevant Programme Agent.

4. **Form of Securities**

If "Temporary Bearer Global Security exchangeable for a Permanent Bearer Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in bearer form (other than French Bearer Securities) will be represented on issue by a temporary global security in bearer form (each a "**Temporary Bearer Global Security**") exchangeable upon certification of non-U.S. beneficial ownership for a permanent global security in bearer form (each a "**Permanent Bearer Global Security**" and, together with each Temporary Bearer Global Security, a "**Bearer Global Security**"). If "Permanent Bearer Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities in bearer form (other than French Bearer Securities) will be represented on issue by a Permanent Bearer Global Security. Each Temporary Bearer Global Security and each Permanent Bearer Global Security representing Securities other than German Securities will be exchangeable, in limited circumstances, for Securities in definitive registered form. No Bearer Securities will be issued in or exchangeable into bearer definitive form, whether pursuant to the request of any Holder(s) or otherwise.

If "Temporary Registered Global Security which is exchangeable for a Permanent Registered Global Security" is specified in the relevant Pricing Supplement, the relevant Series of Securities (other than Swiss Securities and Swiss Certificates (UBS-cleared)) in registered form will be represented on issue by a temporary global security in registered form (each a "**Temporary Registered Global Security**") exchangeable upon certification of non-U.S. beneficial ownership for a permanent global security in registered form (each a "**Permanent Registered Global Security**" and, together with each Temporary Registered Global Security, a "**Registered Global Security**" and, together with each Bearer Global Security, "**Global Securities**"). Each Temporary Registered Global Security and Permanent Registered Global Security will be exchangeable, in limited circumstances, for Securities in registered definitive form. Regulation S Securities issued by JPMSP and guaranteed by JPMorgan Chase Bank, N.A., under the

Programme that are to be accepted for Settlement in CREST via the CREST Depository Interest ("**CDI**") mechanism (the "**CREST CDI Securities**"), and Securities in respect of which "Permanent Registered Global Security" is specified in the relevant Pricing Supplement, will be represented on issue by a Permanent Registered Global Security.

Global Securities may be deposited on the issue date with a depository, or registered in the name of a nominee, on behalf of:

- Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking, société anonyme ("**Clearstream, Luxembourg**");
- Clearstream Banking AG, Eschborn ("**Clearstream Frankfurt**");
- The Depository Trust Company ("**DTC**");
- the Swiss Domestic Settlement System, SIX SIS AG (the "**SIX SIS**"); and/or
- with a depository for such other clearing system as is specified in the General Conditions and/or the relevant Pricing Supplement.

The depository on behalf of Euroclear and Clearstream, Luxembourg shall be a common depository.

For the avoidance of doubt, no Global Securities shall be issued in respect of Swiss Certificates (UBS-cleared).

(a) ***New Safekeeping Structure***

Notes represented by Registered Global Securities which are intended to be held under the new safekeeping structure ("**NSS**") shall be delivered on or prior to the issue date to a common safekeeper (the "**Common Safekeeper**") for Euroclear and Clearstream, Luxembourg and registered in the name of a nominee of such Common Safekeeper.

(b) ***New Global Note***

Notes represented by Bearer Global Securities which are intended to be issued in New Global Note ("**NGN**") form, shall be delivered on or prior to the issue date to the Common Safekeeper for Euroclear and Clearstream, Luxembourg.

(c) ***German Securities***

German Securities issued by JPMCFC, JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. will be represented on issue by a Temporary Bearer Global Security exchangeable upon certification of non-U.S. beneficial ownership for a Permanent Bearer Global Security. German Securities will be governed by German law.

(d) ***Danish Notes***

Notes issued under the Programme by JPMSP may include Securities which are registered in uncertificated and dematerialised book-entry form with Euronext Securities Copenhagen (VP Securities A/S) ("**VP**") in accordance with all applicable Danish laws, regulations and rules ("**Danish Notes**"). Danish Notes will not be issued in or exchangeable into definitive form.

(e) ***Finnish Securities***

Securities issued under the Programme by JPMSP may include Securities which are registered in uncertificated and dematerialised book-entry form with Euroclear Finland Oy, the Finnish Central Securities Depository ("**Euroclear Finland**"), in accordance with all applicable Finnish laws, regulations and rules ("**Finnish Securities**"). Finnish Securities will not be issued in or exchangeable into definitive form.

(f) ***French Securities***

Securities issued under the Programme by JPMSP may be in dematerialised form and deposited with Euroclear France S.A. ("**Euroclear France**") as central depository ("**French Securities**"). French Securities may be in bearer form (*au porteur*) or in registered form (*au nominatif*) and will be governed by French law. French Securities will not be issued in or exchangeable into definitive form.

(g) ***Norwegian Securities***

Securities issued under the Programme by JPMSP may include Securities which are registered in uncertificated and dematerialised electronic book-entry form with the Norwegian Central Securities Depository (the "**VPS**") in accordance with all applicable Norwegian laws, regulations and rules ("**Norwegian Securities**"). Norwegian Securities will not be issued in or exchangeable into definitive form.

(h) ***Swedish Securities***

Securities issued under the Programme by JPMSP may include Securities which are registered in uncertificated and dematerialised electronic book-entry form with Euroclear Sweden AB, the Swedish Central Securities Depository ("**Euroclear Sweden**") in accordance with all applicable Swedish laws, regulations and rules ("**Swedish Securities**"). Swedish Securities will not be issued in or exchangeable into definitive form.

(i) ***Swiss Securities and Swiss Certificates (UBS-cleared)***

Securities cleared through SIX SIS are referred to as "**Swiss Securities**". Each Tranche of Swiss Securities issued by JPMCFC, JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. will be either (i) issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of SIX SIS as custodian (*Verwahrungsstelle*) or (ii) initially represented by a single Global Security in registered form that is deposited with SIX SIS as central depository, in each case on or prior to the original issue date of such Tranche. As a matter of Swiss law, once (i) the uncertificated securities (*einfache Wertrechte*) representing Swiss Securities are entered into the main register of SIX SIS as custodian (*Verwahrungsstelle*) or (ii) a Global Security in registered form representing Swiss Securities is deposited with SIX SIS and, in each case, entered into the securities accounts of one or more participants of SIX SIS, such Swiss Securities will constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities**"). No Holder of Swiss Securities will have the right to effect or demand the conversion of such Swiss Securities into, or the delivery of, uncertificated securities (in the case of Swiss Securities represented by a Global Security) or Securities in definitive form (in the case of either Swiss Securities represented by a Global Security or Swiss Securities issued in uncertificated form). However, Swiss Securities will be exchangeable for definitive Securities in registered form under the limited circumstances described in the General Conditions.

Securities which are cleared through UBS Switzerland AG are referred to as "Swiss Certificates (UBS-cleared)". Each Tranche of Swiss Certificates (UBS-cleared) will be issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*). UBS Switzerland AG has the right but not the obligation at any time to transfer the main register (*Hauptregister*) to another UBS group entity licensed as a Swiss bank or securities firm, subject to the prior written consent of the Product Provider, such consent not to be unreasonably withheld. As a matter of Swiss law, once the uncertificated securities (*einfache Wertrechte*) are entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*) and credited to one or more securities accounts maintained by UBS Switzerland AG for and on behalf of its clients, such Swiss Certificates (UBS-cleared) will constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities (UBS-cleared)**"). No Holder of Swiss Certificates (UBS-cleared) will have the right to effect or demand the conversion of such Swiss Certificates (UBS-cleared) into, or the delivery of Securities in definitive form. Swiss Certificates (UBS-cleared) will not be exchangeable for definitive Securities in registered form under any circumstances.

References to UBS Switzerland AG include any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable. References to the Product Provider mean J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

(j) ***CREST CDI Securities***

CREST CDI Securities will be in Permanent Registered Global Form (and will only be exchangeable for definitive Securities in registered form under the limited circumstances described in the General Conditions). The Permanent Registered Global Security in respect of CREST CDI Securities will be deposited with a common depository for Euroclear and Clearstream, Luxembourg and will be accepted for settlement in Euroclear UK & Ireland Limited ("**CREST**") via the CDI mechanism.

(k) ***Eurosystem Eligibility***

Registered Notes held under the NSS and Bearer Notes issued in NGN form may be issued with the intention that such Notes be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem, either upon issue or at any time or all times during their life. Such recognition will depend upon satisfaction of the Eurosystem eligibility criteria as specified by the European Central Bank. However, there is no guarantee that such Notes will be recognised as eligible collateral. Any other Notes are not intended to be recognised as eligible collateral for Eurosystem monetary policy and intra-day operations by the Eurosystem.

5. **Programme Agents**

- The Bank of New York Mellon, London Branch, (or as otherwise specified in the relevant Pricing Supplement) will act as Principal Programme Agent and Paying Agent, Transfer Agent, and The Bank of New York Mellon S.A./N.V., Luxembourg Branch, will act as Paying Agent, Transfer Agent and Registrar, with respect to the Securities.

- Skandinaviska Enskilda Banken AB (publ) will act as Danish Programme Agent, Finnish Programme Agent, Norwegian Programme Agent and Swedish Programme Agent in respect of any Danish Notes, Finnish Securities, Norwegian Securities and Swedish Securities respectively.

- BNP Paribas Securities Services will act as French Programme Agent in respect of any French Securities.

- BNP PARIBAS Securities Services S.C.A. Frankfurt Branch will act as German Programme Agent in respect of any German Securities which are cleared through Clearstream Frankfurt.

- Credit Suisse AG will act as Swiss Programme Agent and Swiss Registrar in respect of any Swiss Securities.

- UBS Switzerland AG will act as Swiss Certificates (UBS-cleared) Agent in respect of Swiss Certificates (UBS-cleared).

Each of these agents will together be referred to as "**Programme Agents**".

6. **Programme limit (in respect of Notes only)**

The aggregate nominal amount of Notes outstanding under the Programme (whether issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co.) will not at any time exceed U.S.$50,000,000,000 (or the equivalent in other currencies). The aggregate nominal amount of Notes outstanding under the Programme (issued by JPMCFC) will not at any time exceed U.S.$8,000,000,000 (or the equivalent in other currencies). There is no limit on the amount of Certificates or Warrants which may be outstanding.

COMMONLY ASKED QUESTIONS

This section is intended to answer some of the questions which investors may have when considering an investment in the Securities. However, any decision to invest in the Securities should only be made after careful consideration of all relevant sections of this Offering Circular and the relevant Pricing Supplement. This section should be treated as an introduction to the Issuers, the types of Securities which may be issued under the Programme and certain terms of such Securities.

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1. **What documents do you need to read in respect of an issuance of Securities?**

There are several legal documents which you must read in respect of any Securities: (i) each applicable section of this Offering Circular (including the documents incorporated by reference into the Offering Circular); and (ii) the Pricing Supplement in respect of such Securities.

You may request copies of any documents from your selling agent or from:

- the Luxembourg listing agent;
- the Irish Listing Agent in respect of Securities admitted to the Official List and to trading on the GEM;
- the Swiss Programme Agent in respect of Swiss Securities or the Swiss Certificates (UBS-cleared) Agent in respect of Swiss Certificates (UBS-cleared);
- the German Programme Agent in respect of German Securities; or
- the Principal Programme Agent in respect of German Securities which are cleared through Euroclear or Clearstream Luxembourg.

The address for each of the agents listed above are set out below.

(a) ***What information is included in this Offering Circular?***

This Offering Circular contains the general terms and conditions of all Securities in the section entitled "General Conditions" and the Specific Product Provisions, which relate to the most common Reference Assets, being the Share Linked Provisions, the Index Linked Provisions, the Commodity Linked Provisions, the FX Linked Provisions, the Market Access Participation Provisions, the Fund Linked Provisions, the Bond Linked Provisions, the LEPW Provisions and the Rate Linked Provisions. For further information about these Specific Product Provisions, see questions 28 (*What are the Share Linked Provisions?*), 30 (*What are the Index Linked Provisions?*), 32 (*What are the Commodity Linked Provisions?*), 34 (*What are the FX Linked Provisions?*), 37 (*What are the Fund Linked Provisions?*) and 39 (*What are the Bond Linked Provisions?*) below.

For all Securities, the General Conditions, which may be completed and/or amended by the Specific Product Provisions, must be read together with the Pricing Supplement which will specify which General Conditions and which Specific Product Provisions (if any) apply to your Securities – see paragraph (b) (*What information is included in the Pricing Supplement?*) below.

A summary of all of the information in the Offering Circular is set out at the beginning of this Offering Circular, but like these commonly asked questions, the summary should only be read as an introduction to the rest of the information in this Offering Circular.

This Offering Circular discloses financial and other information about each Issuer and, if applicable, the Guarantor, of such Securities and incorporates by reference further information about such entities. Such documents incorporated by reference into this Offering Circular are available to investors by request from:

- The Bank of New York Mellon S.A./N.V., Luxembourg Branch, the Luxembourg listing agent, at its office at Vertigo Building, Polaris, 2-4 rue Eugène Ruppert, L-2453, Luxembourg;
- in relation to Securities admitted to the Official List and to trading on the GEM, The Bank of New York Mellon S.A./N.V., Dublin Branch, the Irish Listing Agent, at its office at Riverside 2, Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland;
- in relation to Swiss Securities, Credit Suisse AG, the Swiss Programme Agent, at its office at Paradeplatz 8, CH-8001 Zürich, Switzerland;
- in relation to Swiss Certificates (UBS-cleared), UBS Switzerland AG, the Swiss Certificates (UBS-cleared) Agent, at its office at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland; and
- in relation to German Securities, from BNP PARIBAS Securities Services S.C.A. Frankfurt Branch, the German Programme Agent, at its office at Senckenberganlage 19, 60325 Frankfurt am Main, Germany.

In addition, the Luxembourg Stock Exchange will publish all of such documents on their website: www.bourse.lu.

This Offering Circular also discloses restrictions about who can buy such Securities and to whom the Securities may be transferred or resold and risk factors relating to the Issuers and the Guarantors and the Securities issued under this Programme. It also contains certain tax advice and certain ERISA considerations, although you should always seek specialist advice which has been tailored to your circumstances.

(b) ***What information is included in the Pricing Supplement?***

While this Offering Circular includes general information about all Securities, the Pricing Supplement is the document that sets out the specific details of each particular issuance of Securities. The Pricing Supplement will contain, for example, the issue date, the maturity date and the methods used to calculate the redemption amount and any interest payments, if

applicable. The Pricing Supplement may also include specific risk factors with respect to the particular issuance of Securities.

The Pricing Supplement for each Series of Securities will specify which, if any, of the Specific Product Provisions apply to an issuance of such Securities, and will complete and/or amend the General Conditions and any such Specific Product Provisions. Therefore, the Pricing Supplement for such Securities must be read in conjunction with this Offering Circular.

2. **Who are the Issuers and the Guarantors under this Programme?**

The Pricing Supplement will specify whether the Issuer of your Securities is JPMorgan Chase Financial Company LLC, J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. Securities issued by JPMorgan Chase Financial Company LLC are guaranteed by JPMorgan Chase & Co. Securities issued by J.P. Morgan Structured Products B.V. are guaranteed by JPMorgan Chase Bank, N.A. Securities issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. will not be guaranteed.

(a) ***Who is JPMorgan Chase Financial Company LLC?***

JPMorgan Chase Financial Company LLC or JPMCFC is an indirect, wholly-owned finance subsidiary of JPMorgan Chase & Co. created for the purpose of issuing securities designed to meet investor needs for products that reflect certain risk-return profiles and specific market exposure.

(b) ***Who is J.P. Morgan Structured Products B.V.?***

J.P. Morgan Structured Products B.V. or JPMSP is an indirect, wholly-owned subsidiary of JPMorgan Chase Bank, N.A., which is in turn one of the principal bank subsidiaries of JPMorgan Chase & Co. JPMSP's business principally consists of the issuance of securitised derivatives comprising notes, warrants and certificates, including equity-linked, reverse convertible and market participation notes and the subsequent hedging of those risk positions.

(c) ***Who is JPMorgan Chase Bank, N.A.?***

JPMorgan Chase Bank, N.A. was initially organised as a New York banking corporation on 26 November 1968, and converted into a national banking association on 13 November 2004. JPMorgan Chase Bank, N.A. operates under the U.S. National Banking Act. JPMorgan Chase Bank, N.A. is a wholly-owned bank subsidiary of JPMorgan Chase & Co. JPMorgan Chase Bank, N.A. either directly or through overseas branches and subsidiaries, representative offices and subsidiary foreign banks offers a wide range of banking services to its U.S. and non-U.S. customers.

(d) ***Who is JPMorgan Chase & Co.?***

JPMorgan Chase & Co. is a financial holding company and was incorporated under Delaware law on 28 October 1968 with file number 0691011. JPMorgan Chase & Co. operates under the Delaware General Corporation Law. JPMorgan Chase & Co. is a leading global financial services firm and one of the largest banking institutions in the United States, with operations worldwide.

3. **What type of Securities can be issued under this Programme?**

Under this Programme, each of the Issuers may issue warrants, certificates and notes, which together are known as "Securities". Securities may have any maturity, save that any Securities issued by JPMorgan Chase & Co. will not have a maturity of less than one year from the date of their issue. Securities issued by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. may be admitted to the Official List and to trading on the GEM, listed on the Official List and admitted to trading on the Luxembourg Stock Exchange's Euro MTF, on the SIX Swiss Exchange or any other exchanges which are not "regulated markets" for the purposes of MiFID II, or not listed or traded. Notes may or may not be rated. Notes may be non-interest bearing or bear fixed or floating rate interest or bear interest that may be linked to the performance of one or more Reference Assets. Certificates and Warrants will be non-interest

bearing but Certificates may pay fixed or floating rate coupons or other amounts that may in each case be linked to the performance of one or more Reference Assets. Upon maturity of the Security you may receive a cash amount or delivery of a Reference Asset.

Securities may be cleared through the international clearing systems, or may be cleared through a domestic clearing system. Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities and Swiss Securities are Securities cleared through the domestic clearing system in Denmark, Finland, Norway, Sweden and Switzerland, respectively. Swiss Certificates (UBS-cleared) are Securities which are cleared and settled through UBS Switzerland AG and not SIX SIS AG, and no external clearing of such Securities is possible through any international or domestic clearing system. CREST CDI Securities will be deposited with a common depository for Euroclear and Clearstream, Luxembourg and will be accepted for settlement in CREST via the CDI mechanism. German Securities may be cleared through the German domestic clearing system or Euroclear or Clearstream, Luxembourg, will be governed by German law and are intended to be placed with investors in Germany, Austria and/or Switzerland. French Securities are Securities cleared through Euroclear France and will be governed by French law. Securities which may be offered to certain qualified institutional investors in the United States are described as Rule 144A Securities. Securities which may be sold concurrently outside the United States to certain non-U.S. Persons and to certain qualified institutional investors in the United States are described as Regulation S/Rule 144A Securities. New York Law Notes and Rule 144A Securities which are Warrants or Certificates will be governed by the laws of the State of New York. All other Securities will be governed by English law.

4. **What are the Reference Assets to which Securities may be linked?**

The interest and/or repayment/delivery terms of the Securities issued under this Programme may be linked to a number of different Reference Assets ("**Reference Assets**"), which may include:

- a share or a depositary receipt;
- a share index;
- a commodity;
- a commodity index;
- a foreign exchange rate;
- a fund (regulated or unregulated, mutual, exchange traded tracker or hedge);
- a consumer price or other inflation index;
- an interest rate or constant maturity swap rate or any other rate;
- a loan or bond or other debt obligation or certificate;
- any other financial, economic or other measures or instruments including the occurrence or non-occurrence of any event or circumstance and credit events relating to one or more issuers or securities;
- a basket of the above; or
- any combination of any of the above.

5. **Will the issue price of a Security reflect its market value on or after the issue date?**

As at the Issue Date, the Issue Price of the Securities will likely be more than the market value of such Securities, and more than the price, if any, at which the Dealer or any other person would be willing to purchase the Securities in secondary market transactions. In particular, (a) where permitted by applicable law, the Issue Price may take into account amounts with respect to commissions relating to the issue and sale of the Securities and (b) amounts relating to the hedging of the Issuer's obligations under such Securities, including the profits JPMorgan Chase

expects to realise in consideration for assuming the risks inherent in providing such hedge. In addition, any secondary market prices of the Securities will likely be lower than the original issue price of the Securities because, among other things, secondary market prices take into account the secondary market credit spreads of the Issuer (and the Guarantor, if applicable). See Risk Factor 2 (*Risks related to the valuation, liquidity and offering of the Securities*) above.

6. **Are the market value and interest and amounts payable or deliverable in respect of your Securities subject to the credit risk of the relevant Issuer and the relevant Guarantor (if applicable)?**

Yes. You will be exposed to the credit risk of the Issuer and the Guarantor (if applicable), and you will have no recourse to the Reference Asset(s) (see question 9 (*If your Securities are linked to a Reference Asset, will you have recourse to that asset if the Issuer and the Guarantor (if applicable) defaults?*) below). The market value of the Securities will not only be affected by the value of the Reference Asset(s), but will also depend in part on the credit ratings of the relevant Issuer or the relevant Guarantor (if applicable), together with various other factors (see Risk Factor 2.3 (*Prior to their scheduled redemption, the value of the Securities will be influenced by many factors and cannot be predicted*) above).

The creditworthiness of JPMorgan Chase Bank, N.A. is more likely to affect the market value of Securities issued by JPMorgan Chase Bank, N.A. and Securities issued by JPMSP which are guaranteed by JPMorgan Chase Bank, N.A. The creditworthiness of JPMorgan Chase & Co. is more likely to affect the market value of Securities issued by JPMorgan Chase & Co. and Securities issued by JPMCFC which are guaranteed by JPMorgan Chase & Co. Further information regarding JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co.'s credit ratings can be obtained from their website (www.jpmorganchase.com/corporate/investor-relations/fixed-income.htm).

7. **Will you be able to sell your Securities?**

Unless otherwise specified in the relevant Pricing Supplement, the Securities will not be listed on any securities exchange. There may be little or no secondary market for the Securities. Even if there is a secondary market for the Securities, it may not provide enough liquidity to allow you to trade or sell the Securities easily.

JPMorgan Chase may act as a market maker for the Securities, but is not required to do so (subject to the rules of any applicable securities exchange). As other market makers may not participate significantly in the secondary market for the Securities, the price at which you may be able to trade your Securities is likely to depend on the price, if any, at which JPMorgan Chase is willing to buy the Securities. If at any time the Dealer or another agent does not act as a market maker, it is likely that there would be little or no secondary market for the Securities.

If JPMorgan Chase does make a market for the Securities, it may cease to do so at any time without notice (subject to the rules of any applicable securities exchange).

Securities are also subject to selling restrictions and purchaser representations and requirements and transfer restrictions that may limit your ability to resell or transfer them

8. **What will be the price of your Securities if you are able to sell them?**

If it is possible to sell your Securities, they would be sold for the prevailing bid price in the market. The prevailing bid price may be affected by several factors including the performance of the Reference Asset, prevailing interest rates at the time of sale, the time remaining until the stated repayment date, transaction costs and the perceived creditworthiness of the Issuer and the Guarantor (if applicable). It is therefore possible that if you sell your Securities in the secondary market you may receive a price which is lower than your initial investment. See also question 5 (*Will the issue price of a Security reflect its market value on or after the issue date?)* above.

9. **If your Securities are linked to a Reference Asset, will you have recourse to that asset if the Issuer and the relevant Guarantor (if applicable) defaults?**

No. The Securities are linked to the performance of the Reference Asset, but there is no obligation on the Issuer or the Guarantor (if applicable) to hold the Reference Asset. Even if the Issuer or the Guarantor (if applicable) does hold the Reference Asset, it will not be segregated from the other assets of the Issuer or the relevant Guarantor (if applicable) or held for the benefit of the Holders of Securities.

10. **How much of your investment is at risk?**

For some Securities, as indicated in the relevant Pricing Supplement, you will be entitled to receive 100 per cent. or more of the face amount of the Securities on the maturity date. If you sell such Securities prior to the maturity date or in certain circumstances if the Securities are repaid early, you may not receive the entire face amount of such Security, and may receive less than the amount that you invested. You will always be exposed to the credit risk of the Issuer and the Guarantor (if applicable).

For other Securities, your investment may be at risk as you may receive an amount less than your original investment on the maturity date and may even lose your entire investment. In such circumstances, the value of the Securities can fluctuate and there is no guarantee that the value of the Securities will increase or that they will retain their value. The higher the potential return of your Securities, the greater the risk of loss attached to those Securities will be. You will always be exposed to the credit risk of the Issuer and the Guarantor (if applicable).

See "*Risk Factors*" above for more detailed information about the risks relating to the loss of any invested amounts. Further risks may be disclosed in the relevant Pricing Supplement.

11. **Who is the "Holder" of the Securities?**

In respect of Securities (other than German Securities, and French Securities, and Swiss Securities and Swiss Certificates (UBS-cleared) which constitute Intermediated Securities (as defined below)), the legal "Holder" of the Securities who is entitled to take action with respect to the Securities will for most purposes be the entity which appears in the records of the clearing system through which the Securities are held. Such entity (known as a custodian) may be your selling agent or another entity.

If you need to take any action with respect to your Securities (unless your Securities are German Securities or French Securities, or Swiss Securities or Swiss Certificates (UBS-cleared) which constitute Intermediated Securities), you must instruct the custodian who holds the Securities on your behalf to take such action (or procure that such action is taken) on your behalf.

In respect of German Securities, the end investor is the legal holder of such Securities. As such you are therefore entitled to take any action with respect to any German Securities you hold yourself.

In respect of French Securities, the "Holder" is the person whose name appears in the account of the relevant Euroclear France Account Holder or the Issuer or the French Registration Agent (as the case may be) as being entitled to such French Securities. Such person is entitled to take any action with respect to the relevant French Securities except, in respect of Holders of French Notes, if such right is deferred to the "Masse" for the defence of the common interest of the Holders.

As a matter of Swiss law, Swiss Securities which are either represented by a Global Security in registered form deposited with SIX SIS or issued in uncertificated form and entered into the main register (*Hauptregister*) of SIX SIS as custodian (*Verwahrungsstelle*) and have been entered into the securities accounts of one or more participants of SIX SIS, constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities**"), and, consequently, the holder of such Swiss Securities will be deemed to be each person holding any such Swiss Security in a securities account (*Effektenkonto*) that is in such person's name or, in the case of intermediaries (*Verwahrungsstellen*), each intermediary (*Verwahrungsstelle*) holding any such Swiss Security for its own account in a securities account (*Effektenkonto*) that is in such

intermediary's name (and the expression "Holder" as used herein shall be construed accordingly).

As a matter of Swiss law, Swiss Certificates (UBS-cleared) which are issued in uncertificated form and entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*) and credited to one or more securities accounts maintained by UBS Switzerland AG for and on behalf of its clients will constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities (UBS-cleared)**"), and, consequently, the holder of such Swiss Certificates (UBS-cleared) will be deemed to be each person holding any such Swiss Certificate (UBS-cleared) in a securities account (*Effektenkonto*) that is in such person's name or, in the case of intermediaries (*Verwahrungsstellen*), each intermediary (*Verwahrungsstelle*) holding any such Swiss Certificate (UBS-cleared) for its own account in a securities account (*Effektenkonto*) that is in such intermediary's name (and the expression "Holder" as used herein shall be construed accordingly).

12. **What rights do Holders have against an Issuer?**

Securities issued under this Programme will constitute direct, unsubordinated and unsecured obligations of the relevant Issuer and will rank equally among themselves and with all other direct unsubordinated and unsecured obligations of such Issuer, except for certain obligations that enjoy preferences or priorities.

A Holder's rights may include the right to have the principal amount of Securities repaid by such Issuer at maturity, the right to receive interest based on the principal amount of such Securities or otherwise, the right to receive a cash amount from the relevant Issuer calculated in accordance with the relevant Pricing Supplement or the right to receive delivery of a specified asset or assets against payment of a specified sum, all as more particularly described in the relevant Pricing Supplement.

Upon insolvency of the Issuer, Holders of the Securities will generally be paid at the same time as Holders of other unsecured obligations of the Issuer and will be paid after preferred obligations (for example, secured creditors). In respect of Securities issued by JPMSP, if JPMSP is unable to repay amounts due to Holders, each Holder will be treated equally with all other Holders who own unsecured Securities issued by JPMSP, but will be entitled to claim for any shortfalls in amounts owed but unpaid by JPMSP against the JPMSP Guarantor. In respect of Securities issued by JPMCFC, if for any reason JPMCFC does not make any required payment in respect of the Securities when due, the JPMCFC Guarantor will on demand pay the unpaid amount at the same place and in the same manner that applies to payments made by JPMCFC under the General Conditions. You will not have any recourse to any Reference Assets.

See also Risk Factor 1.2 (*Status of the JPMorgan Chase Bank, N.A. Guarantee and of Securities issued by JPMorgan Chase Bank, N.A.*) and Risk Factor 1.3 (*Status of the JPMorgan Chase & Co. Guarantee and of Securities issued by JPMorgan Chase & Co.*).

13. **What do you have to do to exercise your rights in respect of your Securities?**

In respect of Securities other than German Securities, your rights relating to the Securities are governed by the procedures of the relevant clearing systems. As only the legal Holders of the Securities can exercise any right to early repayment of the Securities, if you wish any such right to early repayment to be exercised on your behalf, you must contact the custodian through which you hold your interest for details of how to give notice. You should ensure proper and timely instructions are given to your custodian requesting that it notify the Holder to exercise the repayment right on your behalf.

In respect of German Securities, you may exercise your rights directly in accordance with the terms and conditions of your Securities. However, you will generally be required to instruct your custodian to transfer your Securities to the Relevant Programme Agent in order to do so.

In respect of Swiss Certificates (UBS-cleared) which are cleared and settled directly through UBS Switzerland AG and for which no external clearing of such Securities is possible through

any clearing system, you may exercise your rights in accordance with the terms and conditions of your Securities through UBS Switzerland AG in accordance with its rules, procedures and other requirements.

14. **How can you enforce your rights against an Issuer if the Issuer has failed to make a payment of principal on the Securities?**

The Issuer has executed a deed of covenant in respect of Securities which are governed by English law (other than Swiss Certificates (UBS-cleared), pursuant to which it covenants in favour of the Holders of Securities to comply with its obligations set out in the General Conditions and Specific Product Provisions. Holders of Securities are granted direct rights against the Issuer, including without limitation, the right to receive all payments, and are able to enforce such direct rights. This means that even if the legal "Holder" of the Securities is a depository on behalf of a clearing system, the accountholders in the clearing system will still be able to make a direct claim against the Issuer without having to rely on the depository doing so on their behalf. For the avoidance of doubt, each purchaser and subsequent Holder of New York Law Notes shall not have the benefit of the deed of covenant, and the deed of covenant shall not apply in respect of such Notes (including following an Event of Default).

In respect of German Securities, you may enforce your rights under the Securities directly against the Issuer. You may not rely on your custodian or any other person to make any claims on your behalf.

In respect of Swiss Certificates (UBS-cleared), such Securities do not have the benefit of any deed of covenant. Holders of such Securities have direct rights against the Issuer and will be able to make a direct claim against the Issuer.

15. **How are payments made to you?**

The Issuer will make payments of interest and principal or other amounts by paying the total amount payable to the clearing system(s), who will credit the appropriate amount to the account of each accountholder in such clearing system which holds the Securities (which may include your custodian), in each case, in accordance with the rules and policies of the clearing system(s). You must look to your custodian for payments on your Securities. The Issuer has no obligation to make payments directly to end investors.

If a date specified for payment is not a business day, then the Issuer will make the relevant payment on the first following day that is a business day. On these occasions, the payment will be treated as if it were made on the original specified date for payment and will not be considered to be a late payment. Accordingly, the Issuer will not pay any additional interest amount for the postponement.

16. **What if the Securities are not held through a clearing system?**

For Securities not held through a clearing system, the "Holder" will be the investor shown on the register in the case of Securities other than German Securities or, in the case of German Securities, the investor evidencing its holding of the Security to the satisfaction of the relevant Issuer. To receive payment under the terms of the Security you will need to contact the registrar (in the case of Securities other than German Securities) or the Relevant Programme Agent (for German Securities) and present evidence of your holding of the Security. The Issuer will not make payments to you directly but will do so through the Relevant Programme Agents.

17. **How are Reference Assets delivered to you?**

If the terms of the Securities specify that a Reference Asset will be delivered to you on any date specified in the relevant Pricing Supplement, you may be required to complete a reference asset transfer notice (the form of which can be obtained from the Relevant Programme Agent) and deliver it to the Relevant Programme Agent. If so required, upon receipt of a completed reference asset transfer notice, the Issuer will procure the delivery of the Reference Asset in the manner specified in the relevant Pricing Supplement or in such other commercially reasonable manner as the Issuer shall determine to be appropriate for such delivery and shall notify you in accordance with the General Conditions. Unless otherwise specified in the relevant Pricing

Supplement, delivery will usually take place through the clearing systems. The reference asset transfer notice will contain, amongst other things, certain representations in respect of the delivery of shares of a company (which are also set out in the section entitled "*Purchaser representations and requirements and transfer restrictions*" - "*Representations relating to Securities that may be settled by Physical Settlement of Shares*" of this Offering Circular and which are deemed to have been made), a certification of non-U.S. beneficial ownership or, in the case of Rule 144A Securities or Rule 144A New York Law Notes, that the Holder is an eligible investor for the purposes of U.S. securities laws or, in the case of Regulation S/Rule 144A Securities, certification of either non-U.S. beneficial ownership or that the Holder is an eligible investor for the purposes of U.S. securities law, as the case may be. If the reference asset transfer notice fails to set out the relevant representations or contain such a certification, the Issuer may deliver a cash amount which the Calculation Agent estimates to be the fair market value of the deliverable assets in lieu of the assets themselves. No reference asset transfer notice is required for Swiss Securities or for German Securities, save in the case of German Securities, where the relevant Pricing Supplement specifies the reference asset transfer notice to be applicable.

If the Issuer is unable to deliver the Reference Assets as a result of market disruption, it will deliver the deliverable assets on the day on which such disruption has ceased, and will not have any obligation to pay interest or other amounts to Holders to compensate them for the delay. The Issuer has a right, in its discretion, to settle any obligation to deliver Reference Assets where settlement has been disrupted by payment of a cash amount which the Calculation Agent estimates to be the fair market value of such Reference Assets.

18. **When are payments made to investors?**

Each type of Security will have a different repayment date or settlement date. Securities that bear interest (whether accrued at a fixed or floating rate or calculated by reference to a Reference Asset) will also have interest payment dates.

19. **Who calculates the amounts payable to you?**

Unless otherwise specified in the relevant Pricing Supplement, J.P. Morgan Securities plc, J.P. Morgan Securities LLC or J.P. Morgan SE will act as the Calculation Agent in respect of Securities, and in such capacity, will determine the performance levels of the Reference Asset(s) on specified valuation dates and will determine any interest amounts and the redemption amounts and/or physical settlement amounts payable or deliverable by the Issuer in respect of such Securities. In the event that a disruption event has occurred in respect of a Reference Asset on a specified valuation date which renders it impossible for the Calculation Agent to make a determination on such date, the valuation may be postponed to an alternative date in accordance with the terms and conditions of the Securities.

In the event that the performance of the relevant Issuer's obligations under the Securities shall have become unlawful in whole or in part as a result of compliance in good faith by such Issuer with any applicable present or future applicable law or regulation, which results in the early redemption or termination of the Securities, the Early Payment Amount payable in respect of the Securities will be determined by the Calculation Agent.

See also the section "*Overview of the potential for discretionary determinations by the Calculation Agent and the Issuer*" below, Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) above and question 25 (*How is the Early Payment Amount calculated?*) below.

If the Calculation Agent determines that a Payment Disruption Event, Market Disruption Event, Potential Adjustment Event, Extraordinary Event, Additional Disruption Event, Index Adjustment Event, Change in Law, Fund Event, Unpaid Redemption Proceeds Event, In-kind Redemption Proceeds Event, FX Disruption Event or Settlement Disruption Event and any other applicable event has occurred, any consequential postponement of, or any alternative provisions for, valuation or the obligation to pay provided in the terms and conditions of any Securities

and/or early redemption or termination of the Securities and/or substitution or replacement of the Reference Asset may have an adverse effect on the value of such Securities. See also Risk Factor 7.1 (*JPMorgan Chase as Issuer and Calculation Agent has authority to make discretionary determinations under the Securities*) above.

20. **What is a "Payment Disruption Event" and what are its consequences?**

A "Payment Disruption Event" is an event which (a) prevents, restricts or delays the Issuer from converting or delivering relevant currencies, (b) imposes capital or exchange controls, (c) implements changes to laws relating to foreign investments, or (d) otherwise prohibits or prevents the Issuer from making a payment or performing an obligation required of it as a result of war, catastrophe, governmental action or other event beyond its control. Where the Calculation Agent determines that a Payment Disruption Event has occurred or is likely to occur, then the next payment or settlement or exercise date (as applicable) under the Securities may be postponed to a date falling 14 calendar days after the date on which the Payment Disruption Event is no longer occurring. No interest shall accrue and no Event of Default will result on account of such postponement. Partial Payments may be paid during such period (after deduction for any expenses). In the event that a Payment Disruption Event is still continuing on the date which is one year after the last scheduled payment date for the Securities, then the Issuer shall, by giving notice to Holders in accordance with General Condition 27 (*Notices*), make payment (in whole or in part) of the relevant amount in an equivalent amount in U.S. dollars, and the Issuer shall have no further obligations whatsoever under the Securities.

21. **Are the Calculation Agent's determinations binding on you?**

All calculations, determinations or adjustments made by the Calculation Agent shall, in the absence of manifest error, be final, conclusive and binding on the Holders of the Securities. The Calculation Agent has a broad discretion to make changes to the terms of your Securities if any of the events described in the section headed "*Overview of the potential for discretionary determinations by the Calculation Agent and the Issuer*" occur. However, the Calculation Agent is not required to consult with Holders before making any determinations, and it is expected that it will not do so. In making its determinations, the Calculation Agent will take into account relevant market factors including, but not limited to, interest rates, the term structure of interest rates, spot foreign exchange rates and any other factors which the Calculation Agent may deem relevant. The Calculation Agent is an agent of the Issuer and not of the Holders of Securities. You should also be aware that the Calculation Agent is likely to be J.P. Morgan Securities plc, J.P. Morgan Securities LLC or J.P. Morgan SE which are each affiliates of the Issuer. See the section entitled "*Conflicts of Interest*" above.

22. **Are there any fees, expenses or taxes to pay when purchasing, holding or selling Securities?**

You may incur fees and expenses in relation to the purchase, holding, transfer and sale of Securities. You should always be aware that stamp duties, financial transaction taxes or other taxes may have to be paid in accordance with the current or future laws and practices of any relevant country (potentially including countries where the Securities are issued or transferred or where a counterparty is resident). You should consult your selling agent for details of fees, expenses, commissions or other costs payable to your selling agent, and your own tax advisors in order to understand fully the tax implications specific to investment in any Security.

23. **Under what circumstances may the Securities be redeemed or terminated before their stated maturity?**

The Issuer has the right in certain circumstances to redeem or terminate the Securities earlier than the specified maturity or settlement date and repay the Holder an early payment amount. There are also other circumstances in which the Securities may be redeemed or terminated early. These reasons may include:

- the occurrence of a mandatory early redemption event (e.g., the price or level of the Reference Asset rises above or falls below a pre-determined barrier level), if specified in the terms and conditions of the Securities;

- the exercise by the Issuer of a call option, if specified to be applicable in the relevant Pricing Supplement (as to which, see Risk Factor 3.4 (*There are risks where the Securities include an Issuer call option*) above);

- the exercise by the Holder of a put option, if specified to be applicable in the relevant Pricing Supplement;

- the occurrence of certain events outside of the control of the Issuer or other circumstances in relation to a Reference Asset at the discretion of the Calculation Agent, where applicable (see the *Specific Product Provisions*) or in relation to the floating rate of interest or coupon rate or other variable linked interest;

- the Issuer determines that its performance under any Security has become unlawful in whole or in part for any reason (see General Condition 16 (*Early Redemption or Termination for Illegality*));

- in certain circumstances where the relevant Issuer determines that it will become subject to withholding tax on payments made to it as a result of Holders failing to provide information required by FATCA, there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA or there is a substantial likelihood that a series of Securities will be treated, for U.S. federal income tax purposes, as being in bearer form (see General Condition 18.3 (*Early Redemption or Termination for Taxation - FATCA*));

- the occurrence of certain taxation events with respect to the Securities or (if specified to be applicable in the relevant Pricing Supplement) with respect to underlying hedging transactions (see General Condition 18.4 (*Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions*));

- following an Event of Default (see General Condition 15 (*Events of Default*));

- following the occurrence of an Extraordinary Hedge Disruption Event, if specified to be applicable in the relevant Pricing Supplement (see General Condition 17 (*Extraordinary Hedge Disruption Event*) and question 38 (*What is an "Extraordinary Hedge Disruption Event" and what are its consequences?*));

- following the occurrence of a Disruption Event, if specified to be applicable in the relevant Pricing Supplement (see General Condition 19 (*Disruption Event*)) and question 39 (*What is a "Disruption Event" and what are its consequences?*)); or

- if (i) it would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine the level or other value of a "benchmark" Reference Asset or make any other determination in respect of the Securities which it would otherwise be obliged to do so pursuant to the Conditions, or (ii) if the applicable benchmark administrator does not obtain or maintain (as applicable) such authorisation or registration or, if a non-EU entity, "equivalence" is not available and it is not recognised, then the Securities may be redeemed prior to maturity. See Risk Factor 4.3 (*Risks associated with benchmark reform and the discontinuance, loss of representativeness and replacement of "IBORs"*).

The Early Payment Amount may be less than the original purchase price of the Securities. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) above and question 25 (*How is the Early Payment Amount calculated?*) below.

For some Securities, the Issuer's right to repay the Securities can be exercised at any time or the Issuer may repay the Securities on the occurrence of a specified trigger event.

24. **Are there any other circumstances in which your Securities may become repayable prior to maturity?**

In respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., you will have the right to require the Issuer to redeem the Securities if an event of default has occurred and is continuing, subject to the event of default continuing over a certain minimum number of days and the other requirements of General Condition 15 (*Events of Default*).

In respect of Securities issued by JPMCFC, you will have the right to require the Issuer to redeem the Securities if an event of default (other than the insolvency of JPMCFC) has occurred and is continuing, provided that the Holders of not less than 25 per cent. of (i) (in the case of Notes) the aggregate principal amount of the outstanding Notes of the relevant Series and (ii) (in the case of Certificates) the total number of the outstanding Certificates of the relevant Series, in each case give written notice to the Issuer thereof, and subject to the conditions and requirements of General Condition 15 (*Events of Default*). However, the Securities will be redeemed automatically, and without any declaration or other action by you, in the event of the insolvency of JPMCFC.

25. **How is the Early Payment Amount calculated?**

(a) The Early Payment Amount is determined on the second Business Day immediately preceding the due date for the early redemption or settlement of the Securities. Save where (i) "Early Payment Amount 3" is applicable or (ii) the Securities are New York Law Notes and the Early Payment Amount is payable following an Event of Default or (iii) the relevant Pricing Supplement or the Conditions otherwise provide, the Early Payment Amount represents the fair market value of such Securities, determined using JPMorgan Chase's internal models and methodologies by reference to such factors as the Calculation Agent may consider to be appropriate including, without limitation:

(i) if the early redemption results from an event that will cause the Issuer's obligations under the Securities to be or to become illegal:

- market prices or values for the underlying(s) and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid or offer prices of the underlying(s) (as relevant);
- the remaining term of the Securities had they remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption;
- the value at the relevant time of any minimum redemption or cancellation amount which would have been payable had the Securities remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption or exercise date;
- if applicable, accrued interest;
- internal pricing models;
- prices at which other market participants might bid for securities similar to the Securities; and
- any other information which the Calculation Agent considers to be relevant (but ignoring the event which resulted in such early redemption).

(ii) if the early redemption results from:

(A) external events which affect the Issuer's hedging arrangements (such as Change in law, Change in law-Increased Cost, Hedging Disruption, Insolvency Filing or Commodity Hedging Disruption Event) (in each case, where applicable in respect of the relevant Securities);

(B) an event which will cause the Issuer's obligations under its hedging arrangements related to the Securities to be or to become illegal (such as an Extraordinary Hedge Sanctions Event, Extraordinary Hedge Bail-In Event and Extraordinary Hedge Currency Disruption Event) (in each case, if specified to be applicable in the relevant Pricing Supplement); or

(C) external events which affect the Reference Asset(s) (such as Potential Adjustment Events, Extraordinary Events, Successor Index Event (ETF), Successor to a Commodity Reference Price, Successor Index Sponsor or Successor Index, Index Adjustment Events or Commodity Index Adjustment Events, Successor Currency, Rebasing of Securities, Fund Events and Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event):

- market prices or values for the underlying(s) and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid and offer prices of the underlying(s) (as relevant);
- the remaining term of the Securities had they remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption;
- the value at the relevant time of any minimum redemption or cancellation amount which would have been payable had the Securities remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption or exercise date;
- if applicable, accrued interest;
- internal pricing models;
- prices at which other market participants might bid for securities similar to the Securities; and
- any other information which the Calculation Agent considers to be relevant.

(b) Further, if the relevant Pricing Supplement specifies the Early Payment Amount as "Early Payment Amount 2", the amount determined in accordance with paragraph 25(a) above may be adjusted to account for all costs incurred by the Issuer and/or its affiliates in connection with the early redemption, including any costs of unwinding any funding relating to the Securities or related underlying hedge transactions, and all other related expenses.

(c) If early redemption results from an Event of Default (as defined in General Condition 15.1 (*Occurrence of Event of Default*)), the Early Payment Amount due and payable in respect of such Security shall be, in respect of:

(i) each Security that is a Zero Coupon Note (irrespective of whether such Security is a New York Law Note or a Security that has a Minimum Redemption Amount (as defined in General Condition 32.1 (*Definitions*))), the Amortised Face Amount in respect of the Acceleration Date (as defined in General Condition 15.2 (*Consequences of an Event of Default*) as determined by the Calculation Agent in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*);

(ii) each Security that has a Minimum Redemption Amount and that is not a Zero Coupon Note or a New York Law Note, the greater of (I) the Minimum Redemption Amount and (II) Early Payment Amount 1, Early Payment Amount 2 or Early Payment Amount 3, as specified to be applicable in the relevant Pricing Supplement calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount;

(iii) each Security that is a New York Law Note and that is not a Zero Coupon Note (and irrespective of whether such Security has a Minimum Redemption Amount), Early Payment Amount 3 (as defined in General Condition 32.1 (*Definitions*)); and

(iv) each Security that is not a Zero Coupon Note, a New York Law Note or a Security that has a Minimum Redemption Amount, Early Payment Amount 1, Early Payment Amount 2 or Early Payment 3, as specified to be applicable in the relevant Pricing Supplement, or such other amount as may be specified in the relevant Pricing Supplement, calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount.

(d) If the relevant Pricing Supplement specifies the Early Payment Amount as "Early Payment Amount 3" or the Securities are New York Law Notes and the Early Payment Amount is payable following an Event of Default, the Early Payment Amount shall be the outstanding nominal amount of the relevant Security, including, if applicable, any accrued interest to (but excluding) the date of redemption or settlement of the Securities.

(e) If the relevant Pricing Supplement specifies that Early Payment Amount is determined in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*), the Early Payment Amount shall be equal to the scheduled Final Redemption Amount discounted at a rate per annum equal to the Amortisation Yield (compounded annually).

26. **Can the Issuer amend the condition of the Securities once they have been issued without your consent?**

Yes, under certain circumstances described below.

The terms and conditions of Securities other than French Securities and German Securities may be amended by the Issuer with the approval of the Calculation Agent but without the consent of the Holders (subject as provided above) if the amendment:

- is of a formal, minor or technical nature; or
- is made to cure a manifest or proven error; or
- is made to cure any ambiguity, or is made to correct or supplement any defective provisions of the Securities; or
- is made to correct an error or omission such that, in the absence of such correction, the terms of the Securities would not otherwise represent the intended terms of the Securities on which the Securities were sold and have since traded; or
- will not materially and adversely affect the interests of the Holders.

In addition, other changes may be made to the terms and conditions with the consent of the Holders of the Securities (other than French Securities and German Securities). In order to make such changes, the Issuer requires the consent of up to 75 per cent. of Holders. If the amendment is approved, any dissenting Holders will be bound by such changes. Therefore the Issuer may be able to make a change which you have voted against if up to 75 per cent. or more of Holders have approved the change.

French Notes may only be amended following consent of two-thirds of Holders and French Securities other than French Notes may only be amended following consent of a majority of Holders, in each case at a meeting of Holders.

In respect of French Notes which have a Specified Denomination of at least EUR 100,000 or which can be traded in amounts of at least EUR 100,000 (or its equivalent in the relevant currency as of the Issue Date), the Issuer may amend the Conditions of the Securities without the consent of the Holders to correct a manifest error.

In the case of German Securities, the terms and conditions of the Securities may be amended by the Issuer without the consent of the Holders, if the amendment is to correct any manifest clerical or calculation errors or similar manifest incorrectness. In addition, the Issuer, may without the consent of the Holders, amend or supplement at its reasonable discretion any contradictory or incomplete provisions of the terms and conditions of the Securities, provided that such amendments are reasonably acceptable to the Holder. See General Condition 24.1(b) (*Modification of German Securities without Holder consent*).

Furthermore, the Holders may agree to amendments to the terms and conditions of the Securities with regard to matters permitted by the German Bond Act of 2009 (Schuldverschreibungsgesetz) by resolution with the majority specified in General Condition 24.1(e)(ii) proposed by the Issuer. Majority resolutions shall be binding on all Holders. See General Condition 24.1(e) (*Modification of German Securities with Holder consent*).

In all other cases, the terms and conditions of German Securities can only be amended with the consent of all of the Holders of such Securities.

Following the occurrence of certain events, the Calculation Agent, on behalf of the Issuer, may be entitled to amend the terms and conditions of Securities without requiring the consent of the Holders of such Securities. Typically, such events will have affected the composition, or calculation, of the Reference Asset(s) to such an extent that the Calculation Agent could not make any adjustment to account for the economic effect on the Securities without amending the terms and conditions of the Securities. See questions 27 (*What are Share Linked Securities?*), 29 (*What are Index Linked Securities?*), 31 (*What are Commodity Linked Securities?*), 33 (*What are FX Linked Securities?*), 36 (*What are Fund Linked Securities?*) and 38 (*What are Bond Linked Securities?*) below.

27. **What are Share Linked Securities?**

Amounts payable or assets deliverable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to the performance of a share or a basket of shares (or one or more global depositary receipts or shares of exchange traded funds) over a fixed period of time or on fixed dates. Such Securities are known as Share Linked Securities. The shares of companies or exchange traded funds that are referenced by such Securities are likely to be traded on a stock exchange and the prices of such shares may be published on recognised information services, for example, Bloomberg or Reuters screens or on the website of the share issuer or exchange traded fund, in which case you will be able to monitor the relevant share prices during the life of the Share Linked Securities.

28. **What are the Share Linked Provisions?**

The Share Linked Provisions deal with how the payments related to Share Linked Securities are calculated and the consequences following the occurrence of (a) a disruption event which results in the Calculation Agent not being able to obtain a tradable price for a share on a day which it is required to do so in accordance with the terms and conditions of the Share Linked Securities, (b) an adjustment event which has a diluting or concentrative effect on the price of a share, for example, a free distribution or dividend to existing holders, (c) an extraordinary event relating to a share (including a global depositary receipt or a share of an exchange traded fund), for example, a merger event, delisting or insolvency, (d) for a share of an exchange traded fund and if specified in the relevant Pricing Supplement, an extraordinary event relating to the share (for example, a failure to publish the net asset value for more than a short period and/or which is non-temporary in nature and has a material effect on the Share Linked Securities, or a permanent cancellation or material modification of the index underlying the exchange traded fund) or (e) for a share of an exchange traded fund and if specified in the relevant Pricing Supplement, a successor index event (ETF), whereby the index underlying the exchange traded fund is either calculated and announced by a successor sponsor or replaced by a successor index using the same or substantially similar calculation formula and method as the index.

Examples of disruption events include (but are not limited to) (i) a suspension or limitation of trading relating to the share, (ii) a disruption or impairment of the ability of market participants to effect transactions or obtain values for shares on the exchange on which the shares are listed,

(iii) a non-scheduled early closure of the exchange, for example as a result of an IT problem or (iv) for a share of an exchange traded fund and if specified in the relevant Pricing Supplement, a temporary failure to publish the net asset value which has a material effect on the Share Linked Securities.

Adjustment provisions in the Share Linked Provisions allow the Calculation Agent to amend the terms and conditions of the Share Linked Securities so that they continue to produce a commercially reasonable result. In certain circumstances following the occurrence of such events, the Share Linked Securities will be redeemed (see question 23 (*Under what circumstances may the Securities be redeemed or terminated before their stated maturity?*) above).

29. **What are Index Linked Securities?**

Amounts payable or assets deliverable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to the performance of an index or a basket of indices over a fixed period of time or on fixed dates. Such Securities are known as Index Linked Securities.

A share-based index is a synthetic portfolio of shares representing a particular market or portion of it and each such index has its own calculation methodology and is usually expressed in terms of a change from a base value.

There are three types of such share-based indices that are referenced by Index Linked Securities: (a) a unitary index, where the underlying shares are deemed to trade on a single stock exchange and the level of such index is published on a recognised information service; (b) a multi-exchange index, where the underlying shares are deemed to trade on more than one stock exchange and the level of such index is published on a recognised information service; and (c) a proprietary index, where the level of such index is calculated by the entity that owns and sponsors such index rather than relying on the stock exchange traded prices of the underlying shares. A JPMorgan Chase affiliate may be the sponsor of an index.

30. **What are the Index Linked Provisions?**

The Index Linked Provisions deal with how the payments related to Index Linked Securities are calculated and the consequences following the occurrence of (a) a disrupted day or a disruption event with respect to an index which results in the Calculation Agent not being able to obtain a tradable level for an index on a day which it is required to do so in accordance with the terms and conditions of the Index Linked Securities or (b) an adjustment event with respect to an index.

A disrupted day has a different meaning for each type of index: (i) in respect of a unitary index, a day on which the exchange on which the underlying shares trade and the related exchange (on which trading in futures or options contracts related to such index) is scheduled to be open for trading but fails to open or a day on which a disruption event has occurred; (ii) in respect of a multi-exchange index, a day on which the index sponsor fails to publish the index level or the related exchange (on which trading in futures or options contracts related to such index) fails to open or a day on which a disruption event has occurred; and (iii) in respect of a proprietary index, a day on which a disruption event has occurred.

Examples of disruption events in respect of a unitary index and a multi-exchange index include (but are not limited to) (A) a suspension or limitation of trading relating to the shares that comprise 20 per cent. of the index, (B) a disruption or impairment of the ability of market participants to effect transactions or obtain tradable values for shares that comprise 20 per cent. of the index on the exchanges on which such shares are listed or (C) a non-scheduled early closure of the exchanges in respect of shares that comprise 20 per cent. of the index, for example as a result of a technology problem.

Examples of index adjustment events include (but are not limited to) (I) the cancellation and non-replacement of an index, (II) the failure to publish the index level, and (III) a non-scheduled material modification to the formula for, or calculation of, the index.

Adjustment provisions in the Index Linked Provision allow the Calculation Agent to amend the terms and conditions of the Index Linked Securities so that they continue to produce a commercially reasonable result. In certain circumstances following the occurrence of such events, the Index Linked Securities will be redeemed (see question 23 (*Under what circumstances may the Securities be redeemed or terminated before their stated maturity?*) above).

31. **What are Commodity Linked Securities?**

Amounts payable or assets deliverable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to the performance of a commodity, or a basket of commodities, a commodity index or a basket of commodity indices over a fixed period of time or on fixed dates. Such Securities are known as Commodity Linked Securities.

Commodities (including contracts that provide for physical settlement or are based on the price of a deliverable commodity) and commodity indices are generally divided into four main classes: (a) energy, which includes crude oil, gasoline, heating oil and natural gas; (b) agricultural produce, which includes corn, soybeans, soybean oil, wheat, sugar, cocoa, cotton and coffee; (c) livestock, which includes cattle and lean hogs; and (d) metals, which can be subdivided into base metals such as aluminium, copper, nickel, lead and zinc, and precious metals such as gold, silver and platinum.

A commodity index is generally a synthetic production-weighted basket of commodity futures contracts that satisfy specified criteria and is designed to be a liquid and diversified benchmark for such commodities. Each commodity index has its own composition and calculation methodology and is usually expressed in terms of a change from a base value.

32. **What are the Commodity Linked Provisions?**

The Commodity Linked Provisions deal with how the payments related to Commodity Linked Securities are calculated and the consequences following the occurrence of (a) a disruption event with respect to a commodity or commodity index which results in the Calculation Agent not being able to obtain a price for a commodity or a level for a commodity index on a day which it is required to do so in accordance with the terms and conditions of the Commodity Linked Securities or (b) an adjustment event with respect to a commodity index.

Examples of disruption events in respect of commodities include (but are not limited to) (i) the disappearance of trading in, or the price of, the commodity, (ii) a material change in the content or calculation formula of the commodity, (iii) the failure to publish the price of the commodity, (iv) the material suspension of or limitation on, trading in the commodity, and (v) the imposition of tax on the commodity.

Examples of disruption events in respect of commodity indices include (but are not limited to) (A) a material limitation, suspension or disruption of trading in one or more futures contracts included in the commodity index, (B) the closing price of a futures contract included in the commodity index exceeds or falls below the exchange's permitted price limits and (C) the failure to publish a price of a futures contract included in the commodity index.

Examples of commodity index adjustment events include (but are not limited to) (I) the cancellation and non-replacement of a commodity index, (II) the failure to publish the index level and (III) a non-scheduled material modification to the formula for, or calculation of, the commodity index.

Adjustment provisions in the Commodity Linked Provisions allow the Calculation Agent to amend the terms and conditions of the Commodity Linked Securities so that they continue to produce a commercially reasonable result following the occurrence of commodity index adjustment events. In certain circumstances following the occurrence of such events, the Commodity Linked Securities will be redeemed (see question 23 (*Under what circumstances may the Securities be redeemed before their stated maturity?*) above).

33. **What are FX Linked Securities?**

Amounts payable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to the performance of a foreign exchange rate or a basket of foreign exchange rates over a fixed period of time or on fixed dates. Such Securities are known as FX Linked Securities. Foreign exchange rates indicate the relationship between one specified currency and another currency. The values of such foreign exchange rates are published by recognised information services or are determined by central banks.

34. **What are the FX Linked Provisions?**

The FX Linked Provisions deal with how the payments related to FX Linked Securities are calculated and the consequences following the occurrence of a disruption event with respect to an exchange rate which results in the Calculation Agent not being able to obtain an exchange rate on a day which it is required to do so or to actually convert one relevant currency into another in accordance with the terms and conditions of the FX Linked Securities.

Examples of disruption events include (a) the occurrence of an event which means it becomes impossible to obtain the exchange rate and (b) the occurrence of an event which affects the convertibility of a reference currency into the base currency.

Adjustment provisions in the FX Linked Provisions allow the Calculation Agent to amend the terms and conditions of the FX Linked Securities so that they continue to produce a commercially reasonable result. In certain circumstances following the occurrence of such events, the FX Linked Securities will be redeemed (see question 23 (*Under what circumstances may the Securities be redeemed before their stated maturity?*) above).

35. **What are Credit Linked Notes?**

Credit Linked Notes are Notes in respect of which the amount payable at maturity and the amount payable on each interest payment date (if any) are linked to the credit risk of one or more underlying entities (each a "**Reference Entity**"). In exchange for a higher rate of interest or other return on the Notes in the absence of a Credit Event, investors take the risk that the amount which they receive at maturity will be less than the face value of the Note and the amount of interest they receive may be reduced if the Reference Entity has, amongst other similar things, become insolvent or defaulted on its obligations. Insolvency or default of a Reference Entity is referred to as a "Credit Event" having occurred. If a Credit Event has occurred with respect to a Reference Entity to which your Notes are linked, you will receive a reduced percentage (which may be zero) of the face value of each Note you hold calculated by reference to the recovery rate achieved by creditors of the Reference Entity if your Notes are cash settled.

36. **What are Fund Linked Securities?**

Amounts payable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to a fund or a basket of funds over a fixed period of time or on fixed dates. Such Securities are known as Fund Linked Securities.

The funds, that are referenced by such Securities, are managed by fund management companies who select underlying fund components and manage such underlying fund components.

37. **What are the Fund Linked Provisions?**

The Fund Linked Provisions deal with how the payments related to Fund Linked Securities are calculated, together with various other provisions in relation to fund shares which are referenced by Securities, namely:

(i) potential adjustment events (e.g., where the terms of the Share of a Fund have been adjusted in a dilutive or concentrative way), and their consequences for the Securities (e.g., adjustments to the terms and conditions);

(ii) fund events (e.g., fund insolvency, termination, merger, nationalisation or fund extraordinary events such as certain global events, net asset value and performance issues, trading matters, exceptional failures and regulatory and legal constraints) and

their consequences for the Securities (e.g., adjustments, substitution of the fund, or early redemption); and

(iii) other events in relation to the fund (e.g., failure to pay full redemption proceeds or payment in kind to a holder of fund shares) and their consequences for the Securities (e.g., postponement and/or cancellation of the payment obligations).

38. **What are Bond Linked Securities?**

Amounts payable in respect of some Securities, as indicated in the relevant Pricing Supplement, will be calculated by reference to a bond or a basket of bonds over a fixed period of time or on fixed dates. Such Securities are known as Bond Linked Securities.

The bonds, that are referenced by such Securities, are issued by the relevant Reference Entity and may be denominated in a different currency (which may include emerging market currencies) to the Securities. In investing in the Securities, investors are exposed to the credit risk of the Reference Entity and will have no rights against the Reference Entity or interest in the bonds if the Reference Entity defaults.

39. **What are the Bond Linked Provisions?**

The Bond Linked Provisions deal with various provisions in relation to bonds and the issuers of such bonds which are referenced by Securities, namely:

(i) early redemption events (e.g., failure to pay, bond redemption, obligation acceleration, repudiation/moratorium, restructuring, inconvertibility event, sovereign event, expropriation/hedge event, bond tax event, bankruptcy, sanction event, governmental intervention or any other events which adversely affect a bond and/or the issuer of such bond), and their consequences for the Securities (i.e., optional early redemption of the Securities by the Issuer);

(ii) adjustment events (e.g., residual risk event, settlement/custodial event and tax event) and their consequences for the Securities (e.g., adjustment to any amount payable under the Securities); and

(iii) limited recourse of a Holder to payments which would be actually received by a hypothetical broker dealer holding a certain principal amount of such bonds and limitation of such Holder's interests and rights in such bonds.

40. **What is an "Extraordinary Hedge Disruption Event" and what are its consequences?**

An "Extraordinary Hedge Disruption Event" is one or more of the following events (in each case, if specified to be applicable in the relevant Pricing Supplement):

- an "Extraordinary Hedge Sanctions Event" - in broad terms, due to a change in law relating to financial sanctions and embargo programmes (or change in interpretation of such law), it becomes illegal or is likely to become illegal within the next 90 days for the Hedging Entity to perform its obligations under hedging transactions in relation to the relevant Securities;

- an "Extraordinary Hedge Bail-in Event" - in broad terms, the Hedging Entity or its counterparty becomes subject to a resolution regime and, as a result, the obligations of the Hedging Entity or its counterparties under hedging transactions in relation to the Securities are subject to the exercise of a "bail-in" or other resolution power by the relevant resolution authority (or it is likely that the resolution authority will exercise a "bail-in" or other resolution power within the next 90 days) or there is otherwise a material adverse effect on such hedging transactions; or

- an "Extraordinary Hedge Currency Disruption Event" - in broad terms, a governmental authority introduces, or is likely to introduce within the next 90 days, a new currency and/or capital controls and, as a result, the payment obligations under the hedge transactions relating to the Securities are redenominated into another currency and/or are

subject to capital controls and/or such hedge transactions are otherwise materially adversely affected.

The Pricing Supplement of the relevant Securities will specify whether or not any of the three events described above is applicable or not in relation to those Securities. If an event may be both an Extraordinary Hedge Disruption Event and a "Payment Disruption Event" (as described in question 20 (*What is a "Payment Disruption Event" and what are its consequences?*)) and the Issuer elects to redeem or terminate (as applicable) the Securities, the consequences relating to Payment Disruption Events described in question 20 (*What is a "Payment Disruption Event" and what are its consequences?*) will not apply.

If an 'Extraordinary Hedge Disruption Event' occurs, the Issuer may redeem or terminate the Securities earlier than the specified maturity or settlement date and repay the Holder an Early Payment Amount. The Early Payment Amount may be less than the price at which you purchased the Securities. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) and Risk Factor 5.4 (*Where applicable, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of an Extraordinary Hedge Disruption Event*) above.

41. **What is a "Disruption Event" and what are its consequences?**

A "Disruption Event" is one or more of the following events (if (i) the Specific Product Provisions are not applicable and (ii) "Disruption Event" is specified to be applicable in the relevant Pricing Supplement):

- a "Change in Law (Hedge)" - in broad terms, due to a change in any applicable law or regulation (including, without limitation, any tax law) (or change in interpretation of such law) (i) it becomes illegal or is likely to become illegal within the next 15 calendar days prior to the maturity of the Securities for the Hedging Entity to hold, acquire or dispose of any asset in relation to the Underlying Hedge Transactions, or (ii) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities; or

- a "Hedging Disruption" - in broad terms, the Hedging Entity is unable, after using commercially reasonable efforts, to hedge the risk (e.g. if the Hedging Entity is unable to enter into a hedge, substitute the hedge or to realise the proceeds of a hedge) of the Issuer issuing, entering into and performing its obligations under the Securities.

The Pricing Supplement of the relevant Securities will specify whether or not any of the two events described above is applicable or not in relation to those Securities.

If a "Disruption Event" occurs, the Issuer may adjust the terms and conditions of the securities, or may redeem or terminate the Securities (as applicable) earlier than the specified maturity or settlement date and repay the Holder an Early Payment Amount. The Early Payment Amount may be less than the price at which you purchased the Securities. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) and Risk Factor 5.4 (*Where applicable, the Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity due to the occurrence of an Extraordinary Hedge Disruption Event*) above.

OVERVIEW OF THE POTENTIAL FOR DISCRETIONARY DETERMINATIONS BY THE CALCULATION AGENT AND THE ISSUER

Under the terms and conditions of your Securities, following the occurrence of certain events outside of its control, the Calculation Agent or the Issuer (as applicable) may exercise discretion to take one or more actions available to it in order to deal with the impact of such events on the Securities and (if specified to be applicable to the particular issue of Securities) the Issuer's hedging arrangements. **Any such discretionary determination by the Calculation Agent or the Issuer could have a negative impact on the value of and return on the Securities and (amongst other things) could result in their early redemption.**

Below is an overview of the types of events that could give rise to a discretionary determination by the Calculation Agent or the Issuer and the actions available to them to deal with the impact of such events. The specific events and available actions will vary depending on the particular issue of Securities: you should also read the Conditions of the Securities (set out in "*Terms and Conditions of the Securities*" of this Offering Circular below) read together with the relevant Pricing Supplement which will specify the particular elections.

1. **What are the types of events that could give rise to a discretionary determination by the Calculation Agent or the Issuer?**

   There are two broad types of external events which could trigger a discretionary determination to be made by the Calculation Agent or the Issuer:

   (i) external events affecting the floating rate Securities and Reference Asset(s) – see paragraph 4 below; and

   (ii) external events affecting the Issuer's hedging arrangements - see paragraph 5 below.

   Under the terms and conditions of the Securities, there are also other types of events which could trigger a discretionary determination by the Calculation Agent or the Issuer. For example, if the Issuer's obligations under the Securities become or will become illegal or certain taxation events occur, the Calculation Agent may adjust the terms of the Securities or may determine that the Securities shall redeem early. See, respectively, General Conditions 16 (*Early Redemption or Termination for Illegality*) and 18 (*Taxation and Early Redemption or Termination for Taxation*) in "*Terms and Conditions of the Securities*" below, together with "Risk Factors" generally and Commonly Asked Question 23 (*Under what circumstances may the Securities be redeemed or terminated before their stated maturity?*).

   Further events which could trigger a discretionary determination by the Calculation Agent or the Issuer include disruption events in relation to the Reference Asset(s), currency disruption events and setting final values for an offering – see paragraph 6 below.

   Some of the events will only apply to certain types of Reference Asset(s) and may only apply in relation to any particular issuance of Securities if specified to be applicable in the relevant Pricing Supplement.

2. **If such an event occurs, what are the discretionary determinations that the Calculation Agent or Issuer may take?**

   Broadly, depending on the terms of the particular issue of Securities (and bearing in mind that different terms may apply to different types of Reference Asset(s) and where specified to be applicable in the relevant Pricing Supplement), the Calculation Agent or the Issuer (as applicable) may take one or more of the following actions in order to deal with the effect of the events outlined above:

2.1 **Adjustments**: In respect of:

   (a) **Share Linked Securities, Index Linked Securities, Commodity Linked Securities and FX Linked Securities**, the Calculation Agent may adjust the terms and conditions of the Securities to account for the economic effect of the external event on the Reference Asset(s) and (where specified to be applicable) on its hedging arrangements, and to

preserve the original economic objective and rationale of the Securities. This may include adjustments to the amount(s) payable and/or any variable relevant to payment or delivery under the Securities;

(b) **Fund Linked Securities**, if an Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event has occurred, the Calculation Agent may defer the date of payment of the relevant amount under the Securities, and adjust the amount payable under the Securities to account for such event (including to reduce the amount payable on the scheduled payment date, and to determine whether any further amounts may be payable to reflect any amounts received or realised upon a redemption of the relevant fund shares). **If an Unpaid Redemption Proceeds Event continues to subsist and/or there are still outstanding in-kind redemption proceeds which have not been realised one year from the scheduled relevant payment date, then any outstanding payment obligations of the Issuer in respect of such outstanding amounts shall be deemed to be fully discharged without any further payment to an investor**; and

(c) **Bond Linked Securities**, the Calculation Agent will determine the loss suffered, or costs or expenses reasonably incurred by a Hypothetical Broker Dealer (or any of its agents or affiliates) as a result of an Adjustment Event, which will reduce pro rata (to the proportion of the Securities of the same Series held by such Holder) any amount payable by the Issuer to a Holder by an amount equal to such loss, costs or expenses determined by the Calculation Agent.

2.2 **Substitution**: In respect of:

(a) **Share Linked Securities** where "Share Substitution" is specified to be applicable in the relevant Pricing Supplement, following an Extraordinary Event (as described below), the Calculation Agent may substitute the Reference Asset(s) with a replacement asset satisfying the criteria set out in the Share Linked Provisions. The Calculation Agent may also make adjustments to the terms and conditions of the Securities to account for the Extraordinary Event and the replacement of the original Reference Asset, and to preserve the original economic objective and rationale of the Securities; and

(b) **Fund Linked Securities**, following the occurrence of a Fund Event, if the Calculation Agent determines that no adjustments to the terms of the Securities will achieve a commercially reasonable result, the Calculation Agent shall determine to (i) replace the affected Fund with a replacement fund as specified in the relevant Pricing Supplement, or (ii) if no replacement fund is specified, or if it has been discontinued or is subject to disruption, then the Calculation Agent would replace the affected Fund with a specified cash index, or (iii) if no cash index is specified, then the Calculation Agent may select a replacement fund or index (or basket of funds or indices) satisfying the criteria set out in the Fund Linked Provisions.

2.3 **Early Redemption**: The Issuer may early redeem the Securities by payment of the Early Payment Amount instead of the Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, and no other amounts shall be payable in respect of the Securities on account of interest or otherwise following such determination by the Issuer. See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) in "*Risk Factors*" above and Commonly Asked Question 25 (*How is the Early Payment Amount calculated?*) in "*Commonly Asked Questions*" above.

3. **Why is it necessary for the Calculation Agent and the Issuer to make such discretionary determinations following the occurrence of such events?**

The Issuer cannot continue to perform its obligations under the Securities or its related hedging arrangements if they become or will become illegal. In that case, the Issuer may need to (a) adjust the terms of the Securities so that it is no longer illegal for it to perform its obligations, or (b) early redeem or settle the Securities. It may also be illegal or impracticable for the Issuer to perform its obligations under the Securities following events which have withholding tax

implications, changes to sanctions laws, currency disruption events (e.g., departure of a relevant country from Eurozone) and resolution proceedings which impact the Issuer's hedging arrangements.

Where the Securities are linked to one or more Reference Assets, the investment objective of the Securities is to allow an investor to gain an economic exposure to the Reference Asset(s). If a Reference Asset is materially impacted by an unexpected event (e.g., a company merges and the original stock that formed a Reference Asset is restructured or changed, or the rules of an index that is a Reference Asset are materially modified) then it may not be possible to achieve the investment objective of the Securities based on the original terms and conditions of the Securities. The Issuer will need to make certain discretionary determinations in order to preserve the original economic objective and rationale of the Securities.

In addition, if the usual source which is used to value the Reference Asset is disrupted such that it is not reporting a value when it is needed under the terms and conditions of the relevant Securities, then the Calculation Agent may need to make a discretionary determination of such value. Likewise, if a relevant currency is disrupted (e.g., capital controls are introduced or the currency is replaced with another), then the currency may need to be replaced at a rate determined by the Calculation Agent in its discretion or another discretionary action taken.

Further, the Issuer and/or its affiliates may enter into hedging arrangements in order to manage its exposure in relation to its payment obligations under the Securities and to enable it to issue the Securities at the relevant price and on the relevant terms. If the amount(s) payable by the Issuer under the Securities depend on the performance of the Reference Asset(s) or an interest rate, the hedging arrangements may involve (a) holding the Reference Asset(s) directly, or (b) entering into derivative contracts with counterparties to receive a corresponding economic exposure to the Reference Asset(s) or the relevant interest rate, or to hedge the interest rate, currency rate or price risk in relation to the Reference Asset(s) or the Securities. The exercise of the Issuer's discretion is necessary if an external event occurs subsequent to the issuance of the Securities which negatively impacts the Issuer's hedging arrangements or the costs of maintaining such hedging arrangements. Such external events are unlikely to have been reflected in the original pricing of the Securities.

4. **What are the types of external events affecting the floating rate Securities, Other Variable Linked Securities or the Reference Asset(s) which could trigger discretionary determinations, and what sorts of determinations will be made?**

The external event that is most likely to affect Floating Rate Notes, Floating Rate Coupon Certificates or Other Variable Linked Securities will be where (i) the interest or coupon rate is unavailable or permanently discontinued, (ii) there has been a public statement or publication of information by the relevant regulatory supervisor or administrator announcing that the interest or coupon rate is no longer representative of the market or economic reality that it is intended to measure or (iii) there has been a material change in the methodology or formula of the interest or coupon rate.

If such external events occur, the rate of interest or coupon on any Securities which reference such rate will be determined for the relevant period by the fallback provisions applicable to such Securities. The Calculation Agent may determine to obtain the interest or coupon rate in accordance with the following methodologies:

(i) where the rate is a Compounded RFR, the rate shall be replaced by the applicable Recommended Fallback Rate. Where the Recommended Fallback Rate is used, the Calculation Agent may make such adjustments that it determines to be appropriate, if any, to any one or more of the Conditions or other terms of the Securities, including, without limitation, any Condition or term relevant to the settlement or payment under the Securities, as the Calculation Agent determines appropriate to preserve the economics of the Securities and to otherwise account for such replacement;

(ii) where the rate is a Compounded Index, the rate shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the Underlying RFR, as provided by the administrator of the Underlying RFR for each day in respect of which the Underlying RFR is required for such determination;

(iii) where the rate is a Compounded Index and the Underlying RFR has been discontinued, the rate shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the rate that would apply for derivative transactions referencing the 2021 Definitions with respect to the applicable Underlying RFR;

(iv) where the rate is a Swap Rate, the rate shall be determined by the Calculation Agent by reference to the alternative rate of interest or coupon formally recommended by (in the following order):

(a) the central bank for the currency in which the rate is denominated; or

(b) if no such recommendation is made by such central bank, the central bank (if different) or other supervisor responsible for supervising (i) the rate, or (ii) the administrator of the rate; or

(c) if no such recommendation is made by such central bank or supervisor, any working group or committee officially endorsed or convened by any such central bank or supervisor, or any group thereof, or

(d) if no such recommendation is made in accordance with (a), (b) or (c), the Financial Stability Board or any part thereof, or

(e) if no such recommendation is made in accordance with (a), (b), (c) or (d), where such alternative rate of interest or coupon is substantially the same as the rate, the administrator,

provided that if the Calculation Agent determines that there is no such alternative rate of interest or coupon, the rate shall be determined by the Calculation Agent by reference to such other reference rate(s) and/or price source(s) and/or combination thereof that the Calculation Agent determines to be a commercially reasonable alternative to the rate.

Notwithstanding the above, where (a) the rate is not a rate in respect of which a determination methodology is specified in any of paragraphs (i), (ii), (iii) and (iv) above, or (b) the rate is a rate in respect of which a determination methodology is specified in any of paragraphs (i), (ii), (iii) and (iv) above above and "Generic Permanent Fallback" is specified as applicable in the Pricing Supplement, the Calculation Agent shall determine the rate in respect of such Securities in good faith and in a commercially reasonable manner, after consulting any source it deems to be reasonable, as:

(i) a substitute or successor rate, index, benchmark or other price source that it has determined is the industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source for the relevant rate; or

(ii) if it determines there is no such industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source, then a substitute or successor rate, index, benchmark

or other price source that it determines is a commercially reasonable alternative to the rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market),

provided that (i) any such substitute or successor rate, index, benchmark or other price source may (without limitation) comprise a replacement rate which is determined on a backwards-looking compounding basis by reference to a "risk-free rate"; (ii) there may be more than one such substitute or successor rate, index, benchmark or other price source (which may be applied as of one or more effective dates); (iii) the replacement rate may include an adjustment factor or adjustment spread (which may be positive or negative); and (iv) the terms and conditions of the Securities may be subject to adjustment as described in the paragraph immediately below.

If the Calculation Agent determines the rate of interest or coupon in accordance with the above, it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the rate of interest or coupon, including in order to reduce or eliminate any change in the economic value of the Securities from such change to the method of determination of the rate of interest or coupon. Any such adjustment(s) may include an adjustment factor and/or adjustment spread together with any technical, administrative or operational changes.

If the Calculation Agent determines that the application of these provisions (i) would not achieve a commercially reasonable result (because it is not possible or commercially reasonable to identify a replacement or successor rate, index, benchmark or other price source or relevant adjustments, or for any other reason) and/or (ii) is or would be unlawful at any time under any applicable law or regulation or it would contravene any applicable licensing requirements to determine the interest or coupon amount upon in accordance with the terms of such provisions, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (subject to as provided in the terms and conditions of the relevant Securities). In such case, you may lose some or all of your investment. See General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*) or Rate Linked Provision 1 (*Rate Linked Fallbacks*), as applicable.

Where the interest or coupon rate is USD LIBOR, the provisions of the USD LIBOR Benchmark Transition Event Appendix shall apply as follows: if a Benchmark Transition Event and its related Benchmark Replacement Date occur with respect to USD LIBOR, and if the Calculation Agent cannot determine the relevant USD LIBOR rate by means of interpolating from other tenors of USD LIBOR, then the interest or coupon rate will be determined based on SOFR (unless a Benchmark Transition Event and its related Benchmark Replacement Date also occur with respect to the Benchmark Replacements that are linked to SOFR, in which case the interest or coupon rate will be based on the next-available Benchmark Replacement).

The external events that may affect a Reference Asset will vary depending on the type of Reference Asset and are summarised in the table below. For the purpose of this section, a Reference Asset can be a Share, an Index, a Commodity, a Commodity Index, an FX Rate, a Fund, or a Bond.

Type(s) of Reference Asset	**Type of event**	**Summary of the event(s)**	**Type of Consequence**
Equity Share, ETF or Fund	Potential Adjustment Events	Corporate actions which have a dilutive or concentrative effect on the theoretical value of the share or fund share (as applicable) (e.g., a stock split or a distribution payment to	Adjustments (as described in paragraph 2.1(a) above)

Type(s) of Reference Asset	Type of event	Summary of the event(s)	Type of Consequence
		holders of the shares or fund shares)	
Equity Share	Extraordinary Events	Events which materially impact the business of the share issuer, such as a merger event, a tender offer, the nationalisation of the relevant shares or assets of the share issuer, the share issuer becomes insolvent or a delisting of the relevant shares on an exchange	**EITHER** Adjustments (as described in paragraph 2.1(a) above) **OR** Substitution (as described in paragraph 2.2(a) above) **OR** (if the above options will not lead to a commercially reasonable result), Early Redemption (as described in paragraph 2.3 above)
ETF	Extraordinary Events	(i) Events which materially impact the business of the ETF share issuer, such as a merger event, a tender offer, the nationalisation of the relevant shares or assets of the share issuer, the share issuer becomes insolvent or a delisting of the relevant shares on an exchange, (ii) the failure to publish the net asset value of the share of the ETF or (iii) a material change in the formula for, or the method of, calculating the underlying index of the ETF	**First**, Adjustments (as described in paragraph 2.1(a) above) **Second**, Substitution with a replacement ETF (and Calculation Agent in its sole discretion will determine the appropriate date for substitution) **Third**, Substitution with replacement index (and Calculation Agent in its sole and absolute discretion will make any adjustments as appropriate to account for such substitution) **OR Fourth**, (if the Calculation Agent is unable to or does not pick a replacement index) Early Redemption (as described in paragraph 2.3 above)

Type(s) of Reference Asset	Type of event	Summary of the event(s)	Type of Consequence
	Successor Index Event (ETF)	The index underlying the ETF is either calculated and announced by a successor sponsor or replaced by a successor index (using the same (or substantially similar) formula)	Replace with successor index (and any adjustments as appropriate to account for such successor)(if the Calculation Agent does not determine a successor index) Early Redemption (as described in paragraph 2.3 above)
Commodity	Successor to a Commodity Reference Price	The commodity reference price (a) is calculated and announced by a successor entity to the original price source for such commodity reference price, or (b) is replaced by a successor reference price (calculated using the same (or substantially similar) formula), or (c) ceases to be calculated or announced by the price source, and/or formula or method of calculating the commodity reference price materially changes, but one or more prices in respect of the same Commodity exists and such prices are generally accepted or recognised as successor prices to the commodity reference price	Replace with successor commodity reference price (and, in the case of (c), the Calculation Agent may determine which of the successor prices shall replace the commodity reference price)
	Administrator/ Benchmark Event	Any authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register in respect of the commodity reference price or the administrator or sponsor of the commodity reference price has not been, or will not be, obtained or has been, or will be, rejected, refused, suspended or withdrawn by the relevant competent authority or other relevant official body, or any prohibition by a relevant competent authority or other relevant official body	Early Redemption (as described in paragraph 2.3 above)
	Non-compliant Fallbacks	It would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine	Early Redemption (as described in paragraph 2.3 above)

Type(s) of Reference Asset	Type of event	Summary of the event(s)	Type of Consequence
		the commodity reference price or make any other determination in respect of the Securities which it would otherwise be obliged to do so	
Equity Index, Commodity Index	Successor Index Sponsor or Successor Index	The index is either calculated and announced by a successor sponsor or replaced by a successor index (using the same (or substantially similar) formula	Replace with successor index (and any adjustments as appropriate to account for such successor)
	Non-compliant Fallbacks	It would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine the level of index or make any other determination in respect of the Securities which it would otherwise be obliged to do so	Early Redemption (as described in paragraph 2.3 above)
	Index Adjustment Events or Commodity Index Adjustment Events	Events which materially impact the calculation of the index - for example, the relevant sponsor cancels the index, fails to calculate the level of the index or materially changes the formula for calculating the index	Calculate the relevant level of the index If not reasonably practical (taking into account the costs involved) to calculate the index, rebase the Securities against another index (or basket of indices) comparable to the original index (and any adjustments as appropriate to account for such rebasing) (if the Calculation Agent determines that there is no comparable index or that it would not produce a commercially reasonable result) Early Redemption (as described in paragraph 2.3 above)
FX Rate	Successor Currency	Where a country has lawfully eliminated, converted, redenominated or exchanged its currency (which is the reference	The Calculation Agent will calculate the relevant amounts in the successor currency by applying the ratio for converting the original

Type(s) of Reference Asset	Type of event	Summary of the event(s)	Type of Consequence
		currency for the Securities) for a successor currency	currency to the successor currency based on (a) the exchange rate set forth by the relevant country, or (b) determine the relevant exchange rate for such conversion, unless the successor currency in Euro, in which case the replacement shall be determined in accordance with the applicable laws
	Rebasing of Securities	Where the Calculation Agent is not able to obtain a value for the relevant FX rate, due to the relevant currencies for such FX rate ceasing to exist other than for a temporary disruption	Rebase the Securities against another FX rate comparable to the original FX rate (if the Calculation Agent determines that there is no comparable FX rate) Early Redemption (as described in paragraph 2.3 above)
	Administrator/ Benchmark Event	Any authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register in respect of the relevant FX rate or the administrator or sponsor of the relevant FX rate has not been, or will not be, obtained or has been, or will be, rejected, refused, suspended or withdrawn by the relevant competent authority or other relevant official body, or any prohibition by a relevant competent authority or other relevant official body	Early Redemption (as described in paragraph 2.3 above)
	Non-compliant Fallbacks	It would be unlawful or contradictory to any applicable licensing requirements for the Calculation Agent to determine the relevant FX rate or make any other determination in respect of the Securities which it	Early Redemption (as described in paragraph 2.3 above)

Type(s) of Reference Asset	Type of event	Summary of the event(s)	Type of Consequence
		would otherwise be obliged to do so	
Fund	Fund Events	Events which materially impact the business of a fund, its management company or its service providers, including insolvency, a merger, termination of the fund, nationalisation of a fund, and any fund extraordinary events (such as litigations involving a fund, events which affect the calculation of the net asset value and performance of a fund, or which affect the trading of a fund, any operational failures, or other legal and regulatory constraints)	**First**, Adjustments (as described in paragraph 2.1(b) above) **Second**, Substitution (as described in paragraph 2.2(b) above) **Third**, if the Calculation Agent determines that no adjustments will achieve a commercially reasonable result, or it is not commercially practicable to select a substitution Early Redemption (as described in paragraph 2.3 above)
	Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event	Where a hypothetical investor holding the relevant fund shares in a fund would, if they were to apply for a redemption of such fund shares, (a) not receive in full (or substantially the full) the amount payable within the time limit specified in the relevant fund offering document, and/or (b) receive any in-kind distribution per fund share in full or part satisfaction of the amount payable in respect of such redemption	Adjustments (as described in paragraph 2.1(b) above)
Bond	Adjustment Event	Events which (a) reduce the amounts received by a hypothetical broker dealer or affect the hypothetical broker's costs in respect of a bond, (b) in respect of the custodian used by a hypothetical broker dealer, affect the settlement or performance of its obligations in respect of a bond, and/or (c) arise from the imposition of or adverse change in tax laws and regimes that adversely affect the value of the Securities.	Adjustments (as described in paragraph 2.1(c) above)

5. **What are the types of external events affecting the Issuer's hedging arrangements which could trigger discretionary determinations, and what sorts of determinations will be made?**

There are a number of "Extraordinary Hedge Disruption Event", as summarised in the following table (see General Condition 17 (*Extraordinary Hedge Disruption Event*) in "*Terms and Conditions of the Securities*" below):

Type of Event	Summary of the event(s)	Type of Consequence
Extraordinary Hedge Sanctions Event	A change in law relating to financial sanctions and embargo programmes makes the Issuer's hedging transactions under the Securities illegal	Early Redemption (as described in paragraph 2.3 above)
Extraordinary Hedge Bail-in Event	The Issuer and/or its affiliates or its counterparty under the relevant hedging transactions becomes subject to a European 'resolution regime' and thereby subject to the exercise of a 'bail-in' or other resolution power	
Extraordinary Hedge Currency Disruption Event	A governmental authority introduces, or is likely to introduce, a new currency or capital controls and, as a result, the payment obligations under the hedge transactions relating to the Securities are redenominated into another currency or are subject to capital controls or are otherwise materially adversely affected	

There are a number of "Disruption Events", as summarised in the following table (see General Condition 19 (*Disruption Event*) in "*Terms and Conditions of the Securities*" below):

Type of Event	Summary of the event(s)	Type of Consequence
Change in Law (Hedge)	As a result of a change in any applicable law, or as a result of a change in the interpretation of any applicable law, (i) it has (or, it will, within the next 15 days prior to the maturity of the Securities), become unlawful or illegal to conduct its hedging arrangements in relation to the Securities or (ii) it will incur a materially increased cost in performing its obligations under the Securities	Adjustments (as described in paragraph 2.1(a) and 2.1(c) above) OR Early Redemption (as described in paragraph 2.3 above)
Hedge Disruption	An event which impacts the ability of the Issuer and/or its affiliates to hedge the risk of the Issuer issuing, entering into and performing its obligations under the Securities(e.g., if the Issuer is unable to enter into a hedge or to realise the proceeds of a hedge)	

In addition to the above, the external events that may affect the Issuer's hedging arrangements will vary depending on the type of Reference Asset and are summarised in table below:

Type of Reference Asset	**Type of Event**	**Summary of the event(s)**	**Type of Consequence**
All (other than Bonds)	Change in law	As a result of a change in any applicable law, or as a result of a change in the interpretation of any applicable law, it has (or, it will, within the next 15 days prior to the maturity of the Securities), become unlawful or illegal to conduct its	Adjustments (as described in paragraph 2.1(a) above) **OR** (in the case of Share Linked Securities, Index Linked Securities and Fund Linked Securities)
		hedging arrangements in relation to the Securities (or, in the case of a fund only, the value of the fund shares are or will be materially adversely affected or the rights and remedies of a hypothetical investor holding the relevant fund shares are or will be materially adversely affected)	**AND/OR** (in the case of Commodity Linked Securities and FX Linked Securities) Early Redemption (as described in paragraph 2.3 above)
All (other than Bonds)	Change in law-Increased Cost	As a result of a change in any applicable law, it will incur a materially increased cost in performing its obligations under the Securities	
Bond	Change in Law (Hedge)	As a result of a change in any applicable law, or as a result of a change in the interpretation of any applicable law, (i) it has (or, it will, within the next 15 days prior to the maturity of the Securities), become unlawful or illegal to conduct its hedging arrangements in relation to the Securities or (ii) it will incur a materially increased cost in performing its obligations under the Securities	Adjustments (as described in paragraph 2.1(c) above) OR Early Redemption (as described in paragraph 2.3 above)
All	Hedging Disruption	An event which impacts the ability of the Issuer and/or its affiliates to hedge the risk of the Issuer issuing, entering into and performing its obligations under the Securities(e.g., if the Issuer is unable to enter into a hedge or to realise the proceeds of a hedge)	

Type of Reference Asset	Type of Event	Summary of the event(s)	Type of Consequence
All	Taxation Events	The Issuer becomes subject to withholding tax on payments made to it as a result of Holders failing to provide information required by FATCA, there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA or there is a substantial likelihood that a series of Securities will be treated, for U.S. federal income tax purposes, as being in bearer form. **OR** The occurrence of certain taxation events with respect to the Securities or (if specified to be applicable in the relevant Pricing Supplement) with respect to the Issuer's (or its affiliates') underlying hedging transactions	Early Redemption (as described in paragraph 2.3 above)
Equity Share and ETF	Insolvency Filing	An event which impacts the transferability of the shares as a result of insolvency or similar proceedings affecting the share issuer	Early Redemption (as described in paragraph 2.3 above)
Commodity and Commodity Index	Commodity Hedging Disruption Event	As a result of a change in any applicable law, it is contrary to such law for the Issuer and/or its affiliates to engage in any underlying or hedging transactions relating to the Securities and/or Reference Asset in respect of the Issuer's obligations under such Securities	Early Redemption (as described in paragraph 2.3 above)

6. **Are there any other situations where the Calculation Agent or the Issuer may make discretionary determinations?**

(a) Disruption events affecting the valuation of a Reference Asset

If the Issuer determines that a disruption event in relation to a Reference Asset has occurred which affects the valuation of such Reference Asset on any relevant day, the Issuer may postpone, or apply alternative provisions for, the valuation of such Reference Asset (such as by making its own determination of the value of such Reference Asset). Such determination(s) may have an adverse effect on the value of the Securities.

(b) Currency disruption events affecting the Issuer's ability to make payment

If a payment disruption occurs, the Issuer may delay payment of any amounts due (or shortly to be due) under the Securities following the occurrence of certain currency disruption events which affect its ability to make such payment. If such event continues on the specified cut-off date, the Issuer will make payment of an equivalent amount of the relevant amount in U.S. Dollars on the extended date. If the U.S. Dollar is subject to inconvertibility, non-transferability, capital controls or other conditions affecting its availability, the Issuer's payment obligations under the Securities shall be written down to zero. Such events are unlikely to have been reflected in the original pricing of the Securities.

7. **How will the Calculation Agent and the Issuer make discretionary determinations?**

Unless the relevant discretionary term provides otherwise, all discretionary determinations by the Calculation Agent and the Issuer under the terms and conditions of the Securities shall be made in good faith and in a commercially reasonable manner, and (where there is already a corresponding applicable regulatory obligation on such party to exercise fair treatment) shall take into account whether fair treatment is achieved by any such discretionary determination in accordance with its applicable regulatory obligations.

8. **When making discretionary determinations, are the Calculation Agent and the Issuer obliged to consider the interests of Holders?**

No, the Calculation Agent acts solely as agent of the Issuer and the Guarantor and does not assume any obligations or duty to, or relationship of agency or trust for or with, any Holder. In making any determination or exercising any discretion, the Calculation Agent is not obliged to (and shall not) consider the individual interests or circumstances of any particular investor. The same is true for the Issuer. In making any determination, the Calculation Agent and the Issuer shall take into account whether fair treatment is achieved by such determination in accordance with applicable regulatory obligations.

9. **What is the effect of such event and/or action taken by the Calculation Agent or the Issuer on the Securities?**

Any of the above actions, if taken by the Issuer, may result in a reduced return on the Securities and/or have a material adverse impact on the value of the Securities. For example, the Early Payment Amount could be less than such investor's initial investment.

Further, if the Securities are redeemed or settled early prior to the scheduled maturity, an investor may be unable to reinvest the redemption proceeds in another investment at the time that provides an equivalent return.

See Risk Factor 5.1 (*The Securities may be redeemed or terminated (as applicable) prior to their scheduled maturity for various unforeseen reasons, and in such case you may receive back less than your original investment and you may not be able to reinvest the proceeds in an equivalent investment*) in "*Risk Factors*" above and Commonly Asked Question 25 (*How is the Early Payment Amount calculated?*) in "*Commonly Asked Questions*" above.

10. **Will the Issuer notify me if such an event occurs and/or if it takes any of the above actions?**

Yes, the Issuer will generally give notice to Holders as soon as practicable upon making any adjustments to the terms and conditions of the Securities, or if it substitutes a Reference Asset with a replacement asset, or if the Issuer determines to early redeem the Securities or to pay the Early Payment Amount at maturity, or if the Issuer makes any other discretionary determination.

TERMS AND CONDITIONS OF THE SECURITIES

GENERAL CONDITIONS

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The following is the text of the terms and conditions of the Securities (these "General Conditions"), subject to completion and amendment in accordance with the provisions of the relevant Pricing Supplement (as defined below). In the case of Registered Securities in definitive form, either (i) the full text of these General Conditions together with the relevant provisions of the relevant Pricing Supplement, or (ii) these General Conditions as so completed and amended (and subject to simplification by the deletion of non-applicable provisions), shall be endorsed on the registered certificates relating to any such Registered Securities (if applicable).

All capitalised terms that are not defined in these General Conditions will have the meanings given to them in the relevant Pricing Supplement. References in these General Conditions to "Notes" or "Warrants" or "Certificates" are to the Notes, Warrants or Certificates of one Series only, not to all Securities that may be issued under the Programme.

The Specific Product Provisions contained in Annex 1 in respect of Share Linked Securities, in Annex 2 in respect of Index Linked Securities, in Annex 3 in respect of Commodity Linked Securities, in Annex 4 in respect of FX Linked Securities, in Annex 5 in respect of Market Access Participation Notes, in Annex 6 in respect of Low Exercise Price Warrants, in Annex 7 in respect of Fund Linked Securities, in Annex 8 in respect of Other Variable Linked Interest Notes and in Annex 9 in respect of Bond Linked Securities, will, if specified to be applicable in the relevant Pricing Supplement, complete and amend these General Conditions.

A. INTRODUCTION

JPMorgan Chase Financial Company LLC ("**JPMCFC**"), J.P. Morgan Structured Products B.V. ("**JPMSP**"), JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. (each an "**Issuer**" and together, the "**Issuers**") have established a structured products programme (the "**Programme**") for the issuance of notes ("**Notes**"), warrants ("**Warrants**") and certificates ("**Certificates**", and together with Notes and Warrants, "**Securities**").

Securities (other than Swiss Certificates (UBS-cleared)) issued by each Issuer are issued pursuant to an amended and restated agency agreement (as amended and/or supplemented and/or restated as at the Issue Date, the "**Agency Agreement**") dated 22 September 2022 between JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co., the Relevant Programme Agents and the other agents named therein.

Swiss Certificates (UBS-cleared) (as defined below) issued by JPMCFC for which UBS Switzerland AG acts as issuing and paying agent and provides clearing and other services relating to structured products offered via the UBS Structured Products Investor platform are issued pursuant to the SPI agreement which shall be entered into between J.P. Morgan Securities plc and UBS Switzerland AG (as amended and/or supplemented and/or restated as at the Issue Date, the "**SPI Agreement**"). The related custody services in respect of Swiss Certificates (UBS-cleared) are governed by the Custody Services Agreement which shall be entered into between J.P. Morgan Securities plc and UBS Switzerland AG (as amended and/or supplemented and/or restated as at the Issue Date, the "**Custody Agreement**").

JPMorgan Chase Bank, N.A. has guaranteed the due and punctual settlement of all obligations of JPMSP in respect of the Securities issued by JPMSP in a guarantee dated 22 September 2022 (as amended and/or supplemented and/or restated as at the Issue Date, the "**JPMorgan Chase Bank, N.A. Guarantee**") and JPMorgan Chase & Co. has guaranteed the due and punctual settlement of all obligations of JPMCFC in respect of the Securities issued by JPMCFC in a guarantee dated 22 September 2022 (as amended and/or supplemented and/or restated as at the Issue Date, the "**JPMorgan Chase & Co. Guarantee**") (the JPMorgan Chase Bank, N.A. Guarantee and the JPMorgan Chase & Co. Guarantee, each a "**Guarantee**" and together, the "**Guarantees**").

JPMorgan Chase Bank, N.A. in its capacity as guarantor of Securities issued by JPMSP is referred to as the "**JPMSP Guarantor**" and JPMorgan Chase & Co. in its capacity as guarantor of Securities issued by JPMCFC is referred to as the "**JPMCFC Guarantor**" (the JPMSP Guarantor and the JPMCFC Guarantor, each a "**Guarantor**" and together, the "**Guarantors**") .

The Securities (other than Swiss Certificates (UBS-cleared)), to the extent they are governed by English law, have the benefit of a deed of covenant dated 22 September 2022 (as amended and/or supplemented and/or restated as at the Issue Date, the "**Deed of Covenant**") given by the Issuers in relation to Securities

cleared through Euroclear Bank SA/NV, Clearstream Banking, *société anonyme*, Clearstream Banking AG, Eschborn, Euroclear Sweden AB, Euroclear Finland Oy, Verdipapirsentralen ASA, Euronext Securities Copenhagen (VP Securities A/S) or SIX SIS AG, as the case may be. For the avoidance of doubt, each purchaser and subsequent Holder of New York Law Notes is deemed to acknowledge and agree that such Notes shall not have the benefit of the Deed of Covenant, and the Deed of Covenant shall not apply in respect of such Notes (including following an Event of Default).

Copies of the Agency Agreement, the Deed of Covenant, each Guarantee, the forms of Global Securities and the Securities in definitive form (if applicable) are available for inspection at the specified office of the Relevant Programme Agent.

The provisions contained in Annex 1 in respect of Share Linked Securities (the "**Share Linked Provisions**"), in Annex 2 in respect of Index Linked Securities (the "**Index Linked Provisions**"), in Annex 3 in respect of Commodity Linked Securities (the "**Commodity Linked Provisions**"), in Annex 4 in respect of FX Linked Securities (the "**FX Linked Provisions**"), in Annex 5 in respect of Market Access Participation Notes (the "**Market Access Participation Provisions**"), in Annex 6 in respect of Low Exercise Price Warrants (the "**LEPW Provisions**"), in Annex 7 in respect of Fund Linked Securities (the "**Fund Linked Provisions**"), in Annex 8 in respect of Other Variable Linked Interest Notes (the "**Rate Linked Provisions**") and in Annex 9 in respect of Bond Linked Securities (the "**Bond Linked Provisions**" and, together with the Share Linked Provisions, the Index Linked Provisions, the Commodity Linked Provisions, the FX Linked Provisions, the Market Access Participation Provisions, the LEPW Provisions, the Fund Linked Provisions and the Rate Linked Provisions, the "**Specific Product Provisions**") will, if specified to be applicable in the relevant Pricing Supplement, complete and amend these General Conditions.

These General Conditions, as completed and/or amended by any applicable Specific Product Provisions, in each case subject to completion and/or amendment in the relevant Pricing Supplement, shall be the conditions of the Securities (the "**Conditions**"). To the extent that there is any inconsistency between the Specific Product Provisions and these General Conditions, the Specific Product Provisions shall prevail. To the extent that there is any inconsistency between the relevant Pricing Supplement and the Specific Product Provisions and/or these General Conditions, the relevant Pricing Supplement shall prevail.

Securities issued under the Programme are issued in series (each, a "**Series**"), and each Series may comprise one or more tranches ("**Tranches**" and each, a "**Tranche**") of Securities. One or more Tranches of Securities will be the subject of a pricing supplement (each, a "**Pricing Supplement**"), a copy of which may be obtained by Holders free of charge from the specified office of the Relevant Programme Agent.

Capitalised terms used in these General Conditions have the meanings given in General Condition 32 (*Definitions and Interpretation*).

B. FORM, DENOMINATION, TITLE, TRANSFER AND GUARANTEE OF THE SECURITIES

1. Form, Denomination and Title

1.1 Form and Denomination

(a) ***Bearer Securities***

(i) *Bearer Securities other than French Bearer Securities*: Bearer Securities (other than French Bearer Securities) are, if the relevant Pricing Supplement specifies:

(A) "Temporary Bearer Global Security exchangeable for a Permanent Bearer Global Security", initially represented by a temporary global security (the "**Temporary Bearer Global Security**"); or

(B) "Permanent Bearer Global Security", initially represented by a permanent global security (the "**Permanent Bearer Global Security**").

If so specified in the relevant Pricing Supplement, Bearer Notes shall be issued in New Global Note ("**NGN**") form. Bearer Notes represented by Temporary Global Securities

or Permanent Global Securities will be delivered to a common safekeeper (the "**Common Safekeeper**") for Euroclear and/or Clearstream, Luxembourg, if in NGN form.

Bearer Securities will only be issued in global form and will not be issued in or exchangeable into Bearer Securities in definitive form, whether pursuant to the request of any Holder(s) or otherwise. Bearer Securities will not have any coupons, talons or receipts.

(ii) *French Bearer Securities*: Securities which are issued by JPMSP in bearer dematerialised form (*au porteur*) and inscribed in the books of Euroclear France (acting as central depository) which shall credit the accounts of Euroclear France Account Holders are "**French Bearer Securities**".

(b) ***Registered Securities***

(i) *Registered Securities other than French Registered Securities, Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, Swiss Securities, Swiss Certificates (UBS-cleared), Rule 144A Securities, Rule 144A New York Law Notes, Regulation S/Rule 144A Securities and CREST CDI Securities*: Registered Securities (other than French Registered Securities, Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, Swiss Securities, Swiss Certificates (UBS-cleared), Rule 144A Securities, Rule 144A New York Law Notes, Regulation S/Rule 144A Securities and CREST CDI Securities) are (in the case of Registered Notes) in the Specified Denomination(s) and (if the Registered Securities are in definitive form) represented by registered certificates and, in respect of Notes, save as provided in General Condition 5.3 (*Exercise of Options or Partial Redemption in respect of Registered Notes in definitive form*), each registered certificate shall represent the entire holding of Registered Securities by the same Holder.

Registered Securities (other than French Registered Securities, Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, Swiss Securities, Swiss Certificates (UBS-cleared), Rule 144A Securities, Rule 144A New York Law Notes, Regulation S/Rule 144A Securities and CREST CDI Securities) are, if the relevant Pricing Supplement specifies:

(A) "Temporary Registered Global Security which is exchangeable for a Permanent Registered Global Security", initially represented by a temporary global security (the "**Temporary Registered Global Security**"); or

(B) "Permanent Registered Global Security", initially represented by a permanent global security (the "**Permanent Registered Global Security**").

If so specified in the relevant Pricing Supplement, Registered Notes in global form shall be held under the new safekeeping structure ("**NSS**") in which case the Temporary Registered Global Note or Permanent Registered Global Note will be deposited with a Common Safekeeper for Euroclear and/or Clearstream, Luxembourg and registered in the name of a nominee of such Common Safekeeper.

(ii) *French Registered Securities*: Securities which are issued by JPMSP in registered dematerialised form (*au nominatif*) and, at the option of the relevant Holder in either administered registered form (*au nominatif administré*) inscribed in the books of a Euroclear France Account Holder (and mirroring the inscriptions in the books maintened by the Issuer or the French Registration Agent acting on behalf of the Issuer, if applicable) or in fully registered form (*au nominatif pur*) inscribed in an account in the books of Euroclear France maintained by the Issuer or the registration agent (designated in the relevant Pricing Supplement) acting on behalf of the Issuer (the "**French Registration Agent**") are "**French Registered Securities**", and together with French Bearer Securities, are "**French Securities**". French Securities shall not be issued in or exchangeable into Securities in definitive form.

(iii) *Danish Notes*: Notes which are issued by JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. in uncertificated and dematerialised book-entry form in accordance

with the Danish Capital Markets Act (Consolidated Act No. 2014 of 1 November 2021), as amended from time to time, and Executive Order No. 1175 of 31 October 2017 on registration (book-entry) of dematerialised securities in a centralised securities depository (CSD), as amended from time to time, are "**Danish Notes**". Danish Notes shall be regarded as Registered Securities for the purposes of these General Conditions save to the extent the General Conditions are inconsistent with the VP Rules. Danish Notes shall not be issued in or exchangeable into Notes in definitive form.

(iv) *Finnish Securities*: Securities which are issued by JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. in uncertificated and dematerialised book-entry form in accordance with the Finnish Act on the Book-Entry System and Clearing Operations (in Finnish: *laki arvo-osuusjärjestelmästä ja selvitystoiminnasta* (348/2017), as amended) and the Finnish Act on Book Entry Accounts (in Finnish: *laki arvo-osuustileistä* (827/1991), as amended), with Euroclear Finland which is designated as the registrar in respect of the Finnish Securities (the "**Finnish Registrar**") are "**Finnish Securities**". Finnish Securities shall be regarded as Registered Securities for the purposes of these General Conditions save to the extent not otherwise provided herein or to the extent that the General Conditions are inconsistent with Euroclear Finland Rules. Finnish Securities shall not be issued in or exchangeable into Securities in definitive form.

(v) *Norwegian Securities*: Securities which are issued by JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. in uncertificated and dematerialised book-entry form in accordance with the Norwegian Central Securities Depositories Act (*lov om verdipapirsentraler og verdipapiroppgjør mv. av 15. mars 2019 nr. 6*) are "**Norwegian Securities**". Norwegian Securities shall be regarded as Registered Securities for the purposes of these General Conditions save to the extent the General Conditions are inconsistent with the VPS Rules. Norwegian Securities shall not be issued in or exchangeable into Securities in definitive form.

(vi) *Swedish Securities*: Securities which are issued by JPMSP, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. in uncertificated and dematerialised book-entry form in accordance with the Swedish Central Securities Depositories and Financial Instruments Accounts Act (*lag (1998:1479) om värdepapperscentraler och om kontoföring av finansiella instrument*) are "**Swedish Securities**". Swedish Securities shall be regarded as Registered Securities for the purposes of these General Conditions save to the extent the General Conditions are inconsistent with the Swedish CSD Rules. Swedish Securities shall not be issued in or exchangeable into Securities in definitive form.

(vii) *Swiss Securities*: Securities which are cleared through SIX SIS and are either (a) issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (Obligationenrecht) and entered into the main register (*Hauptregister*) of SIX SIS or (b) initially represented by a Global Security in registered form (a "**Swiss Global Security**") that is deposited with SIX SIS acting as central depository are "**Swiss Securities**". As a matter of Swiss law, once (a) Swiss Securities which are issued in the form of uncertificated securities are entered into the main register (*Hauptregister*) of SIX SIS as custodian (*Verwahrungsstelle*) or (b) a Swiss Global Security is deposited with SIX SIS and, in either case, entered into the securities accounts of one or more participants of SIX SIS, such Swiss Securities will constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities**").

(viii) *Swiss Certificates (UBS-cleared)*: Securities which are cleared through UBS Switzerland AG and are issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*) are "**Swiss Certificates (UBS-cleared)**". As a matter of Swiss law, once Swiss Certificates (UBS-cleared) which are issued in the form of uncertificated securities are entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*) and credited to one or more securities accounts maintained by UBS Switzerland AG for and on behalf of its clients, such Swiss Certificates (UBS-cleared) will constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss

Federal Intermediated Securities Act (*Bucheffektengesetz*) ("**Intermediated Securities (UBS-cleared)**").

UBS Switzerland AG has the right but not the obligation at any time to transfer the main register (*Hauptregister*) to another UBS group entity licensed as a Swiss bank or securities firm, subject to the prior written consent of the Product Provider, such consent not to be unreasonably withheld.

Swiss Certificates (UBS-cleared) will not be represented by any form of Global Security and no Global Security shall be issued in respect of Swiss Certificates (UBS-cleared). Swiss Certificates (UBS-cleared) shall not be issued in or exchangeable into Securities in definitive form.

(ix) *Rule 144A Securities and Rule 144A New York Law Notes*: Securities which may be sold to certain qualified institutional buyers in the United States in reliance on Rule 144A under the Securities Act are "**Rule 144A Securities**", or in the case of certain Notes subject to New York law, "**Rule 144A New York Law Notes**". The Registered Global Security in respect of each Series of Rule 144A Securities and Rule 144A New York Law Notes will be deposited on or about the Issue Date with the DTC Custodian on behalf of DTC. Rule 144A Securities and Rule 144A New York Law Notes will only be issued in registered form, without interest coupons attached, and will not be issued in bearer form. In addition, Rule 144A Securities may be cleared through another Relevant Clearing System in addition to, or in place of, DTC. In such event the Global Security may be deposited with such Relevant Clearing System or a depository therefor. Upon registration of Rule 144A Securities in the name of any nominee for DTC and delivery of the relative Global Security to the DTC Custodian, DTC will credit each clearing system participant with, (a) in respect of Rule 144A Securities (other than Rule 144A Notes), a number of Rule 144A Securities equal to the number thereof for which it has subscribed and paid and (b) in respect of Rule 144A Notes, the aggregate principal amount of Rule 144A Notes for which it has subscribed and paid. Rule 144A Securities or Rule 144A New York Law Notes that are initially deposited with DTC or any other Relevant Clearing System may similarly be credited to the accounts of subscribers with other Relevant Clearing Systems.

(x) *Regulation S/Rule 144A Securities*: Notes, Certificates and Warrants which may be sold concurrently outside the United States to certain non-U.S. Persons and to certain qualified institutional buyers in the United States in reliance on Rule 144A under the Securities Act, are, respectively "**Regulation S/Rule 144A Notes**", "**Regulation S/Rule 144A Certificates**" and "**Regulation S/Rule 144A Warrants**", (the Regulation S/Rule 144A Notes, the Regulation S/Rule 144A Certificates and the Regulation S/Rule 144A Warrants, together, the "**Regulation S/Rule 144A Securities**"). Regulation S/Rule 144A Securities will be issued by JPMSP, represented by, in the case of (a) Regulation S/Rule 144A Notes, a Regulation S/Rule 144A Global Note (the "**Regulation S/Rule 144A Global Note**"), (b) Regulation S/Rule 144A Certificates, a Regulation S/Rule 144A Global Certificate (the "**Regulation S/Rule 144A Global Certificate**") and (c) Regulation S/Rule 144A Warrants, a Regulation S/Rule 144A Global Warrant (the "**Regulation S/Rule 144A Global Warrant**"), and (in each case) deposited on or about the Issue Date with a depository common to Euroclear and Clearstream, Luxembourg. Regulation S/Rule 144A Securities will only be issued in registered form, without interest coupons attached.

(xi) *CREST CDI Securities:* Regulation S Securities issued by JPMSP and guaranteed by JPMorgan Chase Bank, N.A., that are to be accepted for settlement in Euroclear UK & Ireland Limited ("**CREST**") via the CREST Depository Interest ("**CDI**") mechanism are "**CREST CDI Securities**". CREST CDI Securities of each Series will be represented on issue by a Permanent Registered Global Security which will be deposited on or about the Issue Date with a depository for the Relevant Clearing System. CREST CDI Securities will only be issued in registered form, without interest coupons attached, and will not be issued in bearer form.

(xii) *Eurosystem Eligibility*: Registered Notes held under the NSS and Bearer Notes issued in NGN form may, if so specified in the relevant Pricing Supplement, be issued with the intention that such Notes be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem, either upon issue or at any time or all times during their life. Such recognition will depend upon satisfaction of the Eurosystem eligibility criteria as specified by the European Central Bank. However, there is no guarantee that such Notes will be recognised as eligible collateral.

(c) ***Exchange of Securities***

(i) *Exchange of Rule 144A Securities and Rule 144A New York Law Notes*: Rule 144A Securities represented by a Global Security will not be exchanged for Securities in definitive form except:

(A) in the case of a Global Security held on behalf of DTC, if DTC notifies the Issuer that it is no longer willing or able to discharge properly its responsibilities as depository with respect to such Global Security, or ceases to be a "**clearing agency**" registered under the Exchange Act, or if at any time it is no longer eligible to act as such, and the Issuer is unable to locate a qualified successor within 90 days of receiving notice or becoming aware of such ineligibility on the part of DTC;

(B) in the case of a Global Security held by a Relevant Clearing System other than DTC, if the Relevant Clearing System is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so;

(C) following the occurrence of an Event of Default as provided in these General Conditions; or

(D) if the Issuer so decides,

provided that, in the case of the first transfer of part of a holding pursuant to (A), (B) and (C) above, the registered Holder has given the Registrar not less than 30 days' notice at its specified office of the registered Holder's intention to effect such transfer and, in the case of a transfer pursuant to (C) above, each person having an interest in the Rule 144A Securities represented by such Global Security has provided the Registrar with a fully completed, signed certification substantially to the effect that such person is not transferring its interest at the time of such exchange. Upon the occurrence of any of the events specified in (A) to (D) (inclusive) above and satisfaction of any applicable condition in the proviso to the preceding sentence, the Holder of a Global Security may, on or after any due date for exchange, surrender such Global Security or, in the case of a partial exchange, present it for endorsement to or to the order of the Relevant Programme Agent. In exchange for any Global Security, or the part thereof to be exchanged, the relevant Issuer will in the case of a Global Security exchangeable for Securities in definitive form, deliver, or procure the delivery of, an equal aggregate number of duly executed and authenticated Securities in definitive form. Where the holding of Rule 144A Securities represented by a Global Security is only transferable in its entirety, only a Global Security shall be issued to the transferee upon transfer of such holding. Where transfers are permitted in part, a Global Security shall only be issued to transferees if the transferee so requests and certifies to the Registrar that it is, or is acting as a nominee for DTC and/or a Relevant Clearing System.

Each new Rule 144A Security in definitive form to be issued pursuant to this General Condition 1.1(c)(i) shall be available for delivery within three business days of receipt of the request for exchange, form of transfer or Put Option Exercise Notice (in respect of a partial exercise of the Securities represented by the original Rule 144A Security in definitive form) and surrender of the relevant Rule 144A Security in definitive form for exchange. Delivery of the new Securities in definitive form shall be made at the specified office of the Relevant Programme Agent to whom delivery or surrender of such request for exchange, form of transfer, or Put Option Exercise Notice for the Rule 144A Security

in definitive form shall have been made. At the option of the Holder making such delivery or surrender as aforesaid and if it is so specified in the relevant request for exchange, form of transfer, Put Option Exercise Notice or otherwise in writing, the new Rule 144A Security in definitive form shall be mailed by uninsured post at the risk of the Holder entitled to the new Rule 144A Security in definitive form to such address as may be so specified, unless such Holder requests otherwise and pays in advance to the Relevant Programme Agent the costs of such other method of delivery and/or such insurance as it may specify. In this General Condition 1.1, "business day" means a day, other than a Saturday or Sunday, on which banks are open for business in the place of the specified office of the Relevant Programme Agent.

(ii) *Exchange of Bearer Securities other than French Bearer Securities and German Securities*:

(A) Temporary Bearer Global Securities

Each Temporary Bearer Global Security will be exchangeable free of charge to the Holder on or after its Exchange Date and upon certification as to non-U.S. beneficial ownership in the form set out in the Agency Agreement:

(1) in whole or in part for interests in a Permanent Bearer Global Security ("**Permanent Bearer Global Security**"); or

(2) in whole but not in part for Registered Securities in definitive form, if, prior to its exchange for interests in a Permanent Bearer Global Security in accordance with (1) above, (x) the Temporary Bearer Global Security is held on behalf of a Relevant Clearing System and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise), or has announced an intention permanently to cease business or in fact closes, or (y) if any Instalment Amount, Early Payment Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, in respect of any Security represented by such Temporary Global Security is not paid when due by the Holder giving notice to the Principal Programme Agent and the Registrar of its election for such exchange, provided that, in the case of (x) above, the Issuer may instead procure that the Temporary Bearer Global Security is deposited with a successor or alternative clearing system where it is of the reasonable opinion that such transfer will not be prejudicial to the Holders.

(B) Permanent Bearer Global Securities

Each Permanent Bearer Global Security will be exchangeable, free of charge to the Holder, on or after its Exchange Date in whole but not in part for Registered Securities in definitive form:

(1) by the relevant Issuer giving notice to the Holders, the Principal Programme Agent and the Registrar of its intention to effect such exchange; or

(2) otherwise (x) if the Permanent Bearer Global Security is held on behalf of a Relevant Clearing System and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise), or has announced an intention permanently to cease business or in fact closes or (y) if any Instalment Amount, Early Payment Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, in respect of any Security represented by such Permanent Bearer Global Security is not paid when due by the Holder giving notice to the Principal Programme Agent and the Registrar of its election for such exchange.

(iii) *Exchange of German Securities*:

Each Temporary Bearer Global Security will be exchangeable, on or after its Exchange Date, in whole or in part upon certification as to non-U.S. beneficial ownership for interests in a Permanent Bearer Global Security ("**Permanent Bearer Global Security**").

Each Temporary Bearer Global Security and Permanent Bearer Global Security will be kept in custody by the Relevant Clearing System until all obligations of the Issuer under the German Securities have been satisfied.

In relation to any German Securities in respect of which the relevant Pricing Supplement specifies "Clearstream Frankfurt" to be the Relevant Clearing System, the principal amount (in the case of Notes) or number (in the case of Warrants and Certificates) of German Securities represented by the Temporary Bearer Global Security or Permanent Bearer Global Security (as the context may require) is evidenced by a register maintained for that purpose by Clearstream Frankfurt as agent for the Issuer, showing the aggregate principal amount (in the case of Notes) or aggregate number (in the case of Warrants and Certificates) of German Securities represented by the Temporary Bearer Global Security or the Permanent Bearer Global Security (as the context may require).

(iv) *Exchange of Registered Securities (other than French Registered Securities, Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, Swiss Securities, Swiss Certificates (UBS-cleared), Rule 144A New York Law Notes and Rule 144A Securities)*:

(A) Temporary Registered Global Securities

Each Temporary Registered Global Security will be exchangeable, free of charge to the Holder, on or after its Exchange Date, in whole or in part upon certification as to non-U.S. beneficial ownership in the form set out in the Agency Agreement for interests in a Permanent Registered Global Security or for Registered Securities in definitive form, as the case may be.

(B) Permanent Registered Global Securities

Each Permanent Registered Global Security will be exchangeable, free of charge to the Holder, on or after its Exchange Date in whole but not in part for Registered Securities in definitive form:

(1) by the relevant Issuer giving notice to the Holders and the Registrar of its intention to effect such exchange; or

(2) otherwise (x) if the Permanent Registered Global Security is held on behalf of Euroclear or Clearstream, Luxembourg or any other Relevant Clearing System and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise), or has announced an intention permanently to cease business or in fact closes or (y) if any Instalment Amount, Early Payment Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, in respect of any Security represented by such Registered Global Security is not paid when due by the holder giving notice to the Registrar of its election for such exchange.

(v) *Exchange of Swiss Securities but no exchange of Swiss Certificates (UBS-cleared)*: Unless otherwise specified in the relevant Pricing Supplement, Swiss Securities issued in uncertificated form or represented by a Swiss Global Security will in either case be exchangeable for Registered Securities in definitive form only in the limited circumstances described in the paragraph immediately below. No Holder of Swiss Securities will at any time have the right to effect or demand the conversion of such Swiss Securities into, or the delivery of, uncertificated securities (in the case of Swiss Securities represented by a Swiss Global Security) or Securities in definitive form (in the

case of either Swiss Securities represented by a Swiss Global Security or Swiss Securities issued in uncertificated form). Swiss Certificates (UBS-cleared) issued in uncertificated form will not be exchangeable for Registered Securities in definitive form in any circumstances. No Holder of Swiss Certificates (UBS-cleared) will at any time have the right to effect or demand the conversion of such Swiss Certificates (UBS-cleared) into, or the delivery of Securities in definitive form.

Swiss Securities will only be exchangeable for Registered Securities in definitive form (i) if the Swiss Programme Agent determines that SIX SIS has become permanently unable to perform its functions in relation to the relevant Swiss Securities as a result of its insolvency, *force majeure* or for regulatory reasons, and no substitute clearing system has assumed the functions of SIX SIS (including the function as depository of the Swiss Global Security) within 90 calendar days thereafter, or (ii) at the option of the Swiss Programme Agent if the Swiss Programme Agent determines that printing Registered Securities in definitive form is necessary or useful or required by Swiss or applicable foreign laws or regulations in connection with the enforcement of rights.

Provided such printing is permitted by these General Conditions, the Issuer has irrevocably authorised the Swiss Programme Agent to arrange for the printing of Registered Securities in definitive form, in whole or in part, in the form agreed in the Agency Agreement or, in case of Swiss Securities listed on the SIX Swiss Exchange AG (the "**SIX Swiss Exchange**"), as then required by the rules and regulations of the SIX Swiss Exchange.

If Registered Securities in definitive form are printed, the Swiss Programme Agent will (i) in the case of Swiss Securities represented by a Swiss Global Security, cancel the Swiss Global Security deposited with SIX SIS and, in the case of printing only a portion of a Tranche of Swiss Securities, exchange such Swiss Global Security for a Swiss Global Security representing the Swiss Securities of such Tranche that are not printed or (ii) in the case of Swiss Securities issued as uncertificated securities (*einfache Wertrechte*), deregister such Swiss Securities from the uncertificated securities book (*Wertrechtebuch*) and, in each case, deliver the Registered Securities in definitive form to the relevant Holders. If Registered Securities in definitive form are issued, the Swiss Programme Agent will maintain a register of the Holders for which Registered Securities in definitive form have been issued (the "**Swiss Register**") in accordance with U.S. Treasury Regulation Section 5f.103-1(c)(1) and proposed U.S. Treasury Regulation Section 1.163-5(b)(1). In the case of Swiss Securities represented by a Swiss Global Security, prior to and as a condition to depositing such Swiss Global Security with a Relevant Clearing System (or issuing it to any person) other than SIX SIS, the Issuer shall obtain an opinion of United States tax counsel competent in such matters to the effect that, having regard to the applicable governing local law (for which purpose tax counsel may rely on an opinion of competent local counsel), the related Swiss Securities will be described in section 871(h)(2)(B) or 881(c)(2)(B) of the Code. In addition, if any Swiss Global Security is deposited with a Relevant Clearing System other than SIX SIS, such Relevant Clearing System must be an intermediary (*Verwahrungstelle*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) in Switzerland that, in the case of Swiss Securities listed on the SIX Swiss Exchange, is recognised for such purposes by the SIX Swiss Exchange.

(vi) *Registered Securities in definitive form*: Subject as otherwise provided in this General Condition 1.1(c), Registered Securities in definitive form may be exchanged or transferred in whole or in part for one or more Registered Securities in definitive form in respect of the same number of Securities. Registered Securities in definitive form will be substantially in the form set out in the Agency Agreement.

(vii) *Exchange of French Securities*: French Securities in one form may not be exchanged for French Securities in any other form except as provided below.

French Securities issued in fully registered form (*au nominatif pur*) may, at the option of the Holder, be converted into French Securities in administered registered form (*au nominatif administré*), and vice versa. The exercise of any such option by such Holder

shall be made in accordance with Article R.211–4 of the French *Code monétaire et financier*. Any such conversion shall be effected at the cost of such Holder.

1.2 **Title**

(a) ***Title to Registered Securities (other than Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, French Registered Securities, Swiss Securities and Swiss Certificates (UBS-cleared))***

Subject as provided below, title to the Registered Securities shall pass by registration in the register (the "**Register**"). The Registrar will maintain the Register in accordance with the provisions of the Agency Agreement. In the case of Registered Securities in definitive form, "**Holder**" means, unless otherwise specified, the person in whose name a Registered Security is registered (as the case may be) or relating to it.

(b) ***Title to Securities (other than German Securities, Intermediated Securities and Intermediated Securities (UBS-cleared)) represented by a Global Security***

For so long as any of the Notes (other than Notes which are German Securities) are represented by a Global Note, or Warrants or Certificates (other than Warrants or Certificates which are German Securities) are represented by a Global Warrant or Global Certificate, as applicable (for the purposes of this paragraph each a "**Global Security**" and together the "**Global Securities**") held on behalf of Euroclear, Clearstream, Luxembourg or DTC, each person (other than Euroclear, Clearstream, Luxembourg or DTC) who is for the time being shown in the records of Euroclear, Clearstream, Luxembourg or DTC as the Holder of a principal amount or number of such Securities (in which regard any certificate or document issued by Euroclear, Clearstream, Luxembourg or DTC as to the principal amount or number of such Securities standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error or proven error) shall be treated by the relevant Issuer and the Agents as the Holder of such principal amount or number of such Securities for all purposes other than with respect to the payment of principal or interest (if any) on such principal amount of Securities or the coupon amount, redemption amount or settlement amount of Securities, for which purpose the common depository or, as the case may be, its nominee in respect of the relevant Registered Security shall be treated by the relevant Issuer and any Agent as the Holder of such principal amount or number of such Securities in accordance with and subject to the terms of the Global Security.

(c) ***Title to Danish Notes***

Title to Danish Notes shall pass by registration in the VP in accordance with the VP Rules. In respect of Danish Notes, "**Holder**" means the person in whose name the Danish Notes are registered in the VP and shall include any person duly authorised to act as a nominee for the Notes.

(d) ***Title to Finnish Securities***

Title to Finnish Securities shall pass by registration in the register that the Issuer shall procure to be kept by the Finnish Registrar in accordance with the provisions of the Agency Agreement and Euroclear Finland Rules (the "**Finnish Register**"). Title to Finnish Securities shall pass by transfer from a Holder's book-entry securities account to another book-entry securities account within the Finnish Register (except where the Finnish Securities are nominee-registered and are transferred from one sub-account to another with the same nominee). In respect of Finnish Securities, "**Holder**" means the person on whose book-entry securities account the Finnish Securities are held including a nominee account holder, as the case may be.

Each of the Issuer and the Finnish Programme Agent shall be entitled to obtain information on the Holders from the Finnish Register in accordance with the Euroclear Finland Rules.

(e) ***Title to Norwegian Securities***

Title to Norwegian Securities shall pass by registration in the register that the Issuer shall procure to be kept with the Norwegian Registrar in accordance with the provisions of the

Agency Agreement and the VPS Rules (the "**VPS Register**"). The Issuer shall be entitled to obtain information from VPS in accordance with the VPS Rules. In respect of Norwegian Securities, "**Holder**" means the person in whose name a Security is registered and shall include any person duly authorised to act as nominee (*forvalter*) and registered for the Securities.

By purchasing Norwegian Notes, each Holder is deemed to consent that the VPS may provide the Norwegian Programme Agent and/or the Issuer, upon request, information registered with the VPS relating to the Securities and the Holders. Such information shall include, but not be limited to, the identity of the registered Holder of the Securities, the residency of the registered Holder of the Securities, the number of Securities registered with the relevant Holder, the address of the relevant Holder, the account operator in respect of the relevant VPS account (Kontofører utsteder) and whether or not the Securities are registered in the name of a nominee and the identity of any such nominee. The Norwegian Programme Agent and/or the Issuer will only make use of and store such information to the extent this is required or deemed appropriate to fulfil their obligations in relation to the Securities.

(f) ***Title to Swedish Securities***

Title to Swedish Securities shall pass by registration in the register that the Issuer shall procure to be kept by the Swedish Registrar in accordance with the provisions of the Agency Agreement and the Swedish CSD Rules (the "**Swedish Register**"). In respect of Swedish Securities, "**Holder**" means the person in whose name a Security is registered and shall include any person duly authorised to act as a nominee (*förvaltare*) and registered for the Securities.

The Issuer shall be entitled to obtain information from the Swedish Register in accordance with the Swedish CSD Rules.

(g) ***Title to French Securities***

Title to French Securities will be evidenced in accordance with Articles L. 211-3 and R. 211-1 of the French *Code monétaire et financier* by book entries (*inscriptions en compte*). No physical document of title (*including certificats représentatifs* pursuant to Article R. 211-7 of the French *Code monétaire et financier*) will be issued in respect of French Securities.

Title to French Bearer Securities and French Registered Securities in administered registered form (*au nominatif administré*) shall pass upon, and transfer of such French Securities may only be effected through, registration of the transfer in the accounts of the Euroclear France Account Holders. Title to French Registered Securities in fully registered form (*au nominatif pur*) shall pass upon, and transfer of such French Registered Securities may only be effected through, registration of the transfer in the accounts of the Issuer or the French Registration Agent.

In respect of French Securities, "**Holder**" means the person whose name appears in the account of the relevant Euroclear France Account Holder or the Issuer or the French Registration Agent (as the case may be) as being entitled to such French Securities.

(h) ***Title to German Securities; Book-Entry Registrar***

In respect of German Securities, "**Holder**" means any holder of a proportionate co-ownership interest or similar right in the Global Security.

German Securities shall be transferable in accordance with applicable law and the terms and regulations of the Relevant Clearing System.

In relation to any German Securities in respect of which the relevant Pricing Supplement specifies "Clearstream Frankfurt" to be the Relevant Clearing System, the Issuer has entered into a book-entry registration agreement with Clearstream Frankfurt and appointed Clearstream Frankfurt as its book-entry registrar (the "**Book-Entry Registrar**"). The Book-Entry Registrar has agreed to maintain (i) a register (the "**Book-Entry Register**") showing the interests of Clearstream Frankfurt accountholders in the Temporary Bearer Global Security or the Permanent Bearer Global Security, as the case may be and (ii) as agent of the Issuer, the additional register in accordance with General Condition 1.1(c)(iii) (*Exchange of German Securities*) and the sub-paragraph below.

With respect to any redemption of, or payment of an instalment on, or purchase and cancellation of, any of the German Securities represented by a Temporary Bearer Global Security or a Permanent Bearer Global Security the Issuer shall procure that details of any redemption, payment or purchase and cancellation (as the case may be) in respect of such Temporary Bearer Global Security or such Permanent Bearer Global Security shall be entered accordingly in the Book-Entry Register by the Book-Entry Registrar and, upon any such entry being made, the principal amount (in the case of Notes) or number (in the case of Warrants and Certificates) of German Securities represented by such Temporary Bearer Global Security or such Permanent Bearer Global Security shall be reduced by the aggregate principal amount (in the case of Notes) or aggregate number (in the case of Warrants and Certificates) of German Securities so redeemed or purchased and cancelled or by the aggregate amount of such instalment so paid, and appropriate entries shall be made in the Book-Entry Register.

(i) ***Title to Swiss Securities and Swiss Certificates (UBS-cleared)***

(i) Swiss Securities

In the case of Intermediated Securities, (i) the legal holders of such Swiss Securities are each person holding any such Securities in a securities account (*Effektenkonto*) that is in such person's name or, in the case of intermediaries (*Verwahrungsstellen*), each intermediary (*Verwahrungsstelle*) holding any such Securities for its own account in a securities account (*Effektenkonto*) that is in such intermediary's name (and the expression "Holder" as used herein shall be construed accordingly), and (ii) such Securities may only be transferred by the entry of the transferred Securities in a securities account of the transferee.

Notwithstanding the above, the relevant Issuer shall make all payments due to the Holders under the Swiss Securities to the Swiss Programme Agent and, upon receipt by such Swiss Programme Agent of the due and punctual payment of such funds in Switzerland, shall be discharged from its obligations to the Holders under the Swiss Securities to the extent of the funds received by such Swiss Programme Agent.

In respect of any Swiss Securities in definitive form, title to the Swiss Securities shall pass by registration in the Swiss Register.

(ii) Swiss Certificates (UBS-cleared)

In the case of Swiss Certificates (UBS-cleared) (which will always be in the form of Intermediated Securities (UBS-cleared)), (i) the legal holders of such Swiss Certificates (UBS-cleared) are each person holding any such Securities in a securities account (*Effektenkonto*) that is in such person's name or, in the case of intermediaries (*Verwahrungsstellen*), each intermediary (*Verwahrungsstelle*) holding any such Securities for its own account in a securities account (*Effektenkonto*) that is in such intermediary's name (and the expression "**Holder**" as used herein shall be construed accordingly), and (ii) such Securities may only be transferred by the entry of the transferred Securities in a securities account of the transferee, which must be held at all times directly or indirectly with UBS Switzerland AG.

Notwithstanding the above, the relevant Issuer shall make all payments due to the Holders under the Swiss Certificates (UBS-cleared) to the Swiss Certificates (UBS-cleared) Agent and, upon receipt by such Swiss Certificates (UBS-cleared) Agent of the due and punctual payment of such funds in Switzerland, shall be discharged from its obligations to the Holders under the Swiss Certificates (UBS-cleared) to the extent of the funds received by such Swiss Certificates (UBS-cleared) Agent.

(j) ***Title to Rule 144A Securities and Rule 144A New York Law Notes***

Beneficial interests in the Global Securities for any Series of Rule 144A Securities or Rule 144A New York Law Notes will be shown on, and transfers thereof will be effected only through, records maintained by DTC and its respective participants (including, in the case of Rule 144A

Securities admitted to trading on the Luxembourg Stock Exchange, Euroclear and Clearstream, Luxembourg) or such other Relevant Clearing System or its nominee as may be the registered holder thereof. Rule 144A Securities and Rule 144A New York Law Notes which are represented by a Global Security will only be transferable in accordance with the rules and procedures of DTC or other Relevant Clearing System, as the case may be. Unless and until it is exchanged for Securities in definitive form in the circumstances described above, a Global Security may not be transferred except as a whole by and among DTC or other Relevant Clearing System, as the case may be, its nominees and any successor of DTC or other Relevant Clearing System, as the case may be, or those nominees.

Each of the persons shown in the records of DTC or any other Relevant Clearing System as the Holder of a Security represented by a Global Security must look solely to DTC or such Relevant Clearing System (as the case may be) for his share of each payment made by the relevant Issuer to the holder of the underlying securities and in relation to all other rights arising under the Global Securities, subject to and in accordance with the respective rules and procedures of DTC or such Relevant Clearing System (as the case may be). Such persons shall have no claim directly against the Issuer in respect of payments due on the Securities for so long as the Securities are represented by such Global Security and such obligations of the relevant Issuer will be discharged by payment to the holder of the underlying securities in respect of each amount so paid. The relevant Issuer shall not be liable to any such persons or any other beneficial holder of an interest represented by a Global Security to the extent the relevant Issuer shall have made payment in respect of the Securities represented thereby to DTC or the Relevant Clearing System, as the case may be.

Upon the terms and subject to the conditions set forth in the Agency Agreement, a Rule 144A Security or Rule 144A New York Law Note in definitive form may be transferred in whole or in part by the Holder surrendering such Rule 144A Security or Rule 144A New York Law Note in definitive form for registration of the transfer of the Rule 144A Security or Rule 144A New York Law Note in definitive form (or the relevant part of the Rule 144A Security or Rule 144A New York Law Note) at the specified office of the Relevant Programme Agent, with the form of transfer thereon duly executed by the Holder thereof or its attorney duly authorised in writing and upon the Relevant Programme Agent, after due and careful enquiry, being satisfied with the documents of title and the identity of the person making the request and subject to such reasonable regulations as the relevant Issuer and the Relevant Programme Agent may prescribe.

(k) ***Title to Regulation S/Rule 144A Securities***

For so long as the Securities are represented by a Regulation S/Rule 144A Global Note, a Regulation S/Rule 144A Global Certificate or, a Regulation S/Rule 144A Global Warrant, as the case may be held through Euroclear and/or Clearstream, Luxembourg, each person who is for the time being shown in the records of a Relevant Clearing System as the holder of a particular number of Security (in which regard any certificate or other document issued by such Relevant Clearing System as to the number of Securities standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer, the Guarantor and the Relevant Programme Agent as the holder of such number of Securities for all purposes (and the expressions "Holder", "holder of Notes" or "holder of Warrants" and related expressions shall be construed accordingly).

(l) ***Ownership***

Except as ordered by a court of competent jurisdiction, or as required by law, the Holder of any Securities shall be deemed to be and may be treated as its absolute owner for all purposes, whether or not it is overdue and regardless of any notice of ownership, trust or an interest in it (or on the registered certificate) or its theft or loss (or that of the related registered certificate) and no person shall be liable for so treating the Holder.

2. **Transfers**

2.1 **Registered Securities held in a Relevant Clearing System**

(a) ***Transfers of Registered Securities (other than Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities and Intermediated Securities)***

Transfers of Registered Securities (other than Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities and Intermediated Securities) which are held in a Relevant Clearing System may be effected only through the Relevant Clearing System(s) in which the Securities to be transferred are held.

(b) ***Transfer of Danish Notes***

Transfers of Danish Notes are effected on entry in the VP of an account transfer from a Holder's book-entry securities account to another securities book-entry account within the VP (except where the Danish Notes are nominee-registered and are transferred from one account to another account with the same nominee) in accordance with the VP Rules.

(c) ***Transfer of Finnish Securities***

Transfers of Finnish Securities are effected upon entry in the Finnish Register of an account transfer from a Holder's book-entry securities account to another securities book-entry account (except where the Finnish Securities are nominee-registered and are transferred from one sub-account to another sub-account with the same nominee) in accordance with Euroclear Finland Rules.

(d) ***Transfer of Norwegian Securities***

Transfers of Norwegian Securities are effected upon entry into the VPS Register of an account transfer from a Holder's book-entry securities account to another securities book-entry account within the VPS (except where the Norwegian Securities are nominee-registered and are transferred from one account to another account with the same nominee) in accordance with the VPS Rules.

(e) ***Transfer of Swedish Securities***

Transfers of Swedish Securities are effected upon entry in the Swedish Register of an account transfer from a Holder's book-entry securities account to another securities book-entry account (except where the Swedish Securities are nominee-registered and are transferred from one account to another account with the same nominee) in accordance with the Swedish CSD Rules.

(f) ***Transfers of Intermediated Securities***

Transfers of Intermediated Securities may only be effected by the entry of the transferred Intermediated Securities in the securities account of the transferee.

(g) ***Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities***

No Holder may require the transfer of Registered Securities to be registered:

(i) in respect of Danish Notes, Norwegian Securities and Swedish Securities during a closed period pursuant to the VP Rules, the VPS Rules or Swedish CSD Rules (as applicable); or

(ii) in respect of Finnish Securities, during a period not permitted by the then applicable Euroclear Finland Rules or when the relevant Finnish Securities are held in a blocked book-entry securities account pursuant to General Condition 5.2 (*Redemption at the Option of Holders*) or General Condition 9.2 (*Redemption at the Option of Holders*).

2.2 **Registered Securities in definitive form**

(a) ***Transfer of Registered Securities in definitive form***

Transfers of Registered Securities in definitive form are effected upon (i) the surrender (at the specified office of the Registrar or any Transfer Agent) or the transfer of the registered

certificate representing such Registered Securities in definitive form, together with the form of transfer (which shall be available at the specified office of the Registrar or Transfer Agent) endorsed on such registered certificate (or another form of transfer substantially in the same form and containing the same representations and certifications (if any), unless otherwise agreed by the Issuer), duly completed and executed and any other evidence as the Registrar or Transfer Agent may reasonably require, (ii) the recording of such transfer in the Register and (iii) issuance of a new registered certificate to the transferee.

(b) ***Part Transfer of Registered Securities in definitive form***

In the case of a transfer of part only of a holding of Registered Securities in definitive form represented by one registered certificate, a new registered certificate shall be issued to the transferee in respect of the part transferred and a further new registered certificate in respect of the balance of the holding not transferred shall be issued to the transferor.

(c) ***Delivery of New Registered Securities in definitive form***

Each new registered certificate to be issued pursuant to this General Condition 2 (*Transfers*) shall be available for delivery within three business days of receipt of the form of transfer or Put Option Exercise Notice and surrender of the registered certificate for exchange. Delivery of the new registered certificate(s) shall be made at the specified office of the Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such request for exchange, form of transfer, Put Option Exercise Notice or registered certificate shall have been made or, at the option of the Holder making such delivery or surrender as aforesaid and as specified in the relevant request for exchange, form of transfer, Put Option Exercise Notice or otherwise in writing, be mailed by uninsured post at the risk of the Holder entitled to the new registered certificate (as applicable) to such address as may be so specified, unless such Holder requests otherwise and pays in advance to the Relevant Programme Agent the costs of such other method of delivery and/or such insurance as it may specify.

(d) ***Closed Periods in respect of Registered Notes in definitive form***

No Holder may require the transfer of a Registered Note in definitive form to be registered:

(i) during the period of 15 days ending on the due date for redemption of, or payment of any Instalment Amount in respect of, that Note;

(ii) during the period of 15 days before any date on which Notes may be called for redemption by the Issuer at its option pursuant to General Condition 5.1 (*Redemption at the Option of the Issuer*);

(iii) after any such Note has been called for redemption; or

(iv) during the period of seven days ending on (and including) any Record Date.

(e) ***Exchange Free of Charge***

Exchange and transfer of Securities on registration, transfer, partial redemption, settlement or exercise of an option (as applicable) shall be effected without charge by or on behalf of the Issuer, the Registrar or the Transfer Agent, but upon payment of any tax or other governmental charges that may be imposed in relation to it (or the giving of such indemnity as the Registrar or the relevant Transfer Agent may require).

2.3 **Compulsory Transfer or Redemption**

(a) ***U.S. Persons***

(i) *Securities other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities*: Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time nor offered, sold, transferred, pledged, assigned, delivered,

exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person provided, however, that this restriction shall not apply to any U.S. Person that is an Affiliate of the Issuer.

If the Issuer determines at any time that any Security (other than a Rule 144A Security, a Rule 144A New York Law Note, a Regulation S/Rule 144A Security being offered or sold in accordance with Rule 144A or a CREST CDI Security) is legally or beneficially owned by any U.S. Person that is not an Affiliate of the Issuer, the Issuer may direct the Holder to sell or transfer such Security to a person who either is not a U.S. Person or is an Affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not a U.S. Person or to an Affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Security or (y) give notice to the Holder that such Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with sub-clause (x) of the preceding paragraph, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Security sold as a result of any sale or the exercise of such discretion.

If the Issuer determines at any time that (a) any CREST CDI Security is legally or beneficially owned by a U.S. Person that is not an Affiliate of the Issuer, or (b) any transfer of a CREST CDI Security has been effected other than to a person that is not an Affiliate of the Issuer and who (i) is not (A) a U.S. person (as such term is defined in Rule 902(k) of Regulation S) and (B) resident or otherwise located in the United States, and (ii) has entered into and remains in compliance with the provisions of the relevant Investor Letter of Representations (such person, for the purposes of this General Condition 2.3(a)(i) (*Securities other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities*) only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer such CREST CDI Security to a person who is a Permitted Transferee or to an Affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such CREST CDI Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee or to an Affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such CREST CDI Security or (y) give notice to the Holder that such CREST CDI Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with sub-clause (x) of the preceding paragraph, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the CREST CDI Security sold as a result of any sale or the exercise of such discretion.

(ii) *Securities other than Rule 144A Securities, Rule 144A New York Law Notes, Regulation S/Rule 144A Securities and CREST CDI Securities (where ECI Holder Restrictions apply)*: Securities (other than Rule 144A Securities, Rule 144A New York Law Notes, Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A and a CREST CDI Security) may not be legally or beneficially owned by any U.S. Person at any time or by any non-U.S. Person whose income, gain or loss, if any, or the Notes or Certificates (if applicable) would be effectively connected with a U.S. trade or business ("**ECI Holder**"), nor offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any ECI Holder or any U.S. Person provided, however, that this restriction shall not apply to any U.S. Person that is an Affiliate of the Issuer.

If the Issuer determines at any time that any Security (other than a Rule 144A Security, a Rule 144A New York Law Note, a Regulation S/Rule 144A Security being offered or sold in accordance with Rule 144A or a CREST CDI Security) is legally or beneficially owned by any U.S. Person that is not an Affiliate of the Issuer or by an ECI Holder, the Issuer may direct the Holder to sell or transfer such Security to a person who either is not a U.S. Person and not an ECI Holder or is an Affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not a U.S. Person and not an ECI Holder or to an Affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Security or (y) give notice to the Holder that such Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with sub-clause (x) of the preceding paragraph, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Security sold as a result of any sale or the exercise of such discretion.

(iii) *Rule 144A Securities and Rule 144A New York Law Notes*: If the Issuer determines at any time that a transfer of any Rule 144A Security or any interest in a Rule 144A Security, or a Rule 144A New York Law Note or any interest in a Rule 144A New York Law Note, has been effected other than to a person who (A) is (i) a QIB, (ii) in relation to Securities issued by JPMSP, a QP, (iii) an ECP and (iv) in relation to Securities issued by JPMSP, either a Qualified Offshore Client or MUSIV and (B) (i) in the case of Securities which are Notes held in definitive form or Certificates or Warrants (in definitive or global form), has entered into and remains in compliance with the relevant Investor Letter of Representations and (ii) in the case of Notes represented by a Global Security, has remained in compliance with the representations such beneficial holders are deemed to have made (for the purpose of this General Condition 2.3(a)(iii) (*Rule 144A Securities and Rule 144A New York Law Notes*) only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer such Security to a person who is a Permitted Transferee within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Security or (y) give notice to the Holder that such Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with sub-clause (x) of the preceding paragraph, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Rule 144A Security or Rule 144A New York Law Note sold as a result of any sale or the exercise of such discretion.

(iv) *Regulation S/Rule 144A Securities*: If the Issuer determines at any time that any transfer of a Regulation S/Rule 144A Security has been effected other than (A) to a person who is not an Affiliate of the Issuer and (i) is not a U.S. Person in accordance with Regulation S in "offshore transactions" (as such term is defined in Rule 902(h) of Regulation S); (ii) has entered into and remains in compliance with the provisions of the relevant Investor Letter of Representations; and (iii) is a "qualified investor", as defined in the EU Prospectus Regulation or UK Prospectus Regulation (as applicable), or any other purchaser that is approved by the Dealer from time to time: or (B) to a person who is (i) a QIB, (ii) a QP, (iii) an ECP and (iv) either (a) a MUSIV or (b) a Qualified Offshore Client and (v) who has entered into and has remained in compliance with the relevant Investor Letter of Representations at the time of such transfer, (each person satisfying either sub-clause (A) or sub-clause (B), for the purpose of this General Condition 2.3(a)(iv) (*Regulation S/Rule 144A Securities*) only, a "**Permitted Transferee**"), the Issuer may direct the Holder to sell or transfer its Regulation S/Rule 144A Security to a person who is a Permitted Transferee or to an Affiliate of the Issuer within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer such Regulation S/Rule 144A Security within such period, the Issuer may at its discretion (x) cause such Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is a Permitted Transferee or to an Affiliate of the Issuer, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of such Regulation S/Rule 144A Security or (y) give notice to the Holder that such Regulation S/Rule 144A Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with sub-clause (x) of the preceding paragraph, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Regulation S/Rule 144A Security sold as a result of any sale or the exercise of such discretion.

(b) ***Indian Residents***

Securities in respect of which the Reference Asset is an equity security or index listed or proposed to be listed on an Indian securities exchange ("**Indian Participation Securities**") may not be legally or beneficially owned by (i) a person that is a resident of the Republic of India (an "**Indian Resident**") in terms of Section 2(v) of the Foreign Exchange Management Act, 1999; (ii) a citizen of India who is a not an Indian Resident (a "**Non-Resident Indian**") as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019; (iii) an individual resident outside India who is registered as an overseas citizen of India (an "**Overseas Citizen of India**") as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019, together with Indian Resident and Non-Resident Indian, each, a "**Restricted Entity**"); or (iv) any person/entity which is not eligible to, directly or indirectly, subscribe to, deal in or otherwise be involved in Indian Participation Securities as specifically identified by the Securities and Exchange Board of India ("**SEBI**") or otherwise in accordance with the Securities and Exchange Board of India (Foreign

Portfolio Investors) Regulations, 2019, and notifications, circulars, rules and guidelines issued by SEBI from time to time (collectively, the "**FPI Regulations**") (together with any Restricted Entity, each, an "**Ineligible Entity**"). If the Issuer determines at any time that any Holder of an Indian Participation Security is an Ineligible Entity, the Issuer may, at its discretion, (i) cause the Indian Participation Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not an Ineligible Entity, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of the Indian Participation Security or (ii) give notice to the Holder that the Indian Participation Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale, pledge, assignment, novation, entering into a back-to-back offshore derivative instrument or into an agreement in respect of any of the foregoing in accordance with paragraph (i) above, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Indian Participation Security sold as a result of any sale or the exercise of such discretion.

Furthermore, the Issuer shall not honour a transfer of beneficial interests in any Indian Participation Security to any person who is an Ineligible Entity.

Each prospective purchaser of Indian Participation Securities will be required to execute and deliver to the Dealer or any of its affiliates a letter of investor representations as may be amended from time to time due to legal and regulatory changes. Investors interested in purchasing such Securities should specifically refer to the India specific representations in the Purchaser Representations and Requirements and Transfer Restrictions set out herein (and in the Agency Agreement) and ensure that the conditionalities mentioned therein are satisfied.

(c) ***ERISA Violations***

If the Issuer determines at any time that any Holder of a Security has made or been deemed to have made a representation related to the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**") (as set forth in the section entitled "*Certain ERISA Considerations*" in this Offering Circular), that is false or misleading (a "**Non-Permitted Holder**"), the Issuer may direct the Holder to sell or transfer its Security to a person who is not a Non-Permitted Holder within 14 days following receipt of notice of the direction. If the Holder fails to sell or transfer its Security within such period, the Issuer may at its discretion (i) cause the Security to be sold to an acquirer selected by the Issuer that certifies to the Issuer that such acquirer is not a Non-Permitted Holder, on terms as the Issuer may choose, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and, pending such transfer, no further payments will be made in respect of the Security or (ii) give notice to the Holder that the Security will be redeemed by the Issuer at the Early Payment Amount on the date specified in such notice.

In the event of a sale in accordance with paragraph (i) above, the Issuer may select an acquirer by any means determined by it in its sole discretion. The proceeds of the sale, net of any commissions, expenses and taxes due in connection with the sale shall be remitted to the selling Holder. The terms and conditions of any sale hereunder (including the sale price) shall be determined in the sole discretion of the Issuer, subject to the purchaser representations and requirements and transfer restrictions set out herein (and in the Agency Agreement), and the Issuer shall not be liable to any person having an interest in the Security sold as a result of any sale or the exercise of such discretion.

Furthermore, the Issuer shall not honour a transfer of beneficial interests in any Security to any person who is a Non-Permitted Holder.

2.4 **Swiss Certificates (UBS-cleared) held with UBS**

Swiss Certificates (UBS-cleared) are held with UBS Switzerland AG and not cleared through SIX SIS or any other clearing system. Swiss Certificates (UBS-cleared) may only be acquired by, transferred to and held by Holders having a securities account with UBS Switzerland AG or holding in a securities account with another provider which, in turn, has a securities account with UBS Switzerland AG or another UBS group entity.

Any transfers or purported transfers of Swiss Certificates (UBS-cleared) will be in accordance with the terms and conditions (including any related requirements, restrictions and prohibitions) determined by UBS Switzerland AG (or, if applicable, the relevant institution other than UBS Switzerland AG where the Holder maintains a securities account), and the Issuer and Product Provider have no responsibility therefor and shall have no liability for any losses suffered by Holders or others in relation to failed or delayed transfers or other consequences of a transfer.

3. **Guarantees and Status of the Securities**

3.1 **Guarantees**

(a) ***Guarantee of JPMorgan Chase Bank, N.A.***

In accordance with, and subject to the terms of, the JPMorgan Chase Bank, N.A. Guarantee, JPMorgan Chase Bank, N.A. has unconditionally and irrevocably guaranteed that, if for any reason JPMSP does not pay any sum payable by it or perform any other obligation in respect of any Security on the date such payment or performance is due in accordance with these Conditions (after any applicable delay or extinguishment due to any event or condition set out in these Conditions providing or allowing for delay or extinguishment in respect of the payment or performance of such obligation) JPMorgan Chase Bank, N.A. will, in accordance with the JPMorgan Chase Bank, N.A. Guarantee, pay that sum in the currency in which such payment is due in immediately available funds or, as the case may be, perform or procure the performance of the relevant obligations on the due date for such performance.

(b) ***Guarantee of JPMorgan Chase & Co.***

In accordance with, and subject to the terms of, the JPMorgan Chase & Co. Guarantee, JPMorgan Chase & Co. has fully and unconditionally guaranteed that, if for any reason JPMCFC does not make any required payment in respect of the Securities when due in accordance with these Conditions, JPMorgan Chase & Co. will on demand pay the unpaid amount due at the same place and in the same manner that applies to payments made by JPMCFC. JPMorgan Chase & Co.'s obligations under the JPMorgan Chase & Co. Guarantee are unconditional and absolute. However, JPMorgan Chase & Co. will not be liable for any amount of payment that JPMCFC is excused from making or any amount in excess of the amount actually due and owing by JPMCFC, and any defence or counterclaims available to JPMCFC (except those resulting solely from, or on account of, the insolvency of JPMCFC or its status as debtor or subject of a bankruptcy or insolvency proceeding) will also be available to JPMorgan Chase & Co.to the same extent as these defence or counterclaims are available to the JPMCFC, whether or not asserted by JPMCFC.

(c) ***Status of the Guarantees***

Each of the Guarantees is not a deposit insured by the U.S. Federal Deposit Insurance Corporation ("**FDIC**") or any other government authority.

The JPMorgan Chase Bank, N.A. Guarantee is an unsecured and unsubordinated obligation of JPMorgan Chase Bank, N.A., and not of JPMorgan Chase & Co. or of any of its affiliates (each a "**J.P. Morgan affiliate**"), and will rank *pari passu* with all other unsecured and unsubordinated indebtedness of JPMorgan Chase Bank, N.A., subject to a preference in favour of certain U.S. domestic deposit liabilities or any other obligations that are subject to any priorities or preferences.

The JPMorgan Chase & Co. Guarantee is an unsecured and unsubordinated obligation of JPMorgan Chase & Co. and not of JPMorgan Chase Bank, N.A. or of any of its affiliates (each a "**J.P. Morgan affiliate**"), and will rank *pari passu* with all other unsecured and

unsubordinated indebtedness of JPMorgan Chase & Co., subject to any obligations that are subject to any priorities or preferences.

3.2 **Status of the Securities**

The Securities constitute general contractual obligations of the Issuers and are not secured by any property of the Issuers, nor are they deposits insured by the FDIC or any other government authority. The Securities are unsecured and unsubordinated obligations of the relevant Issuer, and not of any other Issuer or its affiliates, and will rank pari passu with all other unsecured and unsubordinated indebtedness of the relevant Issuer, subject to such exceptions as may be provided by any applicable present or future law, rule, regulation, judgement, order or directive of any governmental, administrative or judicial authority or power (including, in the case of JPMorgan Chase Bank, N.A., a preference in favour of certain U.S. domestic deposit liabilities).

C. PROVISIONS APPLICABLE TO NOTES ONLY

4. Interest and other Calculations under the Notes

4.1 **Interest on Fixed Rate Notes**

Each Fixed Rate Note bears interest on its outstanding nominal amount from the Interest Commencement Date at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrear on each Interest Payment Date(s) and the amount of interest payable on each Interest Payment Date shall be the Fixed Coupon Amount or, if applicable, the Broken Amount.

If interest is required to be calculated for a Fixed Rate Note for a period other than an Interest Period, such interest shall be calculated by multiplying the Rate of Interest by the Specified Denomination and multiplying the product by the Day Count Fraction, and rounding the resultant figure in accordance with General Condition 23 (*Rounding*). In all other circumstances the Day Count Fraction shall not be applicable to Fixed Rate Notes.

4.2 **Interest on Floating Rate Notes**

(a) ***Interest Payment Dates***

Each Floating Rate Note bears interest on its outstanding nominal amount from the Interest Commencement Date at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrear on each Interest Payment Date.

(b) ***Rate of Interest for Floating Rate Notes***

The Rate of Interest in respect of Floating Rate Notes for each Interest Period (or any relevant day, as applicable) shall be determined in the manner specified in the relevant Pricing Supplement and the provisions below relating to ISDA Determination, Screen Rate Determination, SONIA Floating Rate Determination, SOFR Floating Rate Determination, TONA Floating Rate Determination or €STR Floating Rate Determination shall apply, depending upon which is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest shall be determined in respect of the relevant Interest Period (or relevant day, as applicable).

(i) *ISDA Determination for Floating Rate Notes*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*) below, where ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall be determined by the Calculation Agent as a rate equal to the relevant ISDA Rate plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any). For the purposes of this sub-paragraph (i), "**ISDA Rate**" for an Interest Period means a rate equal to the Floating Rate that would be determined by the Calculation Agent (each as defined in the ISDA Definitions) under an interest rate swap transaction ("**Swap Transaction**") under

the terms of an ISDA 2002 Master Agreement incorporating the ISDA Definitions, and under which:

(A) the Floating Rate Option is as specified in the relevant Pricing Supplement;

(B) the Designated Maturity, if applicable, is a period as specified in the relevant Pricing Supplement;

(C) the relevant Reset Date is the first day of that Interest Period unless otherwise specified in the relevant Pricing Supplement; and

(D) the relevant Overnight Rate Compounding Method or Overnight Rate Averaging Method (if any) is as specified in the relevant Pricing Supplement,

provided that if, prior to:

(I) the occurrence of an Index Cessation Effective Date (as defined in the ISDA Definitions) in respect of the ISDA Rate; and

(II) the occurrence of an Administrator/Benchmark Event Date (as defined in the 2021 Definitions); and

(III) the application of any provision relating to discontinued rates maturities (as described in the ISDA Definitions),

the Calculation Agent determines that such ISDA Rate cannot be determined in accordance with the ISDA Definitions read with paragraphs (A) to (D) above, then the ISDA Rate for an Interest Period (or relevant day, as applicable) shall be such rate as is determined by the Calculation Agent in good faith and in a commercially reasonable manner having regard to alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

For the purposes of this General Condition 4.2(b)(i), terms used for the purpose of determining the relevant ISDA Rate under the relevant ISDA Definitions shall have the meanings given to those terms in the relevant ISDA Definitions as read together with General Condition 32.3 (*ISDA Determination Additional Provisions*).

(ii) *Screen Rate Determination for Floating Rate Notes*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*) (and to General Condition 4.8 (*Interest Calculations (Notes other than Fixed Rate Notes*) and any other applicable Conditions), where Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall be determined by the Calculation Agent at or about the Relevant Time on the Interest Determination Date in respect of such Interest Period in accordance with the following:

(A) the Rate of Interest shall be:

(1) the offered quotation;

(2) the arithmetic mean of the offered quotations; or

(3) the rate provided by the relevant administrator,

in each case expressed as a percentage rate per annum, of the Reference Rate appearing on such Page at the Relevant Time on the Interest Determination Date;

(B) (subject as provided in paragraph (C) below in respect of a Reference Rate that is a Swap Rate) if sub-paragraph (A)(1) above applies and no such offered quotation appears on the Page at the Relevant Time on the Interest Determination Date or

if sub-paragraph (A)(2) above applies and fewer than three such offered quotations appear on the Page at the Relevant Time on the Interest Determination Date or if sub-paragraph (A)(3) above applies and the Reference Rate does not appear on the relevant Page and the Reference Rate is not published by the administrator of the Reference Rate or an authorised distributor and is not otherwise provided by the administrator of the Reference Rate, in each case as of the Relevant Time, then a "Floating Rate Disruption" ("**Floating Rate Disruption**") shall have occurred and the Rate of Interest shall be determined by the Calculation Agent in good faith and in a commercially reasonable manner, having regard to alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). For the avoidance of doubt and without limitation, the Calculation Agent may determine the relevant Rate of Interest by reference to one or more of the following methods:

(1) the Rate of Interest may be the Adjusted Arithmetic Mean of the offered quotations that each of the Reference Banks is quoting to leading banks in the Relevant Financial Centre at the Relevant Time on the Interest Determination Date, provided that the Calculation Agent determines that at least two such Reference Banks are so quoting Reference Rates;

(2) the Rate of Interest may be the rate formally recommended for use by the administrator of the Reference Rate or the supervisor or competent authority (or a committee endorsed or convened by any such entity) responsible for supervising the Reference Rate or the administrator thereof; and

(3) the Rate of Interest may be the Reference Rate last provided or published by the relevant administrator; or

(C) notwithstanding sub-paragraph (B) above, where a Floating Rate Disruption has occurred in respect of a Reference Rate that is a Swap Rate, the Rate of Interest for such Interest Determination Date (or other day (as applicable)) shall be such commercially reasonable alternative rate as is determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(iii) *SONIA Floating Rate Determination*

(A) *Compounded Daily SONIA – Non-Index Determination*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SONIA Floating Rate Determination (Non-Index Determination) is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall be Compounded Daily SONIA as determined in respect of the relevant Interest Determination Date plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 4.2(b)(iii)(A), "**Compounded Daily SONIA**" means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily Sterling overnight reference rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Interest Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.0000005 being rounded upwards):

(1) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SONIA_i \times n_i}{365}\right)-1\right]\times\frac{365}{d}$$

(2) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SONIA_{i-pLBD} \times n_i}{365}\right)-1\right]\times\frac{365}{d}$$

In each case, for the avoidance of doubt, the formula for the calculation of Compounded Daily SONIA only compounds the SONIA rate in respect of any London Banking Day. The SONIA rate applied to a day that is not a London Banking Day will be taken by applying the SONIA rate for the previous London Banking Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Interest Period.

"**d_0**" means:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of London Banking Days in the relevant Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of London Banking Days in the relevant Interest Period.

"**i**" means a series of whole numbers from one to d_0, each representing the relevant London Banking Day in chronological order:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first London Banking Day in the relevant Observation Period to, and including, the last London Banking Day in such Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first London Banking Day in the relevant Interest Period to, and including, the last London Banking Day in such Interest Period.

"**n_i**" for any London Banking Day "i", means the number of calendar days from, and including, such London Banking Day "i" up to, but excluding, the following London Banking Day.

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling "p" London Banking Days prior to the first day of such Interest Period and ending on, but excluding, the date falling "p" London Banking Days prior to the Interest Period End Date for such

Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Securities become due and payable).

"**p**" means five London Banking Days or such number of London Banking Days specified in the relevant Pricing Supplement.

"**SONIA$_i$**" or "**SONIA rate**" in respect of any London Banking Day "i", in the relevant Observation Period, means a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the London Banking Day immediately following such London Banking Day).

"**SONIA$_{i\text{-}pLBD}$**" in respect of any London Banking Day "i", in the relevant Interest Period, means a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for the London Banking Day falling "p" London Banking Days prior to such London Banking Day "i" as provided by the administrator of SONIA to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the London Banking Day immediately following the London Banking Day falling "p" London Banking Days prior to such London Banking Day "i").

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{365}\right)-1\right]$$

means $[(1 + X_1 / 365) – 1] \times [(1 + X_2 / 365) – 1] \times \ldots \times [(1 + X_{30} / 365) – 1]$.

If, in respect of any relevant London Banking Day, the Calculation Agent determines that the SONIA rate is not available on the relevant Page or has not otherwise been published by the relevant authorised distributors, the Calculation Agent will determine such SONIA rate as being the SONIA rate published on the relevant Page (or otherwise published by the relevant authorised distributors) for the first preceding London Banking Day on which the SONIA rate was published on such Page (or otherwise published by the relevant authorised distributors). If the Calculation Agent determines that it is unable to determine the SONIA rate in accordance with the preceding sentence, the SONIA rate in respect of the relevant London Banking Day shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(B) *Compounded Daily SONIA – Index Determination*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SONIA Floating Rate Determination (Index Determination) is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall, subject as provided below, be calculated by reference to the screen rate or index administered by the administrator of the Sterling Overnight Index Average reference rate that is published or displayed by such administrator or other information service from time to time at the relevant time on the relevant determination dates specified below (the "**SONIA Compounded Index**") and the following formula. Such Rate

of Interest will be plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any):

Compounded Daily SONIA =

$$\left(\frac{SONIA\ Compounded\ Index_y}{SONIA\ Compounded\ Index_x} - 1\right) \times \frac{365}{d}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d**" is the number of calendar days from (and including) the day in relation to which "x" is determined to (but excluding) the day in relation to which "y" is determined;

"**Relevant Number**" is as specified in the relevant Pricing Supplement;

"**x**" denotes the value of the relevant SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the first day of the relevant Interest Period; and

"**y**" denotes the value of the relevant SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the Interest Period End Date of the relevant Interest Period.

If in respect of any relevant determination date a SONIA Compounded Index value has not been provided or published by or on behalf of the relevant administrator (or any successor administrator) or authorised distributors or the relevant website is not available, the relevant SONIA Compounded Index value will be the last such value provided for the SONIA Compounded Index. If the Calculation Agent determines that it is unable to determine the SONIA Compounded Index in accordance with the preceding sentence, the SONIA Compounded Index in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(iv) *SOFR Floating Rate Determination*

(A) *Compounded Daily SOFR – Non-Index Determination*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall, subject as provided below and save where Index Determination applies, be Compounded Daily SOFR plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

"**Compounded Daily SOFR**" means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily Secured Overnight Financing Rate as the reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Interest Determination Date as follows, and the resulting percentage will be rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.00000005 being rounded upwards:

$$\left[\prod_{i=1}^{d_0}\left(1 + \frac{SOFR_{i-pUSBD} \times n_i}{360}\right) - 1\right] \times \frac{360}{d}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, the number of calendar days in the relevant Interest Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, the number of calendar days in the relevant SOFR Observation Period;

"**d_0**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, in respect of any Interest Period, the number of U.S. Government Securities Business Days in the relevant Interest Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, in respect of any SOFR Observation Period, the number of U.S. Government Securities Business Days in the relevant SOFR Observation Period;

"**i**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, a series of whole numbers from 1 to "d_0", each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Interest Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, a series of whole numbers from 1 to "d_0", each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant the SOFR Observation Period;

"**n_i**" for any U.S. Government Securities Business Day, means the number of calendar days from and including, such U.S. Government Securities Business Day up to but excluding the following U.S. Government Securities Business Day;

"**Observation Look-Back Period**" means the number of U.S. Government Securities Business Days specified in the relevant Pricing Supplement;

"**p**" means (save as specified in the relevant Pricing Supplement) the number of U.S. Government Securities Business Days included in the Observation Look-Back Period specified in the relevant Pricing Supplement;

"**SOFR Observation Period**" means in respect of each Interest Period, the period from and including the date falling "p" U.S. Government Securities Business Days preceding the first date in such Interest Period to but excluding the date falling "p" U.S. Government Securities Business Days preceding the Interest Period End Date in respect of the relevant Interest Period;

"**SOFR Reference Rate**", in respect of any U.S. Government Securities Business Day ("**$USBD_x$**"), is a reference rate equal to the daily secured overnight financing ("**SOFR**") rate for such $USBD_x$ as provided by the

Federal Reserve Bank of New York, as the administrator of such rate (or any successor administrator of such rate) on the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor website or the website of any successor administrator for the publication of such rate (the "**New York Federal Reserve's Website**") (in each case, on or about 3:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following such $USBD_x$) or if the New York Federal Reserve's Website is unavailable as otherwise published by or on behalf of the relevant administrator;

"**$SOFR_{i\text{-}pUSBD}$**" means:

(a) where in the relevant Pricing Supplement "Lag" is specified as the Observation Method, (save as specified in the relevant Pricing Supplement) in respect of any U.S. Government Securities Business Day "i" falling in the relevant Interest Period, the SOFR Reference Rate for the U.S. Government Securities Business Day falling "p" U.S. Government Securities Business Days prior to such day; or

(b) where in the relevant Pricing Supplement "Shift" is specified as the Observation Method, (save as specified in the relevant Pricing Supplement) $SOFR_i$, where $SOFR_i$ is, in respect of any U.S. Government Securities Business Day "i" falling in the relevant SOFR Observation Period, the SOFR Reference Rate for such day;

"**U.S. Government Securities Business Day**" or "**USBD**" means any day, except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (or any successor) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities; and

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{360}\right)-1\right]$$

means $[(1 + X_1 / 360) – 1] \times [(1 + X_2 / 360) – 1] \times \ldots \times [(1 + X_{30} / 360) – 1]$.

(B) *Compounded Daily SOFR – Index Determination*: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined and Index Determination is specified as being applicable in the relevant Pricing Supplement, the Rate of Interest for each Interest Period shall, subject as provided below, be calculated by reference to the following formula and based on the SOFR Index (as defined below) (the "**SOFR Compounded Index**") and the resulting percentage will be rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.00000005 being rounded upwards. Such Rate of Interest shall be plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any):

Compounded Daily SOFR =

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}}-1\right)\times\frac{360}{d_c}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d_c**" is the number of calendar days from (and including) the day in relation to which SOFR $Index_{Start}$ is determined to (but excluding) the day in relation to which SOFR $Index_{End}$ is determined;

"**Relevant Number**" is as specified in the relevant Pricing Supplement;

"**SOFR Index**" means, in respect of any U.S. Government Securities Business Day, the SOFR Index value as published by the Federal Reserve Bank of New York, as the administrator of such index (or any successor administrator of such index) as such index appears on the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor website or the website of any successor administrator for the publication of such index at 3:00 pm New York City time;

"**SOFR $Index_{End}$**" is the SOFR Index value for the day which is the Relevant Number of U.S. Government Securities Business Days preceding the Interest Period End Date for the relevant Interest Period;

"**SOFR $Index_{Start}$**" is the SOFR Index value for the day which is the Relevant Number of U.S. Government Securities Business Days preceding the first date of the relevant Interest Period; and

"**U.S. Government Securities Business Day**" or "**USBD**" means any day, except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (or any successor) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

If in respect of any relevant determination date a SOFR or SOFR Index value, as applicable, has not been provided or published by or on behalf of the relevant administrator (or any successor administrator) or authorised distributors or the relevant website is not available, the relevant SOFR or SOFR Index value, as applicable, will be the last provided or published value for the SOFR or SOFR Index as applicable prior to the day on which the SOFR or SOFR Index value is required. If the Calculation Agent determines that it is unable to determine the SOFR or SOFR Index value, as applicable, in accordance with the preceding sentence, the SOFR or SOFR Index value, as applicable, in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(v) *TONA Floating Rate Determination*

Compounded Daily TONA: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where TONA Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall be Compounded Daily TONA as determined in respect of the relevant Interest Determination Date plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 4.2(b)(v), "**Compounded Daily TONA**" means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily Yen overnight reference rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Interest Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards) as follows:

$$\left[\prod_{i=1}^{d_b}\left(1+\frac{TONA_i \times n_i}{365}\right)-1\right]\times\frac{365}{tn_{d_b}}$$

For the avoidance of doubt, the formula for the calculation of Compounded Daily TONA only compounds the TONA rate in respect of any Tokyo Banking Day. The TONA rate applied to a day that is not a Tokyo Banking Day will be taken by applying the TONA rate for the previous Tokyo Banking Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"**d_b**" means the number of Tokyo Banking Days in the relevant Observation Period.

"**i**" means a series of whole numbers from one to d_b, each representing the relevant Tokyo Banking Day in chronological order from, and including, the first Tokyo Banking Day in the relevant Observation Period to, and including, the last Tokyo Banking Day in such Observation Period.

"**n_i**" for any Tokyo Banking Day "i", means the number of calendar days from, and including, such Tokyo Banking Day "i" up to, but excluding, the following Tokyo Banking Day.

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling "p" Business Days prior to the first day of such Interest Period and ending on, but excluding, the date falling "p" Business Days prior to the Interest Period End Date for such Interest Period.

"**p**" means ten or such other number as specified in the relevant Pricing Supplement.

"**tn_{d_b}**" means the number of calendar days in the relevant Observation Period.

"**Tokyo Banking Day**" means any calendar day (other than a Saturday and Sunday) on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in Tokyo.

"**$TONA_i$**" or "**TONA rate**" in respect of any Tokyo Banking Day "i", in the relevant Observation Period, means a reference rate equal to the daily TONA as provided by the administrator of TONA to, and published by, authorised distributors of TONA as of approximately 10:00 a.m., Tokyo time (or any amended publication time as specified by the administrator of TONA in the TONA benchmark methodology), on the TONA Fixing Day.

If in respect of any relevant determination date the TONA rate is not published by the administrator of TONA or an authorised distributor and is not otherwise provided by the administrator of TONA by either (A) the TONA Fixing Day or (B) such other date on which TONA is required, then the rate for that Tokyo Banking Day "i" will be the last provided or published TONA. If the Calculation Agent determines that it is unable to determine the TONA rate in accordance with the preceding sentence, the TONA rate in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

"**TONA**" means the Tokyo Overnight Average Rate (TONA) administered by the Bank of Japan (or any successor administrator).

"**TONA Fixing Day**" means, in respect of TONA and a Tokyo Banking Day "i", the Tokyo Banking Day immediately following that day "i" (or any amended publication day for TONA as specified by the administrator of TONA in the TONA benchmark methodology).

(vi) *€STR Floating Rate Determination*

Compounded Daily €STR: Subject to General Condition 4.2(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where €STR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period shall be Compounded Daily €STR plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 4.2(b)(vi), "**Compounded Daily €STR**" means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily euro short-term rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Interest Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.0000005 being rounded upwards):

(1) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{€STR_i \times n_i}{360}\right)-1\right]\times\frac{360}{d}$$

(2) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{€STR_{\,i-pTSD} \times n_i}{360}\right)-1\right]\times\frac{360}{d}$$

In each case, for the avoidance of doubt, the formula for the calculation of Compounded Daily €STR only compounds the €STR rate in respect of any TARGET2 Settlement Day. The €STR reference rate applied to a day that is not a TARGET2 Settlement Day will be taken by applying the €STR reference rate for the previous TARGET2 Settlement Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Interest Period.

"**d_0**" means:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of TARGET2 Settlement Days in the relevant Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of TARGET2 Settlement Days in the relevant Interest Period.

"**i**" means a series of whole numbers from one to d_0, each representing the relevant TARGET2 Settlement Day in chronological order:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first TARGET2 Settlement Day in the relevant Observation Period to, and including, the last TARGET2 Settlement Day in such Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first TARGET2 Settlement Day in the relevant Interest Period to, and including, the last TARGET2 Settlement Day in such Interest Period.

"$\mathbf{n_i}$" for any TARGET2 Settlement Day "i", means the number of calendar days from, and including, such TARGET2 Settlement Day "i" up to, but excluding, the following TARGET2 Settlement Day.

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling "p" TARGET2 Settlement Days prior to the first day of such Interest Period and ending on, but excluding, the date falling "p" TARGET2 Settlement Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" TARGET2 Settlement Days prior to such earlier date, if any, on which the Securities become due and payable).

"**p**" means five TARGET2 Settlement Days or such number of TARGET2 Settlement Days specified in the relevant Pricing Supplement.

"$\mathbf{€STR_i}$" or "**€STR rate**" in respect of any TARGET2 Settlement Day "i", in the relevant Observation Period, means a reference rate equal to the daily euro short-term rate ("**€STR**") for such TARGET2 Settlement Day as provided by the administrator of €STR to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the TARGET2 Settlement Day immediately following such TARGET2 Settlement Day).

"$\mathbf{€STR_{i-pTSD}}$" in respect of any TARGET2 Settlement Day "i", in the relevant Interest Period, means a reference rate equal to €STR for the TARGET2 Settlement Day falling "p" TARGET2 Settlement Days prior to such TARGET2 Settlement Day "i" as provided by the administrator of €STR to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the TARGET2 Settlement Day immediately following the TARGET2 Settlement Day falling "p" TARGET2 Settlement Days prior to such TARGET2 Settlement Day "i").

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{360}\right)-1\right]$$

means $[(1 + X_1 / 360) – 1] \times [(1 + X_2 / 360) – 1] \times \ldots \times [(1 + X_{30} / 360) – 1]$.

If, in respect of any relevant TARGET2 Settlement Day, the Calculation Agent determines that the €STR rate is not available on the relevant Page or has not otherwise been published by the relevant authorised distributors, the Calculation Agent will determine such €STR rate as being the €STR rate published on the relevant Page (or otherwise published by the relevant authorised distributors) for the first preceding TARGET2 Settlement Day on which the €STR rate was published on such Page (or otherwise published by the relevant authorised distributors). If the Calculation Agent determines that it is unable to determine the €STR rate in accordance with the preceding sentence, the €STR rate in respect of the relevant TARGET2 Settlement Day shall be such other rate as determined by the Calculation Agent, taking into account any sources

as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(c) ***Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event***

(i) *Index Cessation/Benchmark Event*

(A) Subject to General Condition 4.2(c)(ii) (*USD LIBOR Benchmark Transition Event*) and to paragraph (B) below, if the Calculation Agent determines that an Index Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred or are existing on any day (i) in respect of a Reference Rate, or (ii) where the relevant Reference Rate is a Compounded RFR, in respect of the RFR referenced in such Compounded RFR, in each case in respect of the Securities (such affected Reference Rate, a "**Discontinued Reference Rate**"), then the Calculation Agent shall determine the Rate of Interest for the relevant Interest Period (or relevant day, as applicable) in respect of such Securities in accordance with the following methodologies, as applicable:

(1) *Compounded RFRs*: where the Discontinued Reference Rate is a Compounded RFR, the Discontinued Reference Rate shall be replaced by the applicable Recommended Fallback Rate with effect from and including the Index Cessation/Benchmark Event Effective Date and the Recommended Fallback Rate will be deemed to be the Reference Rate with effect from such date. Where the Recommended Fallback Rate is used, the Calculation Agent may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Rate of Interest, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Rate of Interest. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates;

(2) *Compounded Indices – Index Cessation*: where the Discontinued Reference Rate is a Compounded Index, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Rate of Interest in respect of such Interest Determination Date, and any subsequent Interest Determination Date, shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the Underlying RFR, as provided by the administrator of the Underlying RFR for each day in respect of which the Underlying RFR is required for such determination;

(3) *Compounded Indices – Underlying Rate Cessation*: where the specified Reference Rate is a Compounded Index and an Index

Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred in respect of the Underlying RFR, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Rate of Interest in respect of such Interest Determination Date, and any subsequent Interest Determination Date, shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the rate that would apply for derivative transactions referencing the 2021 Definitions, on or after the occurrence of an Index Cessation Effective Date (as defined in the 2021 Definitions) (which definition is substantively the same as "Index Cessation/Benchmark Event Effective Date") with respect to the applicable Underlying RFR;

(4) *Swap Rates*: where the specified Reference Rate is a Swap Rate, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Rate of Interest in respect of such Interest Determination Date, and any subsequent Interest Determination Date, shall be determined by the Calculation Agent by reference to the alternative rate of interest (the "**Alternative Recommended Rate**") formally recommended by (in the following order):

(a) the central bank for the currency in which the Discontinued Reference Rate is denominated; or

(b) if no such recommendation is made by such central bank, the central bank (if different) or other supervisor responsible for supervising (i) the Discontinued Reference Rate, or (ii) the administrator of the Discontinued Reference Rate; or

(c) if no such recommendation is made by such central bank or supervisor, any working group or committee officially endorsed or convened by any such central bank or supervisor, or any group thereof, or

(d) if no such recommendation is made in accordance with (a), (b) or (c), the Financial Stability Board or any part thereof, or

(e) if no such recommendation is made in accordance with (a), (b), (c) or (d), where such Alternative Recommended Rate is substantially the same as the Discontinued Reference Rate, the administrator,

provided that if the Calculation Agent determines that there is no Alternative Recommended Rate, the Rate of Interest in respect of such Interest Determination Date, and any subsequent Interest Determination Date, shall be determined by the Calculation Agent by reference to such other reference rate(s) and/or price source(s) and/or combination thereof that the Calculation Agent determines to be a commercially reasonable alternative to the Discontinued Reference Rate. If the Calculation Agent determines the Rate of Interest in accordance with this General Condition 4.2(c)(i)(A)(4), it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Rate of Interest, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent

reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Rate of Interest. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

(5) *Generic Permanent Fallback*: notwithstanding any other provision or term of the General Conditions, where (a) the Reference Rate is not a rate in respect of which a determination methodology is specified in any of sub-paragraphs (A)(1), (A)(2), (A)(3) and (A)(4) above, or (b) the Reference Rate is a rate in respect of which a determination methodology is specified in any of sub-paragraphs (A)(1), (A)(2), (A)(3) and (A)(4) above and "Generic Permanent Fallback" is specified as applicable in the Pricing Supplement, the Calculation Agent shall determine the Rate of Interest for the relevant Interest Period (or relevant day, as applicable) in respect of such Securities in good faith and in a commercially reasonable manner, after consulting any source it deems to be reasonable, as:

(a) a substitute or successor rate, index, benchmark or other price source that it has determined is the industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source for the relevant Reference Rate; or

(b) if it determines there is no such industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source, then a substitute or successor rate, index, benchmark or other price source that it determines is a commercially reasonable alternative to the Reference Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market),

in each case provided that (i) any such substitute or successor rate, index, benchmark or other price source, may (without limitation) comprise a replacement rate, index, benchmark or other price source, which is determined on a backwards-looking compounding basis by reference to a "risk-free rate", (ii) there may be more than one such substitute or successor rate, index, benchmark or other price source (which may be applied as of one or more effective dates), (iii) the Rate of Interest may include an adjustment factor or adjustment spread pursuant to the paragraph immediately below and (iv) the Conditions may be subject to adjustment pursuant to the paragraph immediately below.

If the Calculation Agent determines the Rate of Interest in accordance with this General Condition 4.2(c)(i)(A)(5), it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Rate of Interest, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Rate of Interest. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing

industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

(B) if the Calculation Agent determines that the application of General Condition 4.2(c)(i)(A) (i) would not achieve a commercially reasonable result (because it is not possible or commercially reasonable to identify a replacement or successor rate, index, benchmark or other price source, or relevant adjustments or for any other reason) and/or (ii) is or would be unlawful at any time under any applicable law or regulation or it would contravene any applicable licensing requirements to determine the Rate of Interest in accordance with the terms of such provisions, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) on a date specified by it in a notice to the Holders.

(ii) *USD LIBOR Benchmark Transition Event*: Notwithstanding anything else in the Conditions, if the relevant ISDA Rate or Reference Rate (as applicable) in respect of any Floating Rate Notes is a USD LIBOR Benchmark Rate and the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect thereof on any date of determination of the Rate of Interest or other variable or amount under the Conditions that depends on the determination of a USD LIBOR Benchmark Rate, then:

(A) the provisions of the USD LIBOR Benchmark Transition Event Appendix shall apply in respect of the Securities in relation to such USD LIBOR Benchmark Rate; and

(B) the provisions of General Condition 4.2(c)(i) (*Index Cessation/Benchmark Event*) shall not apply in respect of the Securities in respect of such USD LIBOR Benchmark Rate.

If both a Benchmark Transition Event and an Administrator/Benchmark Event have occurred and are occurring, then it shall be deemed that only a Benchmark Transition Event has occurred.

For the purposes of this sub-paragraph (ii), each of "**Benchmark Replacement Date**", "**Benchmark Transition Event**" and "**Reference Time**" have the respective meanings given to those terms in the USD LIBOR Benchmark Transition Event Appendix.

(iii) *Administrator/Benchmark Event*: if the Calculation Agent determines that an Administrator/Benchmark Event and its related Administrator/Benchmark Event Effective Date have occurred or are existing on any day in respect of any Securities and a Relevant Benchmark, the Calculation Agent may:

(A) make such adjustment to the terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Administrator/Benchmark Event (including without limitation, to select a successor Relevant Benchmark) and any adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such replacement and/or change to the method of determination of the Rate of Interest, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such replacement and/or change to the method of determination of the Rate of Interest;

(B) determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

Notwithstanding anything else in this General Condition 4.2(c)(iii), in the event that the Administrator/Benchmark Event comprises a Material Methodology Change Event, the Calculation Agent may determine not to undertake any or all of the actions described in this General Condition 4.2(c)(iii).

(iv) *Interim measures*: If, at any time, following (i) an Index Cessation/Benchmark Event but prior to any replacement or amendment having become effective pursuant to General Condition 4.2(c)(i) above and/or (ii) an Administrator/Benchmark Event but prior to any adjustment and/or redemption and/or cancellation and/or any other action the Issuer may take under General Condition 4.2(c)(iii) taking effect, the relevant Reference Rate is required for any determination in respect of the Securities, then:

(A) if the Reference Rate is still available, and it is still permitted under applicable law or regulation for the Securities to reference the Reference Rate and for the Issuer and/or the Calculation Agent to use the Reference Rate to perform its or their respective obligations under the Securities, the level of the Reference Rate shall be determined pursuant to the terms that would apply to the determination of the Reference Rate as if no Index Cessation/Benchmark Event or Administrator/Benchmark Event (as applicable) had occurred; or

(B) if the Reference Rate is no longer available or it is no longer permitted under applicable law or regulation applicable to the Issuer and/or to the Calculation Agent (as applicable) for the Securities to reference the Reference Rate or for any such entity to use the Reference Rate to perform its or their respective obligations under the Securities, the level of the Reference Rate shall be determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), as (a) a substitute or successor rate that it has determined is the industry-accepted (in the derivatives market) substitute or successor rate for the relevant Reference Rate or (b) if it determines there is no such industry-accepted (in the derivatives market) substitute or successor rate, a substitute or successor rate that it determines is a commercially reasonable alternative to the Reference Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). If such Reference Rate is determined as any such substituted or successor rate, the Calculation Agent may determine such other amendments to the Securities which it considers are necessary and/or appropriate in order to reflect the replacement of the Reference Rate with such substituted or successor rate. If the Calculation Agent determines the Reference Rate in accordance with this paragraph, the Calculation Agent shall notify the Issuer of such determination made by it and the action that it proposes to take in respect of any such determination and the Issuer, in turn, shall notify the Holders thereof as soon as reasonably practicable thereafter.

(v) *Hierarchy if both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event occurs*: If the Calculation Agent determines that an event in respect of a Reference Rate constitutes both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event, then it will be deemed to an Index Cessation/Benchmark and not an Administrator/Benchmark Event, provided that if an Administrator/Benchmark Event Effective Date has not occurred before the Relevant Benchmark ceases to be available, then General Condition 4.2(c)(iv) (*Interim measures*) shall apply as if an Administrator/Benchmark Event had occurred.

(vi) *Corrections to Published and Displayed Rates*: In the event that (i) the Reference Rate determined in accordance with General Condition 4.2 (*Interest on Floating Rate Notes*) above or (ii) where the relevant Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR, is subsequently corrected, and the correction (the "**Corrected Rate**") is published after the original publication but no later than the longer of (a) one hour after such original publication and (b) any other period for corrections specified by a relevant administrator in its methodology for the relevant Reference Rate (or where the Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR), then provided that such Corrected Rate is published on or prior to the date falling two Business Days prior to the date on which a related payment is scheduled to be made under the Securities (the "**Relevant Scheduled Payment Date**"), then such Corrected Rate shall be deemed to be the relevant Reference Rate (or where the Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR) and the Calculation Agent shall use such Corrected Rate in determining the relevant Rate of Interest and related Interest Amount. Any corrections published after the second Business Day prior to the Relevant Scheduled Payment Date shall be disregarded for the purposes of determining the relevant Rate of Interest.

4.3 **Interest on Share Linked Interest Notes, Index Linked Interest Notes, Commodity Linked Interest Notes, FX Linked Interest Notes, Fund Linked Interest Notes, Bond Linked Interest Notes and Other Variable Linked Interest Notes**

Each Share Linked Interest Note, Index Linked Interest Note, Commodity Linked Interest Note, FX Linked Interest Note, Fund Linked Interest Note, Bond Linked Interest Note and Other Variable Linked Interest Note bears interest from the Interest Commencement Date, such interest to be payable on each Interest Payment Date.

The Rate of Interest or the Interest Amount (as applicable) relating to the Notes will be calculated as set out in the relevant Pricing Supplement (and in accordance with General Condition 4.8 (*Interest Calculations (Notes other than Fixed Rate Notes*))).

4.4 **Zero Coupon Notes**

Where a Zero Coupon Note is repayable prior to the Maturity Date and is not paid when due, the amount due and payable prior to the Maturity Date shall be the Early Payment Amount, which shall be an amount determined in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*). As from the Maturity Date, the Rate of Interest for any overdue principal of such a Note shall be a rate per annum (expressed as a percentage) equal to the Amortisation Yield.

4.5 **Dual Currency Notes**

In the case of Dual Currency Notes, if the rate or amount of interest falls to be determined by reference to a Rate of Exchange or a method of calculating a Rate of Exchange, the rate or amount of interest payable shall be determined in the manner specified in the relevant Pricing Supplement.

4.6 **Partly Paid Notes**

In the case of Partly Paid Notes (other than Partly Paid Notes which are Zero Coupon Notes), interest will accrue as aforesaid on the paid-up nominal amount of the Notes and otherwise as specified in the relevant Pricing Supplement.

4.7 **Accrual of Interest**

Interest shall cease to accrue on each Note on the due date for redemption unless, upon due presentation, payment is improperly withheld or refused, in which event interest shall continue to accrue (as well after as before judgement) at the Rate of Interest in the manner provided in this General Condition 4 to the Relevant Payment Date.

4.8 **Interest Calculations (Notes other than Fixed Rate Notes)**

The amount of interest (the "**Interest Amount**") that shall accrue in respect of any Note other than a Fixed Rate Note for any period shall be calculated by applying the Rate of Interest for such period to the Specified Denomination, multiplying the product by the Day Count Fraction and rounding the result in accordance with General Condition 23 (*Rounding*), unless an Interest Amount (or a formula for its calculation) is specified in respect of such period, in which case the amount of interest payable in respect of such Note for such period shall equal such Interest Amount (or be calculated in accordance with such formula).

If any Margin is specified in the relevant Pricing Supplement (either (i) generally or (ii) in relation to one or more Interest Periods), an adjustment shall be made to all Rates of Interest, in the case of (i), or the Rates of Interest for the specified Interest Periods, in the case of (ii), calculated in accordance with General Condition 4.2(b) (*Rate of Interest for Floating Rate Notes*) or the relevant Pricing Supplement (in the case of Index Linked Interest Notes, Share Linked Interest Notes, Commodity Linked Interest Notes, FX Linked Interest Notes, Fund Linked Interest Notes, Bond Linked Interest Notes or Other Variable Linked Interest Notes) by adding (if a positive number) or subtracting the absolute value (if a negative number) of such Margin, subject always to the next paragraph.

If the amount of interest payable for any period as calculated in accordance with the above would otherwise be an amount less than zero, such amount shall be deemed to be zero.

If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Pricing Supplement, then any Rate of Interest shall be subject to such maximum or minimum, as the case may be.

4.9 **Determination and publication of Rates of Interest**

As soon as practicable after any relevant time (which, in respect of an Interest Determination Date shall be the applicable Relevant Time) on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quotation or make any determination or calculation or adjustment to the terms of the Notes with respect to the calculation of the Interest Amount or the Rate of Interest, as applicable, it shall determine such rate or amount and calculate the Interest Amounts in respect of each Specified Denomination of the Notes for the relevant Interest Period, obtain such quotation or make such determination or calculation, as the case may be, and cause the Rate of Interest and/or the Interest Amounts for each Interest Period and the relevant Interest Payment Date or any other amount specified in the relevant Pricing Supplement to be notified to the Relevant Programme Agent, the Issuer, each of the Paying Agents, any other Calculation Agent or Delivery Agent appointed in respect of the Notes that is to make a further calculation or delivery upon receipt of such information and, if the Notes are listed on a stock exchange and the rules of such exchange or other relevant authority so require, such exchange or other relevant authority as soon as possible after their determination but in no event later than (i) the commencement of the relevant Interest Period, if determined prior to such time, in the case of notification to such exchange of a Rate of Interest and Interest Amount, or (ii) in all other cases, as soon as reasonably practicable after such determination.

Where any Interest Payment Date or Interest Period is subject to adjustment in accordance with the applicable Business Day Convention, the Interest Amounts and the Interest Payment Date so published may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. If the Notes become due and payable under General Condition 15 (*Events of Default*), the accrued interest and the Rate of Interest payable in respect of the Notes shall nevertheless continue to be calculated as previously in accordance with this General Condition but no publication of the Rate of Interest or the Interest Amount so calculated need be made.

5. **Redemption of Notes**

5.1 **Redemption at the Option of the Issuer**

If Call Option is specified to be applicable in the relevant Pricing Supplement, the Issuer may, on giving not less than 15 nor more than 30 calendar days' irrevocable notice to the Holders in accordance with General Condition 27 (*Notices*) (or such other notice period as may be specified

in the relevant Pricing Supplement) redeem, all or, if so provided, some, of the Notes on any Optional Redemption Date. Any such redemption of Notes shall be at their Optional Redemption Amount. All Notes in respect of which any such notice is given shall be redeemed on the date specified in such notice in accordance with this General Condition 5.1.

(a) ***Partial Redemption of Notes represented by a Global Security held on behalf of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt***

In the case of a partial redemption or partial exercise of an Issuer's option, the Notes represented by a Global Security held on behalf of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt to be redeemed will be selected in accordance with the rules of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be, to be reflected in the records of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be, as either a pool factor or a reduction in nominal amount of each Note at the discretion of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be.

(b) ***Partial Redemption of French Notes***

In the case of a partial redemption or a partial exercise of the Issuer's option in respect of French Notes, the redemption may be effected, at the option of the Issuer, either (i) by reducing the nominal amount of all the French Notes of such Series in a proportion to the aggregate nominal amount redeemed or (ii) by redeeming in full some only of such French Notes and, in such latter case, the choice between those French Notes that will be fully redeemed and those French Notes of such Series that will not be redeemed shall be made in accordance with article R. 213-16 of the French *Code monétaire et financier* and the provisions of the relevant Pricing Supplement, subject to compliance with any other applicable laws and any applicable stock exchange requirements. So long as the French Notes are listed and admitted on a stock exchange and the rules of that stock exchange or applicable French law and/or regulations so require, the Issuer shall cause to be published a notice specifying the aggregate principal amount of French Notes outstanding.

The right to require redemption of such French Notes must be exercised in accordance with the rules and procedures of Euroclear France and if there is any inconsistency between the above and the rules and procedures of Euroclear France, then the rules and procedures of Euroclear France shall prevail.

(c) ***Partial Redemption of Finnish Notes***

Any partial redemption of Finnish Notes shall be in accordance with Euroclear Finland Rules, and the notice to Holders shall also contain the quantity of Finnish Notes to be redeemed in respect of which such option has been exercised and shall specify the Closed Periods for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*).

(d) ***Partial Redemption of Norwegian Notes***

Any partial redemption of Norwegian Notes shall be in accordance with the VPS Rules, and the Norwegian Notes to be redeemed shall be selected individually by lot in such place and in such manner as may be fair and reasonable in the circumstances, taking account of prevailing market practices, subject to compliance with any applicable laws and stock exchange or other relevant authority requirements, including the VPS Rules. The notice to Holders shall specify the Norwegian Notes or the amount of Norwegian Notes to be redeemed or in respect of which such option has been exercised, and the procedures for partial redemptions laid down in the VPS Rules shall be observed. In respect of redemption of Norwegian Notes, the notice shall also specify the Closed Periods for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*).

(e) ***Partial Redemption of Swedish Notes***

The notice to Holders in respect of a partial redemption of Swedish Notes shall specify the Notes or amounts of the Notes to be redeemed or in respect of which such option has been so exercised, and the procedures for partial redemptions laid down in the Swedish CSD Rules will be

observed. The Notice shall also specify the Closed Periods for the purposes of General Condition 2.1(g)) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*) and the Swedish Record Date for the purposes of General Condition 6 (*Payments*).

(f) ***Partial Redemption of Swiss Notes***

In the case of a partial redemption or a partial exercise of the Issuer's option, the redemption of Swiss Notes will be effected by (i) reducing the nominal amount of all the Swiss Notes of such Series in a proportion to the aggregate nominal amount redeemed or (ii) a selection of the Swiss Notes to be redeemed in accordance with the rules of SIX SIS.

5.2 **Redemption at the Option of Holders**

If Put Option is specified to be applicable in the relevant Pricing Supplement, the Issuer shall, at the option of the Holder of any such Note, upon the Holder of such Note giving not less than 15 nor more than 30 calendar days' notice to the Issuer by completion of a Put Option Exercise Notice as specified below (or such other notice period as may be specified in the relevant Pricing Supplement) redeem such Note on the Optional Redemption Date(s) at its Optional Redemption Amount. In respect of Notes which are German Securities, any such notice shall be given in accordance with General Condition 27.9 (*Notices by Holders of German Securities*).

(a) ***Global Notes***

In respect of Global Notes, to exercise such option or any other Holders' option that may be set out in the relevant Pricing Supplement in respect of Notes other than German Securities, the Holder must give notice to any Paying Agent or the Registrar, respectively, or, in the case of Swiss Notes, to the Swiss Programme Agent, substantially in the form of the Put Option Exercise Notice, except that the Put Option Exercise Notice shall not be required to contain the serial numbers of the Notes in respect of which the option has been exercised, and stating the nominal amount of Notes in respect of which the option is exercised and at the same time presenting the Permanent Bearer Global Security to the Relevant Programme Agent or the Permanent Registered Global Security to the Registrar, as the case may be, for notation.

(b) ***Notes in definitive form***

To exercise such option or any other Holders' option that may be set out in the relevant Pricing Supplement, the holder must deposit the registered certificate representing such Note(s) with the Registrar or any Transfer Agent at its specified office, together with a duly completed Put Option Exercise Notice within the notice period. No registered certificate representing such Note so deposited and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

(c) ***Finnish Notes***

In respect of Finnish Notes, the Holder must deposit a Put Option Exercise Notice with the Finnish Programme Agent and transfer the relevant Finnish Notes to the book-entry securities account designated by the Finnish Programme Agent and blocked for further transfer by the Finnish Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)).

(d) ***Norwegian Notes***

In respect of Norwegian Notes, the Holder must register in the relevant VPS account a transfer restriction in favour of the Norwegian Programme Agent and deliver to the Norwegian Programme Agent a duly completed Put Option Exercise Notice within the notice period. A Put Option Exercise Notice in respect of Norwegian Notes will not take effect against the Issuer before the date on which the relevant Norwegian Notes have been transferred to the account designated by the Norwegian Programme Agent or blocked for further transfer by the Norwegian Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities,*

Swedish Securities and Finnish Securities)). No Norwegian Note so transferred or blocked and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

(e) ***Swedish Notes***

A Put Option Exercise Notice in respect of Swedish Notes will not take effect against the Issuer before the date on which the relevant Swedish Notes have been transferred to the account designated by the Swedish Programme Agent and blocked for further transfer by the Swedish Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)). No Swedish Note so transferred or blocked and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

5.3 **Exercise of Options or Partial Redemption in respect of Registered Notes in definitive form**

In the case of an exercise of an Issuer's or Holders' option in respect of, or a partial redemption of, a holding of Registered Notes in definitive form represented by a single registered certificate, a new registered certificate representing such Notes shall be issued to the Holder to reflect the exercise of such option or in respect of the balance of the holding not redeemed. In the case of a partial exercise of an option resulting in Registered Notes in definitive form of the same holding having different terms, separate registered certificates shall be issued in respect of those Notes of that holding that have the same terms. New registered certificates shall only be issued against surrender of the existing registered certificates to the Registrar or any Transfer Agent. In the case of a transfer of Registered Notes in definitive form to a person who is already a Holder of Registered Notes in definitive form, a new registered certificate representing the enlarged holding shall only be issued against surrender of the registered certificate representing the existing holding.

5.4 **Exercise of Options or Partial Redemption in respect of Norwegian Notes**

Where the exercise of an option results in Norwegian Notes of the same holding having different terms, separate Notes registered with the VPS Register shall be issued in respect of those Norwegian Notes of that holding having the same terms. Such Notes shall only be issued against surrender of the existing Norwegian Notes in accordance with the VPS Rules.

5.5 **Early Redemption of Zero Coupon Notes**

In respect of any Zero Coupon Notes which are redeemed early in accordance with the General Conditions, the Early Payment Amount shall be the "**Amortised Face Amount**". The Amortised Face Amount of any such Note shall be the scheduled Final Redemption Amount of such Note on the Maturity Date discounted at a rate per annum (expressed as a percentage) equal to the "**Amortisation Yield**" (which, if none is specified in the relevant Pricing Supplement, shall be such rate as would produce an Amortised Face Amount equal to the issue price of the Notes if they were discounted back to their issue price on the Issue Date) compounded annually. If the Early Payment Amount payable is not paid when due in respect of any such Note upon its redemption pursuant to General Condition 18.4 (*Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions*) or upon it becoming due and payable as provided in General Condition 15 (*Events of Default*), the Early Payment Amount due and payable shall be the Amortised Face Amount of such Note, except that the date on which the Note becomes due and payable shall be the Relevant Payment Date. The calculation of the Amortised Face Amount shall continue to be made (as well after as before judgment) until the Relevant Payment Date, unless the Relevant Payment Date falls on or after the Maturity Date, in which case the amount due and payable shall be the scheduled Final Redemption Amount of such Note on the Maturity Date together with any interest that may accrue in accordance with General Condition 4.4 (*Zero Coupon Notes*).

Where such calculation is to be made for a period of less than one year, it shall be made on the basis of the Day Count Fraction shown in the relevant Pricing Supplement.

5.6 **Redemption**

Notwithstanding the below, the right to require redemption of such Notes must be exercised in accordance with the rules and procedures of the Relevant Clearing System and if there is any inconsistency between the above and the rules and procedures of the Relevant Clearing System, then the rules and procedures of the Relevant Clearing System shall prevail.

(a) ***Redemption by Instalments***

Unless previously redeemed or purchased and cancelled, as provided in General Condition 25 (*Purchase and Cancellation*), each Note that provides for Instalment Dates and Instalment Amounts shall be partially redeemed on each Instalment Date at the related Instalment Amount. The outstanding nominal amount of each such Note shall be reduced by the Instalment Amount (or, if such Instalment Amount is calculated by reference to a proportion of the nominal amounts of such Note, such proportion) for all purposes with effect from the related Instalment Date, unless payment of the Instalment Amount is improperly withheld or refused, in which case, such amount shall remain outstanding until the Relevant Payment Date relating to such Instalment Amount.

(b) ***Final Redemption***

Unless previously redeemed or purchased and cancelled in accordance with General Condition 25 (*Purchase and Cancellation*), each Note (other than a Note to which General Condition 14.1 (*Physical Settlement in respect of Securities*) applies) shall be redeemed on the Maturity Date at its Final Redemption Amount or, in the case of a Note falling within (a) above, its final Instalment Amount. Where the Final Redemption Amount is linked to the performance of a Reference Asset, the Final Redemption Amount shall be calculated by the Calculation Agent at the relevant date as specified in the relevant Pricing Supplement (unless otherwise previously redeemed).

(c) ***Partly Paid Notes***

Partly Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this General Condition and the provisions specified in the relevant Pricing Supplement.

(d) ***Credit Linked Notes***

Provisions relating to the redemption of Credit Linked Notes will be set out in the relevant Pricing Supplement.

6. **Payments**

6.1 **Payments in respect of Bearer Notes**

Payments of principal and interest in respect of Notes represented by a Global Bearer Note shall be made in the manner specified in the relevant Global Note and in the case of German Securities to the Relevant Clearing System for credit to the accounts of the relevant account holders of the Relevant Clearing System against presentation or surrender, as the case may be, of such Global Note at the specified office of the Relevant Programme Agent, subject to the provisions in General Condition 13 (*Payment Disruption*). The Relevant Programme Agent shall make a record of each payment made against presentation or surrender of any Global Bearer Note, distinguishing between any payment of principal and any payment of interest on the Global Bearer Note by the Paying Agent to which it was presented, and such record shall be prima facie evidence that the payment in question has been made.

Payments in respect of French Notes in bearer dematerialised form shall be made in accordance with General Condition 6.2(g) (*Payments in respect of French Notes*).

6.2 **Payments in respect of Registered Notes**

(a) ***Payments of principal and interest in respect of Registered Global Notes***

In respect of any Registered Notes represented by a Global Note, payments of principal and interest shall be paid to the person shown on the Register at the close of business on the clearing system business day before the due date for payment or on such other day as specified in the relevant Pricing Supplement (in respect of a Global Registered Note, the "**Record Date**"), and if no further payment falls to be made, on surrender of the Global Note to or to the order of the Registrar, subject to the provisions of General Condition 13 (*Payment Disruption*). The Relevant Programme Agent shall make a record of each payment made against presentation or surrender of any Registered Global Note, distinguishing between any payment of principal and any payment of interest on the Registered Global Note by the Paying Agent to which it was presented, and such record shall be *prima facie* evidence that the payment in question has been made. In this General Condition 6.2(a), "**clearing system business day**" means, in relation to Euroclear and Clearstream, Luxembourg, each day which is not a Saturday or a Sunday, 25 December or 1 January, and, in relation to any other Relevant Clearing System, each day on which such Relevant Clearing System is open for business.

(b) ***Payments of principal and interest in respect of Registered Notes in definitive form***

In respect of any Registered Notes in definitive form, payments of principal and interest (which for the purposes of this General Condition shall include final Instalment Amounts but not other Instalment Amounts), shall be made by a cheque payable in the relevant currency drawn on, or, at the option of the Holder, by transfer to an account denominated in such currency with a Bank, subject to the provisions of General Condition 13 (*Payment Disruption*). Interest payments shall be made in accordance with General Condition 6.2(i) (*Record Date*).

(c) ***Payments in respect of Danish Notes***

Payments of principal and/or interest in respect of Danish Notes shall be made on the due date for such payment to the Holders registered as such in the VP on the Danish Record Date in accordance with the applicable VP Rules.

(d) ***Payments in respect of Finnish Notes***

Payments of principal and/or interest in respect of Finnish Notes shall be made to the Holders in accordance with Euroclear Finland Rules. The Record Date in respect of Finnish Notes shall be the first Euroclear Finland register day before the due date for payment (in respect of Finnish Notes, the "**Finnish Record Date**"). In this General Condition 6.2(d), "**Euroclear Finland register day**" means a day on which the Finnish book-entry securities system is open pursuant to Euroclear Finland Rules.

(e) ***Payments in respect of Norwegian Notes***

Payments of principal and/or interest in respect of Norwegian Notes shall be made on the due date for such payment to the Holders registered as such on the second business day (as defined in the then applicable VPS Rules) prior to the due date, or on such other business day falling closer to the due date as then may be stipulated in the VPS Rules (in respect of Norwegian Notes, the "**Norwegian Record Date**").

(f) ***Payments in respect of Swedish Notes***

Payments of principal and/or interest in respect of Swedish Notes shall be made to the Holders registered as such on the fifth business day (as defined by the then applicable Swedish CSD Rules) before the due date for such payment, or such other business day falling closer to the due date as then may be stipulated in the Swedish CSD Rules (in respect of Swedish Notes, the "**Swedish Record Date**") and will be made in accordance with the Swedish CSD Rules.

(g) ***Payments in respect of French Notes***

Payments of principal and interest (including, for the avoidance of doubt, any arrears of interest, where applicable) in respect of French Notes shall (in the case of Notes in bearer dematerialised form or administered registered form) be made by transfer to the account denominated in the relevant currency of the relevant Euroclear France Account Holders for the benefit of the Holders and (in the case of Notes in fully registered form) to an account denominated in the

relevant currency with a Bank designated by the Holders and notified to the Issuer. All payments validly made to such Euroclear France Account Holders or Bank will be an effective discharge of the Issuer in respect of such payments.

(h) ***Payments in respect of Swiss Notes***

Payments of principal and/or interest in respect of Swiss Notes (other than Swiss Notes in definitive form) shall be made via the Swiss Programme Agent through SIX SIS for the account of the relevant Holders on the due date for such payment and, in respect of Swiss Notes in definitive form, by transfer to an account denominated in the relevant currency drawn on with a Bank against presentation and surrender of the relevant Swiss Note in definitive form at the specified office of the Swiss Programme Agent.

(i) ***Record Date***

Each payment in respect of a Registered Note in definitive form will be paid to the person shown as the Holder in the Register at the close of business on the fifteenth day before the due date for the payment thereof (in respect of such Registered Note in definitive form, the "**Record Date**"). Where payment in respect of a Registered Note in definitive form is to be made by cheque, the cheque will be mailed to the address of the Holder appearing in the Register (or to the first-named of joint holders).

6.3 **Payments subject to laws**

All payments are subject in all cases to any applicable laws, regulations and directives in the place of payment, but without prejudice to the provisions of General Condition 18 (*Taxation and Early Redemption or Termination for Taxation*). No commission or expenses shall be charged to the Holders in respect of such payments.

7. **Replacement of Notes**

If a registered certificate representing a Note is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations and stock exchange or other relevant authority regulations, at the specified office of the Relevant Programme Agent or such other agent, as the case may be, as may from time to time be designated by the Issuer for the purpose and notice of whose designation is given to Holders, in each case on payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security and indemnity (which may provide, *inter alia*, that if the allegedly lost, stolen or destroyed registered certificate representing such Note is subsequently presented for payment, there shall be paid to the Issuer on demand the amount payable by the Issuer in respect of such Note) and otherwise as the Issuer may require. Mutilated or defaced registered certificates representing a Note must be surrendered before replacements will be issued. Upon the issuance of any replacement registered certificates representing such Notes, the Issuer may require the payment of a sum sufficient to cover any tax or other governmental or issuance charge that may be imposed in connection with such replacement and any other expense (including the fees and expenses of the Relevant Programme Agent) connected therewith.

D. PROVISIONS APPLICABLE TO CERTIFICATES ONLY

8. **Certificate Coupon**

8.1 **Coupon Payment Dates**

Each Certificate in respect of which the "Certificate Coupon Provisions" are expressed to be applicable in the relevant Pricing Supplement will pay a coupon in respect of the notional amount per Certificate specified in the relevant Pricing Supplement (the "**Notional Amount**") at the rate per annum (expressed as a percentage) equal to the Fixed Rate Coupon, such coupon being payable in arrear on each Coupon Payment Date. If no Coupon Payment Date(s) is/are shown in the relevant Pricing Supplement, Coupon Payment Date shall mean each date which falls the number of months or other period shown in the relevant Pricing Supplement as the Specified Coupon Period after the preceding Coupon Payment Date or, in the case of the first Coupon Payment Date, after the Issue Date.

8.2 **Fixed Rate Coupon and/or Coupon Amount**

The Fixed Rate Coupon in respect of each Coupon Period shall be determined in the manner specified in the relevant Pricing Supplement, unless a Coupon Amount (or a formula for its calculation) is specified in respect of such period, in which case the amount payable in respect of such Certificate for such period shall equal such Coupon Amount (or be calculated in accordance with such formula). Any amounts so calculated will be rounded in accordance with General Condition 23 (*Rounding*).

If the coupon is to be calculated by reference to a Fixed Rate Coupon, the coupon amount in respect of each Coupon Period shall be calculated by multiplying the Notional Amount by the Fixed Rate Coupon for such period, further multiplying the product by the Day Count Fraction, and rounding the result in accordance with General Condition 23 (*Rounding*).

8.3 **Floating Rate Coupon**

(a) ***Floating Rate Coupon Payment Dates***

Each Certificate in respect of which the "Certificate Floating Rate Coupon Provisions" are expressed to be applicable in the relevant Pricing Supplement bears interest on its Notional Amount from the Floating Rate Coupon Commencement Date at the rate per annum (expressed as a percentage) equal to the Floating Rate Coupon, such interest being payable in arrear on each Floating Rate Coupon Payment Date.

(b) ***Floating Rate Coupon***

The coupon rate in respect of each Certificate in respect of which the "Certificate Floating Rate Coupon Provisions" are specified to be applicable in the relevant Pricing Supplement for each Floating Rate Coupon Period (or any relevant day, as applicable) shall be determined in the manner specified in the relevant Pricing Supplement and the provisions below relating to either ISDA Determination, Screen Rate Determination, SONIA Floating Rate Determination, SOFR Floating Rate Determination, TONA Floating Rate Determination or €STR Floating Rate Determination shall apply, depending upon which is specified to be applicable in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon shall be determined in respect of the relevant Floating Rate Coupon Period (or relevant day, as applicable).

(i) *ISDA Determination for Floating Rate Coupon*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*) below, where ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall be determined by the Calculation Agent as a rate equal to the relevant ISDA Rate plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any). For the purposes of this sub-paragraph (i), "**ISDA Rate**" for a Floating Rate Coupon Period means a rate equal to the Floating Rate that would be determined by the Calculation Agent (each as defined in the ISDA Definitions) under an interest rate swap transaction ("**Swap Transaction**") under the terms of an ISDA 2002 Master Agreement incorporating the ISDA Definitions, and under which:

(A) the Floating Rate Option is as specified in the relevant Pricing Supplement;

(B) the Designated Maturity, if applicable, is a period as specified in the relevant Pricing Supplement;

(C) the relevant Reset Date is the first day of that Floating Rate Coupon Period unless otherwise specified in the relevant Pricing Supplement; and

(D) the relevant Overnight Rate Compounding Method or Overnight Rate Averaging Method (if any) is as specified in the relevant Pricing Supplement,

provided that if, prior to:

(I) the occurrence of an Index Cessation Effective Date (as defined in the ISDA Definitions) in respect of the ISDA Rate; and

(II) the occurrence of an Administrator/Benchmark Event Date (as defined in the 2021 Definitions); and

(III) the application of any provision relating to discontinued rates maturities (as described in the ISDA Definitions),

the Calculation Agent determines that such ISDA Rate cannot be determined in accordance with the ISDA Definitions read with paragraphs (A) to (D) above, then the ISDA Rate for a Floating Rate Coupon Period (or relevant day, as applicable) shall be such rate as is determined by the Calculation Agent in good faith and in a commercially reasonable manner having regard to alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

For the purposes of this General Condition 8.3(b)(i), terms used for the purpose of determining the relevant ISDA Rate under the relevant ISDA Definitions shall have the meanings given to those terms in the relevant ISDA Definitions as read together with General Condition 32.3 (*ISDA Determination Additional Provisions*).

(ii) *Screen Rate Determination for Floating Rate Coupon*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*) (and to General Condition 8.3(e) (*Floating Rate Coupon Calculations*) and any other applicable Conditions), where Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall be determined by the Calculation Agent at or about the Relevant Time on the Floating Rate Coupon Determination Date in respect of such Floating Rate Coupon Period in accordance with the following:

(A) the Floating Rate Coupon shall be:

(1) the offered quotation;

(2) the arithmetic mean of the offered quotations; or

(3) the rate provided by the relevant administrator,

in each case expressed as a percentage rate per annum, of the Reference Rate appearing on such Page at the Relevant Time on the Floating Rate Coupon Determination Date;

(B) (subject as provided in paragraph (C) below in respect of a Reference Rate that is a Swap Rate) if sub-paragraph (A)(1) above applies and no such offered quotation appears on the Page at the Relevant Time on the Floating Rate Coupon Determination Date or if sub-paragraph (A)(2) above applies and fewer than three such offered quotations appear on the Page at the Relevant Time on the Floating Rate Coupon Determination Date or if sub-paragraph (A)(3) above applies and the Reference Rate does not appear on the relevant Page and the Reference Rate is not published by the administrator of the Reference Rate or an authorised distributor and is not otherwise provided by the administrator of the Reference Rate, in each case as of the Relevant Time, then a "Floating Rate Disruption" ("**Floating Rate Disruption**") shall have occurred and the Floating Rate Coupon shall be determined by the Calculation Agent in good faith and in a commercially reasonable manner, having regard to alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). For the avoidance of doubt and without limitation, the Calculation Agent may determine the relevant Floating Rate Coupon by reference to one or more of the following methods:

(1) the Floating Rate Coupon may be the Adjusted Arithmetic Mean of the offered quotations that each of the Reference Banks is quoting to leading banks in the Relevant Financial Centre at the Relevant Time on the Floating Rate Coupon Determination Date, provided that the Calculation Agent determines that at least two such Reference Banks are so quoting Reference Rates;

(2) the Floating Rate Coupon may be the rate formally recommended for use by the administrator of the Reference Rate or the supervisor or competent authority (or a committee endorsed or convened by any such entity) responsible for supervising the Reference Rate or the administrator thereof; and

(3) the Floating Rate Coupon may be the Reference Rate last provided or published by the relevant administrator; or

(C) notwithstanding sub-paragraph (B) above, where a Floating Rate Disruption has occurred in respect of a Reference Rate that is a Swap Rate, the Floating Rate Coupon for such Floating Rate Coupon Determination Date (or other day (as applicable)) shall be such commercially reasonable alternative rate as is determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(iii) *SONIA Floating Rate Determination*

(A) *Compounded Daily SONIA – Non-Index Determination*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SONIA Floating Rate Determination (Non-Index Determination) is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall be Compounded Daily SONIA as determined in respect of the relevant Floating Rate Coupon Determination Date plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 8.3(b)(iii)(A), "**Compounded Daily SONIA**" means, in respect of a Floating Rate Coupon Period, the rate of return of a daily compound interest investment (with the daily Sterling overnight reference rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Floating Rate Coupon Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.0000005 being rounded upwards):

(1) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SONIA_i \times n_i}{365}\right)-1\right]\times\frac{365}{d}$$

(2) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SONIA_{i-pLBD} \times n_i}{365}\right)-1\right]\times\frac{365}{d}$$

In each case, for the avoidance of doubt, the formula for the calculation of Compounded Daily SONIA only compounds the SONIA rate in respect of any London Banking Day. The SONIA rate applied to a day that is not a London Banking Day will be taken by applying the SONIA rate for the previous London Banking Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Floating Rate Coupon Period.

"$\mathbf{d_0}$" means:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of London Banking Days in the relevant Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of London Banking Days in the relevant Floating Rate Coupon Period.

"**i**" means a series of whole numbers from one to d_0, each representing the relevant London Banking Day in chronological order:

(i) where "Compounded Daily SONIA (Shift)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first London Banking Day in the relevant Observation Period to, and including, the last London Banking Day in such Observation Period; and

(ii) where "Compounded Daily SONIA (Lag)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first London Banking Day in the relevant Floating Rate Coupon Period to, and including, the last London Banking Day in such Floating Rate Coupon Period.

"$\mathbf{n_i}$" for any London Banking Day "i", means the number of calendar days from, and including, such London Banking Day "i" up to, but excluding, the following London Banking Day.

"**Observation Period**" means, in respect of a Floating Rate Coupon Period, the period from, and including, the date falling "p" London Banking Days prior to the first day of such Floating Rate Coupon Period and ending on, but excluding, the date falling "p" London Banking Days prior to the Floating Rate Coupon Period End Date for such Floating Rate Coupon Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Securities become due and payable).

"**p**" means five London Banking Days or such number of London Banking Days specified in the relevant Pricing Supplement.

"**SONIA$_i$**" or "**SONIA rate**", in respect of any London Banking Day "i", in the relevant Observation Period, means a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then

published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the London Banking Day immediately following such London Banking Day).

"**SONIA$_{i\text{-}pLBD}$**" in respect of any London Banking Day "i", in the relevant Floating Rate Coupon Period, means a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for the London Banking Day falling "p" London Banking Days prior to such London Banking Day "i" as provided by the administrator of SONIA to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the London Banking Day immediately following the London Banking Day falling "p" London Banking Days prior to such London Banking Day "i").

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{365}\right)-1\right]$$

means $[(1 + X_1 / 365) – 1] \times [(1 + X_2 / 365) – 1] \times \ldots \times [(1 + X_{30} / 365) – 1]$.

If, in respect of any relevant London Banking Day, the Calculation Agent determines that the SONIA rate is not available on the relevant Page or has not otherwise been published by the relevant authorised distributors, the Calculation Agent will determine such SONIA rate as being the SONIA rate published on the relevant Page (or otherwise published by the relevant authorised distributors) for the first preceding London Banking Day on which the SONIA rate was published on such Page (or otherwise published by the relevant authorised distributors). If the Calculation Agent determines that it is unable to determine the SONIA rate in accordance with the preceding sentence, the SONIA rate in respect of the relevant London Banking Day shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(B) *Compounded Daily SONIA – Index Determination*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SONIA Floating Rate Determination (Index Determination) is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall, subject as provided below, be calculated by reference to the screen rate or index administered by the administrator of the Sterling Overnight Index Average reference rate that is published or displayed by such administrator or other information service from time to time at the relevant time on the relevant determination dates specified below (the "**SONIA Compounded Index**") and the following formula. Such Floating Rate Coupon will be plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any):

Compounded Daily SONIA =

$$\left(\frac{SONIA\ Compounded\ Index_y}{SONIA\ Compounded\ Index_x}-1\right)\times\frac{365}{d}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d**" is the number of calendar days from (and including) the day in relation to which "x" is determined to (but excluding) the day in relation to which "y" is determined;

"**Relevant Number**" is as specified in the relevant Pricing Supplement;

"**x**" denotes the value of the relevant SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the first day of the relevant Floating Rate Coupon Period; and

"**y**" denotes the value of the relevant SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the Floating Rate Coupon Period End Date of the relevant Floating Rate Coupon Period.

If in respect of any relevant determination date a SONIA Compounded Index value has not been provided or published by or on behalf of the relevant administrator (or any successor administrator) or authorised distributors or the relevant website is not available, the relevant SONIA Compounded Index value will be the last such value provided for the SONIA Compounded Index. If the Calculation Agent determines that it is unable to determine the SONIA Compounded Index in accordance with the preceding sentence, the SONIA Compounded Index in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(iv) *SOFR Floating Rate Determination*

(A) *Compounded Daily SOFR – Non-Index Determination*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall, subject as provided below and save where Index Determination applies, be Compounded Daily SOFR plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

"**Compounded Daily SOFR**" means, in respect of a Floating Rate Coupon Period, the rate of return of a daily compound interest investment (with the daily Secured Overnight Financing Rate as the reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Floating Rate Coupon Determination Date as follows, and the resulting percentage will be rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.00000005 being rounded upwards:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{SOFR_{i-pUSBD}\times n_i}{360}\right)-1\right]\times\frac{360}{d}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, the number of calendar days in the relevant Floating Rate Coupon Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, the number of calendar days in the relevant SOFR Observation Period;

"**d_0**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, in respect of any Floating Rate Coupon Period, the number of U.S. Government Securities Business Days in the relevant Floating Rate Coupon Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, in respect of any SOFR Observation Period, the number of U.S. Government Securities Business Days in the relevant SOFR Observation Period;

"**i**" means:

(i) where the relevant Pricing Supplement specifies "Lag" as the applicable Observation Method, a series of whole numbers from 1 to "d_0", each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Floating Rate Coupon Period; or

(ii) where the relevant Pricing Supplement specifies "Shift" as the applicable Observation Method, a series of whole numbers from 1 to "d_0", each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant the SOFR Observation Period;

"**n_i**" for any U.S. Government Securities Business Day, means the number of calendar days from and including, such U.S. Government Securities Business Day up to but excluding the following U.S. Government Securities Business Day;

"**Observation Look-Back Period**" means the number of U.S. Government Securities Business Days specified in the relevant Pricing Supplement;

"**p**" means (save as specified in the relevant Pricing Supplement) the number of U.S. Government Securities Business Days included in the Observation Look-Back Period specified in the relevant Pricing Supplement;

"**SOFR Observation Period**" means in respect of each Floating Rate Coupon Period, the period from and including the date falling "p" U.S. Government Securities Business Days preceding the first date in such Floating Rate Coupon Period to but excluding the date falling "p" U.S. Government Securities Business Days preceding the Floating Rate Coupon Period End Date in respect of the relevant Floating Rate Coupon Period;

"**SOFR Reference Rate**", in respect of any U.S. Government Securities Business Day ("**$USBD_x$**"), is a reference rate equal to the daily secured overnight financing ("**SOFR**") rate for such $USBD_x$ as provided by the Federal Reserve Bank of New York, as the administrator of such rate (or any successor administrator of such rate) on the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor website or the website of any successor administrator for the publication of such rate (the "**New York Federal Reserve's Website**") (in each case, on or about 3:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following such $USBD_x$) or if the New York Federal Reserve's

Website is unavailable as otherwise published by or on behalf of the relevant administrator;

"**$SOFR_{i\text{-}pUSBD}$**" means:

(a) where in the relevant Pricing Supplement "Lag" is specified as the Observation Method, (save as specified in the relevant Pricing Supplement) in respect of any U.S. Government Securities Business Day "i" falling in the relevant Floating Rate Coupon Period, the SOFR Reference Rate for the U.S. Government Securities Business Day falling "p" U.S. Government Securities Business Days prior to such day; or

(b) where in the relevant Pricing Supplement "Shift" is specified as the Observation Method, (save as specified in the relevant Pricing Supplement) $SOFR_i$, where $SOFR_i$ is, in respect of any U.S. Government Securities Business Day "i" falling in the relevant SOFR Observation Period, the SOFR Reference Rate for such day;

"**U.S. Government Securities Business Day**" or "**USBD**" means any day, except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (or any successor) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities; and

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{360}\right)-1\right]$$

means $[(1 + X_1 / 360) – 1] \times [(1 + X_2 / 360) – 1] \times \ldots \times [(1 + X_{30} / 360) – 1]$.

(B) *Compounded Daily SOFR – Index Determination*: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined and Index Determination is specified as being applicable in the relevant Pricing Supplement, the Floating Rate Coupon for each Floating Rate Coupon Period shall, subject as provided below, be calculated by reference to the following formula and based on the SOFR Index (as defined below) (the "**SOFR Compounded Index**") and the resulting percentage will be rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.00000005 being rounded upwards. Such Floating Rate Coupon shall be plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any):

$$\text{Compounded Daily SOFR} = \left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}}-1\right)\times\frac{360}{d_c}$$

For the purposes of the above definition, the following terms have the following meanings:

"**d_c**" is the number of calendar days from (and including) the day in relation to which SOFR $Index_{Start}$ is determined to (but excluding) the day in relation to which SOFR $Index_{End}$ is determined;

"**Relevant Number**" is as specified in the relevant Pricing Supplement;

"**SOFR Index**" means, in respect of any U.S. Government Securities Business Day, the SOFR Index value as published by the Federal Reserve Bank of New York, as the administrator of such index (or any successor administrator of such index) as such index appears on the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor website or the website of any successor administrator for the publication of such index at 3:00 pm New York City time;

"**SOFR Index$_{End}$**" is the SOFR Index value for the day which is the Relevant Number of U.S. Government Securities Business Days preceding the Floating Rate Coupon Period End Date for the relevant Floating Rate Coupon Period;

"**SOFR Index$_{Start}$**" is the SOFR Index value for the day which is the Relevant Number of U.S. Government Securities Business Days preceding the first date of the relevant Floating Rate Coupon Period; and

"**U.S. Government Securities Business Day**" or "**USBD**" means any day, except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (or any successor) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

If in respect of any relevant determination date a SOFR or SOFR Index value, as applicable, has not been provided or published by or on behalf of the relevant administrator (or any successor administrator) or authorised distributors or the relevant website is not available, the relevant SOFR or SOFR Index value, as applicable, will be the last provided or published value for the SOFR or SOFR Index as applicable prior to the day on which the SOFR or SOFR Index value is required. If the Calculation Agent determines that it is unable to determine the SOFR or SOFR Index value, as applicable, in accordance with the preceding sentence, the SOFR or SOFR Index value, as applicable, in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(v) *TONA Floating Rate Determination*

Compounded Daily TONA: Subject to General Condition 8.3(c) (*Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event*), where TONA Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall be Compounded Daily TONA as determined in respect of the relevant Floating Rate Coupon Determination Date plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 8.3(b)(v), "**Compounded Daily TONA**" means, in respect of a Floating Rate Coupon Period, the rate of return of a daily compound interest investment (with the daily Yen overnight reference rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Floating Rate Coupon Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards) as follows:

$$\left[\prod_{i=1}^{d_b}\left(1+\frac{TONA_i \times n_i}{365}\right)-1\right]\times\frac{365}{tn_{d_b}}$$

For the avoidance of doubt, the formula for the calculation of Compounded Daily TONA only compounds the TONA rate in respect of any Tokyo Banking Day. The TONA rate applied to a day that is not a Tokyo Banking Day will be taken by applying the TONA rate for the previous Tokyo Banking Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"$\mathbf{d_b}$" means the number of Tokyo Banking Days in the relevant Observation Period.

"**i**" means a series of whole numbers from one to d_b, each representing the relevant Tokyo Banking Day in chronological order from, and including, the first Tokyo Banking Day in the relevant Observation Period to, and including, the last Tokyo Banking Day in such Observation Period.

"$\mathbf{n_i}$" for any Tokyo Banking Day "i", means the number of calendar days from, and including, such Tokyo Banking Day "i" up to, but excluding, the following Tokyo Banking Day.

"**Observation Period**" means, in respect of a Floating Rate Coupon Period, the period from, and including, the date falling "p" Business Days prior to the first day of such Floating Rate Coupon Period and ending on, but excluding, the date falling "p" Business Days prior to the Floating Rate Coupon Period End Date for such Floating Rate Coupon Period.

"**p**" means ten or such other number as specified in the relevant Pricing Supplement.

"$\mathbf{tn_{d_b}}$" means the number of calendar days in the relevant Observation Period.

"**Tokyo Banking Day**" means any calendar day (other than a Saturday and Sunday) on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in Tokyo.

"$\mathbf{TONA_i}$" or "**TONA rate**" in respect of any Tokyo Banking Day "i", in the relevant Observation Period, means a reference rate equal to the daily TONA as provided by the administrator of TONA to, and published by, authorised distributors of TONA as of approximately 10:00 a.m., Tokyo time (or any amended publication time as specified by the administrator of TONA in the TONA benchmark methodology), on the TONA Fixing Day.

If in respect of any relevant determination date the TONA rate is not published by the administrator of TONA or an authorised distributor and is not otherwise provided by the administrator of TONA by either (A) the TONA Fixing Day or (B) such other date on which TONA is required, then the rate for that Tokyo Banking Day "i" will be the last provided or published TONA. If the Calculation Agent determines that it is unable to determine the TONA rate in accordance with the preceding sentence, the TONA rate in respect of the relevant determination date shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

"**TONA**" means the Tokyo Overnight Average Rate (TONA) administered by the Bank of Japan (or any successor administrator).

"**TONA Fixing Day**" means, in respect of TONA and a Tokyo Banking Day "i", the Tokyo Banking Day immediately following that day "i" (or any amended publication day for TONA as specified by the administrator of TONA in the TONA benchmark methodology).

(vi) *€STR Floating Rate Determination*

Compounded Daily €STR: Subject to General Condition 8.3(c) (Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event), where €STR Floating Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Floating Rate Coupon is to be determined, the Floating Rate Coupon for each Floating Rate Coupon Period shall be Compounded Daily €STR plus or minus (as indicated in the relevant Pricing Supplement) the Margin (if any).

For the purposes of this General Condition 8.3(b)(vi), "**Compounded Daily €STR**" means, in respect of a Floating Rate Coupon Period, the rate of return of a daily compound interest investment (with the daily euro short-term rate as reference rate for the calculation of interest) calculated by the Calculation Agent in respect of the relevant Floating Rate Coupon Determination Date (and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.0000005 being rounded upwards):

(1) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{€STR_i \times n_i}{360}\right)-1\right]\times\frac{360}{d}$$

(2) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, as follows:

$$\left[\prod_{i=1}^{d_0}\left(1+\frac{€STR_{\,i-pTSD} \times n_i}{360}\right)-1\right]\times\frac{360}{d}$$

In each case, for the avoidance of doubt, the formula for the calculation of Compounded Daily €STR only compounds the €STR rate in respect of any TARGET2 Settlement Day. The €STR reference rate applied to a day that is not a TARGET2 Settlement Day will be taken by applying the €STR reference rate for the previous TARGET2 Settlement Day but without compounding.

For the purposes of the above definition, the following terms have the following meanings:

"**d**" means:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of calendar days in the relevant Floating Rate Coupon Period.

"**d_0**" means:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, the number of TARGET2 Settlement Days in the relevant Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, the number of TARGET2 Settlement Days in the relevant Floating Rate Coupon Period.

"**i**" means a series of whole numbers from one to d_0, each representing the relevant TARGET2 Settlement Day in chronological order:

(i) where "Compounded Daily €STR (Shift)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first TARGET2 Settlement Day in the relevant Observation Period to, and including, the last TARGET2 Settlement Day in such Observation Period; and

(ii) where "Compounded Daily €STR (Lag)" is specified as applicable in the relevant Pricing Supplement, from, and including, the first TARGET2 Settlement Day in the relevant Floating Rate Coupon Period to, and including, the last TARGET2 Settlement Day in such Floating Rate Coupon Period.

"$\mathbf{n_i}$" for any TARGET2 Settlement Day "i", means the number of calendar days from, and including, such TARGET2 Settlement Day "i" up to, but excluding, the following TARGET2 Settlement Day.

"**Observation Period**" means, in respect of a Floating Rate Coupon Period, the period from, and including, the date falling "p" TARGET2 Settlement Days prior to the first day of such Floating Rate Coupon Period and ending on, but excluding, the date falling "p" TARGET2 Settlement Days prior to the Floating Rate Coupon Period End Date for such Floating Rate Coupon Period (or the date falling "p" TARGET2 Settlement Days prior to such earlier date, if any, on which the Securities become due and payable).

"**p**" means five TARGET2 Settlement Days or such number of TARGET2 Settlement Days specified in the relevant Pricing Supplement.

"**€STR$_i$**" or "**€STR rate**" in respect of any TARGET2 Settlement Day "i", in the relevant Observation Period, means a reference rate equal to the daily euro short-term rate ("**€STR**") for such TARGET2 Settlement Day as provided by the administrator of €STR to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the TARGET2 Settlement Day immediately following such TARGET2 Settlement Day).

"**€STR$_{i\text{-}pTSD}$**" in respect of any TARGET2 Settlement Day "i", in the relevant Floating Rate Coupon Period, means a reference rate equal to €STR for the TARGET2 Settlement Day falling "p" TARGET2 Settlement Days prior to such TARGET2 Settlement Day "i" as provided by the administrator of €STR to authorised distributors and as then published on the relevant Page or, if such Page is unavailable, as otherwise published by such authorised distributors (on the TARGET2 Settlement Day immediately following the TARGET2 Settlement Day falling "p" TARGET2 Settlement Days prior to such TARGET2 Settlement Day "i").

$\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30}\left(1+\frac{X_i}{360}\right)-1\right]$$

means $[(1 + X_1 / 360) – 1] \times [(1 + X_2 / 360) – 1] \times \ldots \times [(1 + X_{30} / 360) – 1]$.

If, in respect of any relevant TARGET2 Settlement Day, the Calculation Agent determines that the €STR rate is not available on the relevant Page or has not otherwise been published by the relevant authorised distributors, the Calculation Agent will determine such €STR rate as being the €STR rate published on the relevant Page (or otherwise published by the relevant authorised distributors) for the first preceding TARGET2 Settlement Day on which the €STR rate was published on such Page (or otherwise published by the relevant authorised distributors). If the Calculation Agent determines that it is unable to determine the €STR rate in accordance with the preceding sentence, the €STR rate in respect of the relevant TARGET2 Settlement Day shall be such other rate as determined by the Calculation Agent, taking into account any sources as it considers appropriate and any alternative benchmarks then available and taking into

account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(c) ***Consequences of an Index Cessation/Benchmark Event, USD LIBOR Benchmark Transition Event or Administrator/Benchmark Event***

(i) *Index Cessation/Benchmark Event:*

(A) Subject to General Condition 8.3(c)(ii) (*USD LIBOR Benchmark Transition Event*) and to paragraph (B) below, if the Calculation Agent determines that an Index Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred or are existing on any day (i) in respect of a Reference Rate, or (ii) where the relevant Reference Rate is a Compounded RFR, in respect of the RFR referenced in such Compounded RFR, in each case in respect of the Securities (such affected Reference Rate, a "**Discontinued Reference Rate**"), then the Calculation Agent shall determine the Floating Rate Coupon for the relevant Floating Rate Coupon Period (or relevant day, as applicable) in respect of such Securities in accordance with the following methodologies, as applicable:

(1) *Compounded RFRs*: where the Discontinued Reference Rate is a Compounded RFR, the Discontinued Reference Rate shall be replaced by the applicable Recommended Fallback Rate with effect from and including the Index Cessation/Benchmark Event Effective Date and the Recommended Fallback Rate will be deemed to be the Reference Rate with effect from such date. Where the Recommended Fallback Rate is used, the Calculation Agent may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Floating Rate Coupon, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Floating Rate Coupon. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates;

(2) *Compounded Indices – Index Cessation*: where the Discontinued Reference Rate is a Compounded Index, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Floating Rate Coupon in respect of such Floating Rate Coupon Determination Date, and any subsequent Floating Rate Coupon Determination Date, shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the Underlying RFR, as provided by the administrator of the Underlying RFR for each day in respect of which the Underlying RFR is required for such determination;

(3) *Compounded Indices – Underlying Rate Cessation*: where the specified Reference Rate is a Compounded Index and an Index

Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred in respect of the Underlying RFR, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Floating Rate Coupon in respect of such Floating Rate Coupon Determination Date, and any subsequent Floating Rate Coupon Determination Date, shall be determined by the Calculation Agent by reference to:

(a) the last published level of the applicable Compounded Index;

(b) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(c) the rate that would apply for derivative transactions referencing the 2021 Definitions, on or after the occurrence of an Index Cessation Effective Date (as defined in the 2021 Definitions) (which definition is substantively the same as "Index Cessation/Benchmark Event Effective Date") with respect to the applicable Underlying RFR;

(4) *Swap Rates*: where the specified Reference Rate is a Swap Rate, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Floating Rate Coupon in respect of such Floating Rate Coupon Determination Date, and any subsequent Floating Rate Coupon Determination Date, shall be determined by the Calculation Agent by reference to the alternative rate of interest (the "**Alternative Recommended Rate**") formally recommended by (in the following order):

(a) the central bank for the currency in which the Discontinued Reference Rate is denominated; or

(b) if no such recommendation is made by such central bank, the central bank (if different) or other supervisor responsible for supervising (i) the Discontinued Reference Rate, or (ii) the administrator of the Discontinued Reference Rate; or

(c) if no such recommendation is made by such central bank or supervisor, any working group or committee officially endorsed or convened by any such central bank or supervisor, or any group thereof, or

(d) if no such recommendation is made in accordance with (a), (b) or (c), the Financial Stability Board or any part thereof, or

(e) if no such recommendation is made in accordance with (a), (b), (c) or (d), where such Alternative Recommended Rate is substantially the same as the Discontinued Reference Rate, the administrator,

provided that if the Calculation Agent determines that there is no Alternative Recommended Rate, the Floating Rate Coupon in respect of such Floating Rate Coupon Determination Date, and any subsequent Floating Rate Coupon Determination Date, shall be determined by the Calculation Agent by reference to such other reference rate(s) and/or price source(s) and/or combination thereof that the Calculation Agent determines to be a commercially reasonable alternative to the Discontinued Reference Rate. If the Calculation Agent determines the Floating Rate Coupon in accordance with this General Condition 8.3(c)(i)(A)(4), it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account

for such change to the method of determination of the Floating Rate Coupon, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Floating Rate Coupon. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

(5) *Generic Permanent Fallback*: notwithstanding any other provision or term of the General Conditions, where (a) the Reference Rate is not a rate in respect of which a determination methodology is specified in any of sub-paragraphs (A)(1), (A)(2), (A)(3) and (A)(4) above, or (b) the Reference Rate is a rate in respect of which a determination methodology is specified in any of sub-paragraphs (A)(1), (A)(2), (A)(3) and (A)(4) above and "Generic Permanent Fallback" is specified as applicable in the Pricing Supplement, the Calculation Agent shall determine the Floating Rate Coupon for the relevant Floating Rate Coupon Period (or relevant day, as applicable) in respect of such Securities in good faith and in a commercially reasonable manner, after consulting any source it deems to be reasonable, as:

(a) a substitute or successor rate, index, benchmark or other price source that it has determined is the industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source for the relevant Reference Rate; or

(b) if it determines there is no such industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source, then a substitute or successor rate, index, benchmark or other price source that it determines is a commercially reasonable alternative to the Reference Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market),

in each case provided that (i) any such substitute or successor rate, index, benchmark or other price source, may (without limitation) comprise a replacement rate, index, benchmark or other price source, which is determined on a backwards-looking compounding basis by reference to a "risk-free rate", (ii) there may be more than one such substitute or successor rate, index, benchmark or other price source (which may be applied as of one or more effective dates), (iii) the Floating Rate Coupon may include an adjustment factor or adjustment spread pursuant to the paragraph immediately below and (iv) the Conditions may be subject to adjustment pursuant to the paragraph immediately below.

If the Calculation Agent determines the Floating Rate Coupon in accordance with this General Condition 8.3(c)(i)(A)(5), it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Floating Rate Coupon, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any

change in the economic value of the Securities from such change to the method of determination of the Floating Rate Coupon. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

(B) if the Calculation Agent determines that the application of General Condition 8.3(c)(i)(A) (i) would not achieve a commercially reasonable result (because it is not possible or commercially reasonable to identify a replacement or successor rate, index, benchmark or other price source, or relevant adjustments or for any other reason) and/or (ii) is or would be unlawful at any time under any applicable law or regulation or it would contravene any applicable licensing requirements to determine the Floating Rate Coupon in accordance with the terms of such provisions, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) on a date specified by it in a notice to the Holders.

(ii) *USD LIBOR Benchmark Transition Event*: Notwithstanding anything else in the Conditions, if the relevant ISDA Rate or Reference Rate (as applicable) in respect of any Floating Rate Coupon Certificates is a USD LIBOR Benchmark Rate and the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect thereof on any date of determination of the Floating Rate Coupon or other variable or amount under the Conditions that depends on the determination of a USD LIBOR Benchmark Rate, then:

(A) the provisions of the USD LIBOR Benchmark Transition Event Appendix shall apply in respect of the Securities in relation to such USD LIBOR Benchmark Rate; and

(B) the provisions of General Condition 8.3(c)(i) (*Index Cessation/Benchmark Event*) shall not apply in respect of the Securities in respect of such USD LIBOR Benchmark Rate.

If both a Benchmark Transition Event and an Administrator/Benchmark Event have occurred and are occurring, then it shall be deemed that only a Benchmark Transition Event has occurred.

For the purposes of this sub-paragraph (ii), each of "**Benchmark Replacement Date**", "**Benchmark Transition Event**" and "**Reference Time**" have the respective meanings given to those terms in the USD LIBOR Benchmark Transition Event Appendix.

(iii) *Administrator/Benchmark Event*: if the Calculation Agent determines that an Administrator/Benchmark Event and its related Administrator/Benchmark Event Effective Date have occurred or are existing on any day in respect of any Securities and a Relevant Benchmark, the Calculation Agent may:

(A) make such adjustment to the terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Administrator/Benchmark Event (including without limitation, to select a successor Relevant Benchmark) and any adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such

replacement and/or change to the method of determination of the Floating Rate Coupon, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such replacement and/or change to the method of determination of the Floating Rate Coupon;

(B) determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

Notwithstanding anything else in this General Condition 8.3(c)(iii), in the event that the Administrator/Benchmark Event comprises a Material Methodology Change Event, the Calculation Agent may determine not to undertake any or all of the actions described in this General Condition 8.3(c)(iii).

(iv) *Interim measures*: If, at any time, following (i) an Index Cessation/Benchmark Event but prior to any replacement or amendment having become effective pursuant to General Condition 8.3(c)(i) above and/or (ii) an Administrator/Benchmark Event but prior to any adjustment and/or redemption and/or cancellation and/or any other action the Issuer may take under General Condition 8.3(c)(iii) taking effect, the relevant Reference Rate is required for any determination in respect of the Securities, then:

(A) if the Reference Rate is still available, and it is still permitted under applicable law or regulation for the Securities to reference the Reference Rate and for the Issuer and/or the Calculation Agent to use the Reference Rate to perform its or their respective obligations under the Securities, the level of the Reference Rate shall be determined pursuant to the terms that would apply to the determination of the Reference Rate as if no Index Cessation/Benchmark Event or Administrator/Benchmark Event (as applicable) had occurred; or

(B) if the Reference Rate is no longer available or it is no longer permitted under applicable law or regulation applicable to the Issuer and/or to the Calculation Agent (as applicable) for the Securities to reference the Reference Rate or for any such entity to use the Reference Rate to perform its or their respective obligations under the Securities, the level of the Reference Rate shall be determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), as (a) a substitute or successor rate that it has determined is the industry-accepted (in the derivatives market) substitute or successor rate for the relevant Reference Rate or (b) if it determines there is no such industry-accepted (in the derivatives market) substitute or successor rate, a substitute or successor rate that it determines is a commercially reasonable alternative to the Reference Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). If such Reference Rate is determined as any such substituted or successor rate, the Calculation Agent may determine such other amendments to the Securities which it considers are necessary and/or appropriate in order to reflect the replacement of the Reference Rate with such substituted or successor rate. If the Calculation Agent determines the Reference Rate in accordance with this paragraph, the Calculation Agent shall notify the Issuer of such determination made by it and the action that it proposes to take in respect of any such determination and the Issuer, in turn, shall notify the Holders thereof as soon as reasonably practicable thereafter.

(v) *Hierarchy if both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event occurs*: If the Calculation Agent determines that an

event in respect of a Reference Rate constitutes both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event, then it will be deemed to an Index Cessation/Benchmark and not an Administrator/Benchmark Event, provided that if an Administrator/Benchmark Event Effective Date has not occurred before the Relevant Benchmark ceases to be available, then General Condition 8.3(c)(iv) (*Interim measures*) shall apply as if an Administrator/Benchmark Event had occurred.

(vi) *Corrections to Published and Displayed Rates*: In the event that (i) the Reference Rate determined in accordance with General Condition 8.3 (*Floating Rate Coupon*) above or (ii) where the relevant Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR, is subsequently corrected, and the correction (the "**Corrected Rate**") is published after the original publication but no later than the longer of (a) one hour after such original publication and (b) any other period for corrections specified by a relevant administrator in its methodology for the relevant Reference Rate (or where the Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR), then provided that such Corrected Rate is published on or prior to the date falling two Business Days prior to the date on which a related payment is scheduled to be made under the Securities (the "**Relevant Scheduled Payment Date**"), then such Corrected Rate shall be deemed to be the relevant Reference Rate (or where the Reference Rate is a Compounded RFR, the RFR referenced in such Compounded RFR) and the Calculation Agent shall use such Corrected Rate in determining the relevant Floating Rate Coupon. Any corrections published after the second Business Day prior to the Relevant Scheduled Payment Date shall be disregarded for the purposes of determining the relevant Floating Rate Coupon.

(d) ***Accrual of interest on Certificates in respect of which the Certificate Floating Rate Coupon Provisions are applicable***

Interest shall cease to accrue on each Certificate in respect of which the "Certificate Floating Rate Coupon Provisions" are specified to be applicable in the relevant Pricing Supplement on the due date for redemption unless, upon due presentation, payment is improperly withheld or refused, in which event interest shall continue to accrue (as well after as before judgement) at the Floating Rate Coupon in the manner provided in this General Condition 8.3 to the Relevant Payment Date.

(e) ***Floating Rate Coupon Calculations***

The amount of interest that shall accrue in respect of each Certificate in respect of which the "Certificate Floating Rate Coupon Provisions" are specified to be applicable in the relevant Pricing Supplement for any period shall be calculated by applying the Floating Rate Coupon for such period to the Notional Amount, multiplying the product by the Day Count Fraction and rounding the result in accordance with General Condition 23 (*Rounding*), unless a Coupon Amount (or a formula for its calculation) is specified in respect of such period, in which case the amount of interest payable in respect of such Certificate for such period shall equal such Coupon Amount (or be calculated in accordance with such formula).

If any Margin is specified in the relevant Pricing Supplement (either (i) generally or (ii) in relation to one or more Floating Rate Coupon Periods), an adjustment shall be made to all Floating Rate Coupons, in the case of (i), or the Floating Rate Coupons for the specified Floating Rate Coupon Periods, in the case of (ii), calculated in accordance with this General Condition 8.3 (*Floating Rate Coupon*) or the relevant Pricing Supplement by adding (if a positive number) or subtracting the absolute value (if a negative number) of such Margin, subject always to the next paragraph.

If the amount of interest payable for any period as calculated in accordance with the above would otherwise be an amount less than zero, such amount shall be deemed to be zero.

If any Maximum Rate of Floating Rate Coupon or Minimum Rate of Floating Rate Coupon is specified in the relevant Pricing Supplement, then any Floating Rate Coupon shall be subject to such maximum or minimum, as the case may be.

(f) ***Determination and publication of Floating Rate Coupon***

As soon as practicable after any relevant time (which, in respect of a Floating Rate Coupon Determination Date shall be the applicable Relevant Time) on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quotation or make any determination or calculation or adjustment to the terms of the Certificates with respect to the calculation of the Coupon Amount or the Floating Rate Coupon, as applicable, it shall determine such rate or amount and calculate the Coupon Amounts in respect of the Notional Amount of the Certificates for the relevant Floating Rate Coupon Period, obtain such quotation or make such determination or calculation, as the case may be, and cause the Floating Rate Coupon and/or the Coupon Amounts for each Floating Rate Coupon Period and the relevant Floating Rate Coupon Payment Date or any other amount specified in the relevant Pricing Supplement to be notified to the Relevant Programme Agent, the Issuer, each of the Paying Agents, any other Calculation Agent or Delivery Agent appointed in respect of the Certificates that is to make a further calculation or delivery upon receipt of such information and, if the Certificates are listed on a stock exchange and the rules of such exchange or other relevant authority so require, such exchange or other relevant authority as soon as possible after their determination but in no event later than (i) the commencement of the relevant Floating Rate Coupon Period, if determined prior to such time, in the case of notification to such exchange of a Floating Rate Coupon and Coupon Amount, or (ii) in all other cases, as soon as reasonably practicable after such determination.

Where any Floating Rate Coupon Payment Date or Floating Rate Coupon Period is subject to adjustment in accordance with the applicable Business Day Convention, the Coupon Amounts and the Floating Rate Coupon Payment Date so published may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Floating Rate Coupon Period. If the Certificates become due and payable under General Condition 15 (*Events of Default*), the accrued interest and the Floating Rate Coupon payable in respect of the Certificates shall nevertheless continue to be calculated as previously in accordance with this General Condition 8 but no publication of the Floating Rate Coupon or the Coupon Amount so calculated need be made.

9. Redemption Rights in respect of Certificates

9.1 Redemption at the Option of the Issuer

If Call Option is specified to be applicable in the relevant Pricing Supplement, the Issuer may, on giving not less than 15 nor more than 30 calendar days' irrevocable notice to the Holders in accordance with General Condition 27 (*Notices*) (or such other notice period as may be specified in the relevant Pricing Supplement) redeem, all or, if so provided, some, of the Certificates on any Optional Redemption Date, provided that, if "Notional Amount" is specified to be "Not Applicable" in the relevant Pricing Supplement, the Issuer shall redeem all, and not some only, of such Certificates. Any such redemption of Certificates shall be at their Optional Redemption Amount. All Certificates in respect of which any such notice is given shall be redeemed on the date specified in such notice in accordance with this General Condition 9.1.

(a) ***Partial Redemption of Certificates represented by a Global Security held on behalf of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt***

In the case of a partial redemption or partial exercise of an Issuer's option, the Certificates represented by a Global Security held on behalf of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt to be redeemed will be selected in accordance with the rules of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be, to be reflected in the records of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be, as either a pool factor or a reduction in notional amount of each Certificate at the discretion of Euroclear and Clearstream, Luxembourg or Clearstream Frankfurt, as the case may be.

(b) ***Partial Redemption of French Certificates***

In the case of a partial redemption or a partial exercise of the Issuer's option, the redemption will be effected by reducing the notional amount of all the French Certificates of such Series in a proportion to the aggregate notional amount redeemed.

(c) ***Partial Redemption of Finnish Certificates***

Any partial redemption of Finnish Certificates shall be in accordance with Euroclear Finland Rules, and the notice to Holders shall also contain the quantity of Finnish Certificates to be redeemed in respect of which such option has been exercised and shall specify the Closed Periods for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*).

(d) ***Partial Redemption of Norwegian Certificates***

Any partial redemption of Norwegian Certificates shall be in accordance with the VPS Rules, and the Norwegian Certificates to be redeemed shall be selected individually by lot in such place and in such manner as may be fair and reasonable in the circumstances, taking account of prevailing market practices, subject to compliance with any applicable laws and stock exchange or other relevant authority requirements, including the VPS Rules. The notice to Holders shall specify the Norwegian Certificates or the amount of Norwegian Certificates to be redeemed or in respect of which such option has been exercised, and the procedures for partial redemptions laid down in the VPS Rules shall be observed. In respect of redemption of Norwegian Certificates, the notice shall also specify the Closed Periods for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*).

(e) ***Partial Redemption of Swedish Certificates***

The notice to Holders in respect of a partial redemption of Swedish Certificates shall specify the Certificates or amounts of the Certificates to be redeemed or in respect of which such option has been so exercised, and the procedures for partial redemptions laid down in the Swedish CSD Rules will be observed. The Notice shall also specify the Closed Periods for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*) and the Swedish Record Date for the purposes of General Condition 9.6(a)(ii) (*Finnish Certificates, Norwegian Certificates and Swedish Certificates*).

(f) ***Partial Redemption of Swiss Certificates and Swiss Certificates (UBS-cleared)***

In the case of a partial redemption or a partial exercise of the Issuer's option, the redemption of Swiss Certificates will be effected by (i) reducing the notional amount of all the Swiss Certificates of such Series in a proportion to the aggregate notional amount redeemed or (ii) a selection of the Swiss Certificates to be redeemed in accordance with the rules of SIX SIS.

In the case of a partial redemption or a partial exercise of the Issuer's option, the redemption of Swiss Certificates (UBS-cleared) will be effected by reducing the notional amount of all the Swiss Certificates (UBS-cleared) of such Series in a proportion to the aggregate notional amount redeemed.

9.2 **Redemption at the Option of Holders**

If Put Option is specified to be applicable in the relevant Pricing Supplement, the Issuer shall, at the option of the Holder of any such Certificate, upon the Holder of such Certificate giving not less than 15 nor more than 30 calendar days' notice to the Issuer by completion of a Put Option Exercise Notice as specified below (or such other notice period as may be specified in the relevant Pricing Supplement) redeem such Certificate on the Optional Redemption Date(s) at its Optional Redemption Amount. In respect of Certificates which are German Securities, any such notice shall be given in accordance with General Condition 27.9 (*Notices by Holders of German Securities*).

(a) ***Global Certificates***

In respect of Global Certificates, to exercise such option or any other Holders' option that may be set out in the relevant Pricing Supplement in respect of Certificates other than German Securities, the Holder must give notice to any Paying Agent or the Registrar, respectively, or, in the case of Swiss Certificates, to the Swiss Programme Agent, substantially in the form of the Put Option Exercise Notice, except that the Put Option Exercise Notice shall not be required to contain the serial numbers of the Certificates in respect of which the option has been exercised, and stating the notional amount of Certificates in respect of which the option is exercised and at the same time presenting the Permanent Bearer Global Security to the Relevant Programme Agent or the Permanent Registered Global Security to the Registrar, as the case may be, for notation. For the avoidance of doubt, the foregoing shall not apply to Swiss Certificates (UBS-cleared)

(b) ***Certificates in definitive form***

To exercise such option or any other Holders' option that may be set out in the relevant Pricing Supplement, the holder must deposit the registered certificate representing such Certificate(s) with the Registrar or any Transfer Agent at its specified office, together with a duly completed Put Option Exercise Notice within the notice period. No registered certificate representing such Certificate so deposited and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

(c) ***Finnish Certificates***

In respect of Finnish Certificates, the Holder must deposit a Put Option Exercise Notice with the Finnish Programme Agent and transfer the relevant Finnish Certificates to the book-entry securities account designated by the Finnish Programme Agent and blocked for further transfer by the Finnish Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)).

(d) ***Norwegian Certificates***

In respect of Norwegian Certificates, the Holder must register in the relevant VPS account a transfer restriction in favour of the Norwegian Programme Agent and deliver to the Norwegian Programme Agent a duly completed Put Option Exercise Notice within the notice period. A Put Option Exercise Notice in respect of Norwegian Certificates will not take effect against the Issuer before the date on which the relevant Norwegian Certificates have been transferred to the account designated by the Norwegian Programme Agent or blocked for further transfer by the Norwegian Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)). No Norwegian Certificate so transferred or blocked and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

(e) ***Swedish Certificates***

A Put Option Exercise Notice in respect of Swedish Certificates will not take effect against the Issuer before the date on which the relevant Swedish Certificates have been transferred to the account designated by the Swedish Programme Agent and blocked for further transfer by the Swedish Programme Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)). No Swedish Certificate so transferred or blocked and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Issuer.

9.3 **Exercise of Options or Partial Redemption in respect of Registered Certificates in definitive form**

In the case of an exercise of an Issuer's or Holders' option in respect of, or a partial redemption of, a holding of Registered Certificates in definitive form represented by a single registered certificate, a new registered certificate shall be issued to the Holder to reflect the exercise of

such option or in respect of the balance of the holding not redeemed. In the case of a partial exercise of an option resulting in Registered Certificates in definitive form of the same holding having different terms, separate registered certificates shall be issued in respect of those Certificates of that holding that have the same terms. New registered certificates shall only be issued against surrender of the existing registered certificates to the Registrar or any Transfer Agent. In the case of a transfer of Registered Certificates in definitive form to a person who is already a Holder of Registered Certificates in definitive form, a new registered certificate representing the enlarged holding shall only be issued against surrender of the registered certificate representing the existing holding.

9.4 **Exercise of Options or Partial Redemption in respect of Norwegian Certificates**

Where the exercise of an option results in Norwegian Certificates of the same holding having different terms, separate Certificates registered with the VPS Register shall be issued in respect of those Norwegian Certificates of that holding having the same terms. Such Certificates shall only be issued against surrender of the existing Norwegian Certificates in accordance with the VPS Rules.

9.5 **Redemption on the Redemption Date**

Unless previously redeemed, purchased and/or cancelled, each Certificate (other than Swiss Certificates) shall be redeemed by the Issuer on the Redemption Date at its Redemption Amount, if any. The Redemption Amount shall be calculated by the Calculation Agent in accordance with the Conditions of the Certificates and shall be notified to the Relevant Clearing System(s) and/or any Holders of Certificates that are in definitive form, with a copy to the Relevant Programme Agent and the Issuer by no later than 10.00 a.m. (Local Time) on the earlier of (a) one Clearing System Business Day after the Redemption Date and (b) the Settlement Date. If the relevant Pricing Supplement confer on the Issuer an option of either Cash Settlement or Physical Settlement, its choice shall be notified to the Holders in accordance with General Condition 27 (*Notices*). Payments shall be made by a cheque, in the case of Certificates in definitive form, or against presentation or surrender of the Global Security representing the Certificates, in the case of Certificates represented by a Global Security, at the specified office of the Relevant Programme Agent.

Unless previously redeemed, purchased and/or cancelled, each Swiss Certificate shall be redeemed by the Issuer on the Redemption Date at its Redemption Amount, if any. The Redemption Amount shall be calculated by the Calculation Agent in accordance with the Conditions of the Swiss Certificates and shall be notified to the Swiss Programme Agent. Upon payment by the Issuer of the Redemption Amount to the Swiss Programme Agent on behalf of the Holders, the Issuer shall have discharged its payment obligations in respect of the Redemption Amount in full, and Holders shall bear the risk of any failure to make payment or delay in payment by the Swiss Programme Agent.

Unless previously redeemed, purchased and/or cancelled, each Swiss Certificate (UBS-cleared) shall be redeemed by the Issuer on the Redemption Date at its Redemption Amount, if any. The Redemption Amount shall be calculated by the Calculation Agent in accordance with the Conditions of the Swiss Certificates (UBS-cleared) and shall be notified to the Swiss Certificates (UBS-cleared) Agent. Upon payment by the Issuer of the Redemption Amount to the Swiss Certificates (UBS-cleared) Agent on behalf of the Holders, the Issuer shall have discharged its payment obligations in respect of the Redemption Amount in full, and Holders shall bear the risk of any failure to make payment or delay in payment by the Swiss Certificates (UBS-cleared) Agent.

9.6 **Redemption Procedure**

(a) ***Cash Settlement***

(i) *Transfer of Redemption Amount*: The Issuer shall, for each Certificate being redeemed and which is to be settled by Cash Settlement, transfer or procure the transfer of the Redemption Amount for value on the Redemption Date in respect of such Certificate,

less any Expenses which the Issuer is required by law to deduct or withhold, or is authorised to deduct:

(A) in respect of Certificates represented by a Global Certificate (other than Certificates which are German Securities) to the Relevant Clearing System(s) for the credit of the account of the relevant Holder outside the United States;

(B) in respect of Swiss Certificates (other than Swiss Certificates in definitive form) via the Swiss Programme Agent through SIX SIS for the account of the relevant Holders outside the United States;

(C) in respect of Certificates represented by a Global Certificate which are German Securities, to the Relevant Clearing System for the credit of the account of the relevant account holder in the Relevant Clearing System;

(D) in respect of Certificates in definitive form (other than Certificates which are Swiss Securities), by a cheque payable in the relevant currency drawn on, or, at the option of the Holder, by transfer to an account denominated in such currency with a Bank;

(E) in respect of Certificates in definitive form which are Swiss Securities, by transfer to an account denominated in the relevant currency drawn on with a Bank against presentation and surrender of the relevant Certificates in definitive form at the specified office of the Swiss Programme Agent; or

(F) in respect of Swiss Certificates (UBS-cleared) via the Swiss Certificates (UBS-cleared) Agent for the account of the relevant Holders outside the United States,

subject, in each case, to General Condition 13 (*Payment Disruption*).

(ii) *Finnish Certificates, Norwegian Certificates and Swedish Certificates*: In respect of Finnish Certificates, Norwegian Certificates and Swedish Certificates, Cash Settlement will occur in accordance with Euroclear Finland Rules, the VPS Rules or the Swedish CSD Rules respectively, and payments will be effected to the Holder recorded as such on the Relevant Record Date to an account outside the United States and subject in each case to the provisions of General Condition 13 (*Payment Disruption*).

(b) ***Physical Settlement***

(i) *Transfer of Reference Asset Amount*: The Issuer shall, for each Certificate being redeemed and which is to be settled by Physical Settlement, transfer or procure the transfer of the Reference Asset Amount in accordance with General Condition 14 (*Physical Settlement*).

(ii) *Finnish Certificates, Norwegian Certificates and Swedish Certificates*: In addition, in respect of Finnish Certificates, Norwegian Certificates and Swedish Certificates, Physical Settlement will occur in accordance with Euroclear Finland Rules, the VPS Rules or the Swedish CSD Rules respectively, and transfers will be effected to the Holder recorded as such on the Relevant Record Date. Finnish Certificates may only be subject to Cash Settlement in accordance with Euroclear Finland Rules.

(c) ***Expenses***

The Issuer is authorised to deduct from the Redemption Amount (i) all Expenses, if any, payable by the Issuer or its affiliates in connection with the redemption of the Certificates, (ii) any and all Expenses in relation to any transfer of the Reference Asset Amount made as a result of such redemption, (iii) if the relevant Pricing Supplement specifies exercise rights, all Expenses arising in connection with the exercise of the Certificates in the place in which the relevant Exercise Notice is delivered for exercise, (iv) if the relevant Pricing Supplement specifies exercise rights, all Expenses involved in delivering the relevant Exercise Notice that are payable by the Issuer or its affiliates, and (v) all Expenses, if any, involved with complying with any

Non-U.S. Certification or the Eligible Investor Certification that are payable by the Issuer or its affiliates.

(d) ***Record Date***

Each payment in respect of:

(i) a Registered Certificate represented by a Global Security will be paid to the person shown as the Holder in the Register as at the close of business on the clearing system business day before the due date for the payment thereof, unless otherwise specified in the relevant Pricing Supplement (in respect of such Registered Certificate represented by a Global Security, the "**Record Date**"). In this General Condition 9.6(d)(i), "**clearing system business day**" means, in relation to Euroclear and Clearstream, Luxembourg, each day which is not a Saturday or a Sunday, 25 December or 1 January, and, in relation to any other Relevant Clearing System, each day on which such Relevant Clearing System is open for business;

(ii) a Registered Certificate in definitive form will be paid to the person shown as the Holder in the Register at the close of business on the fifteenth day before the due date for the payment thereof (in respect of such Registered Certificate in definitive form, the "**Record Date**"). Where payment in respect of a Registered Certificate in definitive form is to be made by cheque, the cheque will be mailed to the address of the Holder appearing in the Register (or to the first-named of joint holders);

(iii) a Swedish Certificate shall be made to the Holders registered as such on the fifth business day (where the Swedish Certificates have been registered by the Swedish CSD on the basis of notional amount or are denominated in EUR) or, as the case may be, on the fourth business day (where the Swedish Certificates have been registered by the Swedish CSD on the basis of the number of securities) (in each case as such business day is defined by the then applicable Swedish CSD Rules) before the due date for such payment, or, in each case, on such other business day falling closer to the due date as then may be stipulated in the Swedish CSD Rules (in respect of Swedish Certificates, the "**Swedish Record Date**") and will be made in accordance with the Swedish CSD Rules and payments will be effected to the Holder recorded as such on the Swedish Record Date to an account outside the United States and subject in each case to the provisions of General Condition 13 (*Payment Disruption*);

(iv) a Swiss Certificate (other than Swiss Certificates in definitive form) shall be made to the Holder on the due date for such payment; and

(v) a Swiss Certificate (UBS-cleared) shall be made to the Holder on the due date for such payment.

10. Exercise Rights in respect of Certificates

10.1 Exercise Rights of Certificates

Except in the case of Italian Certificates if the relevant Pricing Supplement specifies "Exercise applicable to Certificates" to be applicable, then General Condition 11 (*Exercise of Warrants*) shall apply to the Certificates instead of General Condition 9 (*Redemption Rights in respect of Certificates*) to such Certificates and the relevant Pricing Supplement may make such other consequential changes to these General Conditions in order to effect such exercise as may be requisite or desirable in the discretion of the Issuer.

10.2 Exercise Rights in respect of Italian Certificates

In the case of Italian Certificates, if the relevant Pricing Supplement specifies "Exercise applicable to Certificates" to be applicable, then General Condition 10.2 (*Exercise Rights in respect of Italian Certificates*) shall apply to the Certificates instead of General Condition 9 (*Redemption Rights in respect of Certificates*).

(a) ***Automatic Exercise***

The exercise of each Series of Italian Certificates is automatic on the Redemption Date, without any prior notice being delivered by the relevant Holder. Any Redemption Amount, which shall be a cash settlement amount, shall be credited, on the Settlement Date, through the Paying Agent, to the account of the relevant intermediary in the Relevant Clearing System.

(b) ***Fees and Expenses in connection with Exercise***

Neither the Relevant Programme Agent nor the Issuer shall apply any charges for the automatic exercise of the Italian Certificates. Any other taxes, duties and/or expenses, including any applicable depository charges, transaction or exercise charges, stamp duty, stamp duty reserve tax, issue, registration, securities transfer and/or other taxes or duties which may arise in connection with the automatic exercise of the Italian Certificates are payable by the Holder.

(c) ***Losses, expenses and costs in connection with Settlement***

No amount relating to losses, expenses and costs of unwinding or adjusting any Underlying Hedge Transactions shall be deducted with respect to the Italian Certificates notwithstanding anything else in the Conditions to the contrary.

E. PROVISIONS APPLICABLE TO WARRANTS ONLY

11. Exercise of Warrants

11.1 Exercise Rights

(a) ***Exercise Style and Period***

Warrants designated in the relevant Pricing Supplement as:

(i) "American Style" Warrants are exercisable on any Scheduled Trading Day (or other such types of days as may be specified in the relevant Pricing Supplement) during the applicable period specified in the relevant Pricing Supplement;

(ii) "European Style" Warrants are only exercisable on the Expiration Date;

(iii) "Bermudan Style" Warrants are exercisable on any one of one or more Potential Exercise Dates and on the Expiration Date,

subject to (i) General Condition 11.3(a) (*Exercise Notice*) and (ii) prior termination of the Warrants as provided in General Condition 16 (*Early Redemption or Termination for Illegality*) and 18.3 (*Early Redemption or Termination for Taxation – FATCA*).

If Automatic Exercise is applicable to the Warrants, then (unless the Warrants have been previously terminated in accordance with General Condition 16 (*Early Redemption or Termination for Illegality*) or 18.3 (*Early Redemption or Termination for Taxation – FATCA*) or purchased and cancelled), the Warrants shall be deemed to be automatically exercised on the Expiration Date.

Finnish Warrants shall be “European Style” Warrants subject to automatic exercise.

(b) ***Entitlement***

The rights attaching to each Warrant on exercise will be as set out in the relevant Pricing Supplement.

(c) ***Failure to Exercise - European Style Warrants***

Any Warrant designated in the relevant Pricing Supplement as "European Style" with respect to which no Exercise Notice has been delivered to the Relevant Clearing System(s) and copied to the Relevant Programme Agent or (in the case of Warrants in definitive form and Warrants which are Swiss Securities or German Securities) to the Relevant Programme Agent only, in the manner set out in General Condition 11.3(a) (*Exercise Notice*), at or prior to 10.00 a.m. (Local Time) on the relevant Expiration Date, shall become void unless the relevant Pricing

Supplement states that "Automatic Exercise" is applicable, in which case such Warrant shall be deemed to have been automatically exercised on the Expiration Date.

(d) ***Failure to Exercise - American or Bermudan Style Warrants***

Any Warrant designated in the relevant Pricing Supplement as "American Style" or "Bermudan Style" with respect to which no duly completed Exercise Notice has been delivered to the Relevant Clearing System(s) and copied to the Relevant Programme Agent or (in the case of Warrants in definitive form and Warrants which are Swiss Securities or German Securities) to the Relevant Programme Agent only, in the manner set out in General Condition 11.3(a) (*Exercise Notice*), at or prior to 10.00 a.m. (Local Time) on the relevant Expiration Date shall become void unless the relevant Pricing Supplement states that "Automatic Exercise" is applicable, in which case such Warrant shall be deemed to have been automatically exercised on the Expiration Date.

11.2 **Automatic Exercise Warrant Notice Requirement**

In respect of Warrants which are automatically exercised, the relevant Holder shall, to the extent specified by the Issuer in a notice to the Holders given in the manner set out in General Condition 27 (*Notices*), deliver to the Relevant Clearing System(s) copied to the Relevant Programme Agent (or deliver to the Relevant Programme Agent only in the case of Warrants in definitive form and Warrants which are Swiss Securities or German Securities) a notice (an "**Automatic Exercise Warrant Notice**") (substantially in the form provided by the Relevant Programme Agent to the Relevant Clearing System, which shall include in the case of Warrants to be settled by Physical Settlement, the Non-U.S. Certification, or, in the case of Rule 144A Warrants or Regulation S/Rule 144A Warrants, the Eligible Investor Certification) within 30 days of the Expiration Date providing the information and certification specified in the Exercise Notice. Unless expressly provided otherwise, such Automatic Exercise Warrant Notice shall be deemed to be the Exercise Notice for the purposes of the General Conditions.

Where an Automatic Exercise Warrant Notice is required by the Issuer, then the Settlement Amount of the Warrants, the Exercise Amount of the Warrants or the Reference Asset Amount in respect of the Warrants will only be paid or delivered, as the case may be, to the Holder if the Relevant Clearing System(s) and/or Relevant Programme Agent, as provided herein or in the relevant Pricing Supplement, receives an Automatic Exercise Warrant Notice in such form as the Relevant Clearing System(s) and/or Relevant Programme Agent considers in its discretion to be satisfactory, within 30 days of the Expiration Date and if no such Automatic Exercise Warrant Notice is received in respect of those Warrants initially subject to Physical Settlement, such Warrants shall be subject to Cash Settlement in all circumstances with such reductions to the Settlement Amount for the Expenses arising as a result of such Holder's failure to deliver such required Automatic Exercise Warrant Notice. Settlement of Warrants will be made in accordance with this General Condition 11 except that the Issuer shall, for each Warrant being exercised, transfer or procure the transfer of the Settlement Amount or the Exercise Amount on the Alternative Settlement Date, which shall occur only upon receipt and approval of such Automatic Exercise Warrant Notice, as the case may be.

11.3 **Exercise Procedure**

(a) ***Exercise Notice***

Warrants may be exercised in the following manner:

(i) in respect of Warrants (other than Warrants which are German Securities) represented by a Global Warrant which is held on behalf of Euroclear and/or Clearstream, Luxembourg only, by the sending of an authenticated instruction by SWIFT message or by any other authorised communication channel, in accordance with Euroclear and/or Clearstream, Luxembourg's rules and operating procedures, to Euroclear and/or Clearstream, Luxembourg, which shall include all the information set out in the form provided by the Principal Programme Agent and which will constitute an Exercise Notice in respect of such Warrants and, following receipt, Euroclear and/or Clearstream,

Luxembourg will send copies of any Exercise Notices so received to the Principal Programme Agent; or

(ii) in respect of any Warrants other than Warrants represented by a Global Warrant which is held on behalf of Euroclear and/or Clearstream, Luxembourg (including Warrants which are German Securities), by delivery of a duly completed Exercise Notice (substantially in the form provided by the Relevant Programme Agent) to the Relevant Clearing System(s) with a copy to the Relevant Programme Agent or to the Relevant Programme Agent only (in the case of Warrants in definitive form and Warrants which are Swiss Securities or German Securities),

in each case prior to the Latest Exercise Time on any Scheduled Trading Day (in the case of "American Style" Warrants) or the Latest Exercise Time on any Potential Exercise Date (in the case of "Bermudan Style" Warrants) during the relevant Exercise Period; provided that, in respect of Warrants designated in the relevant Pricing Supplement as "European Style", such Exercise Notice may be delivered at any time after 10.00 a.m. (Local Time) on the Business Day immediately preceding the Expiration Date but prior to the Latest Exercise Time on the Expiration Date as provided above.

(b) ***Verification of the Holder***

Upon receipt of an Exercise Notice (if any) in respect of Warrants other than Warrants which are German Securities, the Relevant Programme Agent (or such other person designated by the then applicable VPS Rules, the Swedish CSD Rules or Euroclear Finland Rules, as applicable, to be responsible for such actions) will request the Relevant Clearing System(s) to verify that the person exercising the Warrants specified therein was, as at 10.00 a.m. (Local Time) on the relevant Exercise Date, the Holder thereof according to the books of the Relevant Clearing System(s). If the Relevant Clearing System(s) is/are unable so to verify, such Exercise Notice shall be deemed not to have been given. In the event that the Warrants are Registered Warrants in definitive form, the Registrar will verify that the person exercising the Warrants is the Holder thereof and will inform the Issuer of the details thereof, and the inability of the Registrar to so verify shall cause such Exercise Notice to be deemed not given. In respect of Warrants other than Warrants which are German Securities, the Relevant Clearing System(s) will, on or before the Settlement Date, debit the Warrants being exercised from the account of the Holder specified in the Exercise Notice (but without prejudice to the accrued rights of the relevant Holder). In respect of Finnish Warrants, Norwegian Warrants and Swedish Warrants, such verification and debiting of the relevant securities accounts shall be pursuant to the then applicable Euroclear Finland Rules, VPS Rules or Swedish CSD Rules (as applicable) and the Relevant Programme Agent shall request and/or effect the transfer by the Holder of the relevant Finnish Warrants, Norwegian Warrants, or Swedish Warrants (as the case may be) to an account blocked for further transfers until such debiting may occur.

In the case of exercised Warrants in definitive form where Issuer Physical Settlement is applicable, the relevant Reference Assets (if any) shall be delivered outside the United States to the Holder by the Delivery Agent.

(c) ***Cash Settlement - Warrants***

(i) The Issuer shall, for each Warrant being exercised and which is to be settled by Cash Settlement, on the Settlement Date transfer or procure the transfer of the Settlement Amount, less any Expenses due by reason of such exercise or deemed exercise of such Warrant (including any Expenses which are required by law to be deducted or withheld from any payments from the Issuer to the Holder of such Warrant, provided that if the deduction of Expenses would otherwise reduce the amount payable to the Holder to zero, such amount shall be deemed to be zero), which the Issuer is authorised to deduct under the Exercise Notice as applicable, to the Holder's account (located outside the United States) as specified in the relevant Exercise Notice for value on the Settlement Date, provided that, if no Exercise Notice is delivered for the exercise of such Warrants and Automatic Exercise is applicable to such Warrants:

(A) if the Warrants are represented by a Global Warrant or are Swiss Securities in uncertificated form (other than Warrants which are German Securities), then the Issuer shall pay the Settlement Amount in respect of such Warrants, less any Expenses to the Relevant Clearing System(s) for the credit of the accounts of the relevant Holders;

(B) if the Warrants are Swiss Warrants (other than Swiss Warrants in definitive form) via the Swiss Programme Agent through SIX SIS for the account of the relevant Holders outside the United States;

(C) if the Warrants are German Securities represented by a Global Warrant then the Issuer shall pay the Settlement Amount in respect of such Warrants less any Expenses against presentation or surrender of the Global Warrant at the specified office of the Relevant Programme Agent, to the Relevant Clearing System, for the credit of the account of the relevant account holder with the Relevant Clearing System;

(D) if the Warrants are in definitive form (other than Warrants which are Swiss Securities), then the Issuer shall pay the Settlement Amount in respect of such Warrants in definitive form, less any Expenses by a cheque payable in the relevant currency drawn on, or, at the option of the Holder by transfer to an account denominated in such currency with a Bank; or

(E) if the Warrants are in definitive form and are Swiss Securities, by transfer to an account denominated in the relevant currency drawn on with a Bank against presentation and surrender of the relevant Warrants in definitive form at the specified office of the Swiss Programme Agent,

in each case, subject to, if so required by the Issuer, the provision by such Holder of an Automatic Exercise Warrant Notice.

(ii) *Norwegian Warrants and Swedish Warrants*: In addition, in respect of Norwegian Warrants and Swedish Warrants, Cash Settlement will occur in accordance with the VPS Rules or the Swedish CSD Rules respectively, and payments will be effected to the Holder recorded as such on the Relevant Record Date.

(iii) *Finnish Warrants*: In respect of Finnish Warrants, Cash Settlement will occur in accordance with the Euroclear Finland Rules, and payments will be effected to the Holder recorded as such on the Finnish Record Date.

(d) ***Issuer Physical Settlement***

(i) The Issuer shall, for each Warrant being exercised and which is to be settled by Issuer Physical Settlement, on the Settlement Date (but only if the Exercise Amount (if any) and any other amounts payable by the Holder in connection with such exercise, including the additional amount (if any) in accordance with the Holder's undertakings given in the Exercise Notice, have been received by the Issuer in accordance with the relevant Pricing Supplement and all Expenses have been paid by the Holder in accordance with General Condition 11.3(h) (*Expenses*)), deliver or procure delivery of Reference Assets as contemplated by the relevant Pricing Supplement to the account (located outside the United States) or person specified in the relevant Exercise Notice, as applicable. For the purposes hereof, delivery of Reference Assets will be made in accordance with usual market practice for delivery of such Reference Assets.

(ii) *Norwegian Warrants and Swedish Warrants*: In addition, in respect of Norwegian Warrants and Swedish Warrants, Physical Settlement will occur in accordance with the VPS Rules or the Swedish CSD Rules respectively, and transfers will be effected to the Holder recorded as such on the Relevant Record Date.

(iii) *Finnish Warrants*: In addition, Finnish Warrants may only be subject to Cash Settlement in accordance with Euroclear Finland Rules.

(e) ***Holder Physical Settlement***

The Issuer shall, for each Warrant being exercised and which is to be settled by Holder Physical Settlement, on the Settlement Date (but only if the Reference Assets required to be delivered by the Holder in connection with such exercise have been received by the Issuer in accordance with the relevant Pricing Supplement) transfer or procure the transfer of the Exercise Amount, less any Expenses which the Issuer is authorised to deduct under the Exercise Notice as applicable, to the Holder's account (located outside the United States) as specified in the relevant Exercise Notice as applicable, for value on the Settlement Date. For the purposes hereof, the Issuer shall, if necessary, upon receipt of an Exercise Notice, give the Holder sufficient information to enable it to deliver the Reference Assets to the Issuer.

(f) ***Determination***

Any determination as to whether an Exercise Notice contains all the relevant information and is validly delivered shall be made by the Relevant Programme Agent (as applicable) in its sole and absolute discretion and shall be conclusive and binding on the Issuer, the JPMSP Guarantor (if applicable) in respect of Warrants issued by JPMSP, the Registrar, the Calculation Agent and the Holder. Any Exercise Notice so determined to be incomplete or not in proper form, or which is not, in the case of a Warrant sent or otherwise copied to the Relevant Programme Agent immediately after being sent to the Relevant Clearing System(s) (in the case of Global Warrants) or to the Relevant Programme Agent (in the case of Warrants in definitive form and Warrants which are Swiss Securities or German Securities), as applicable, shall be void. If such Exercise Notice is subsequently corrected to the satisfaction of the Relevant Programme Agent as applicable, it shall be deemed to be a new Exercise Notice submitted at the time the correction is delivered. The Relevant Programme Agent will endeavour to notify the Holder of an incomplete Exercise Notice as soon as possible after it becomes aware of the improper exercise. An Exercise Notice shall not be considered to be duly completed if it does not contain the Non-U.S. Certification or, as the case may be, the Eligible Investor Certification, in the required form.

(g) ***Effect of Exercise of Warrants***

Delivery of an Exercise Notice or, in the case of automatically exercised Warrants, the occurrence of the Exercise Date, shall constitute an irrevocable election by the relevant Holder to exercise the relevant Warrants. After delivery of such Exercise Notice or occurrence of such Exercise Date (as applicable), such exercising Holder may not otherwise transfer such Warrants. Notwithstanding this, if any Holder does so transfer or attempts so to transfer such Warrants, the Holder will be liable to the Issuer for any Expenses suffered or incurred by the Issuer or any of its affiliates through whom it has hedged its position, including those suffered or incurred as a consequence of the Issuer or any of its affiliates through whom it has hedged its position having terminated or commenced any related hedging operations in reliance on the relevant Exercise Notice or Exercise Date (as applicable) and subsequently (i) entering into replacement hedging operations in respect of such Warrants or (ii) paying any amount on the subsequent exercise of such Warrants without having entered into any replacement hedging operations.

(h) ***Expenses***

A Holder exercising a Warrant shall pay (i) all Expenses, if any, payable in connection with the exercise of the Warrant, (ii) all Expenses in relation to any transfer of the Reference Asset made as a result of such exercise, (iii) all Expenses arising on the exercise of the Warrants in the place in which the Exercise Notice is delivered, (iv) all Expenses involved in delivering the Exercise Notice and (v) all Expenses, if any, involved in complying with the Non-U.S. Certification or, as the case may be, the Eligible Investor Certification.

(i) ***Minimum Number of Warrants Exercisable***

If Warrants are designated as "American Style" or "Bermudan Style" and a Minimum Exercise Number is specified in the relevant Pricing Supplement, then, save in respect of when the Exercise Date is the Expiration Date, the Warrants of such Series or Tranche may only be

exercised in the Minimum Exercise Number or such multiples in which such Series or Tranche may be exercised in accordance with the relevant Pricing Supplement.

(j) ***Maximum Number of Warrants Exercisable***

If Warrants are designated as "American Style" or "Bermudan Style" and a Maximum Exercise Number is specified in the relevant Pricing Supplement, then if, following any Exercise Date other than the Expiration Date, the Issuer determines in its sole and absolute discretion that more than the Maximum Exercise Number of Warrants of a Series or Tranche were purportedly exercised on such Exercise Date by a single Holder or a group of Holders acting in concert, then the Issuer may deem the Exercise Date for the first such Quota of such Warrants thus exercised to be such date, and the Exercise Date for each Quota of Warrants (or part of a Quota thereof, in the case of the last amount) thus exercised to be each succeeding day thereafter, until all such Warrants exercised on such first Exercise Date by such Holder or group of Holders have been allocated an Exercise Date through this procedure. In any case, where more than the Quota of Warrants of a Series or Tranche are so exercised on the same day by a Holder or group of Holders acting in concert, the order of settlement in respect of such Warrants shall be at the sole and absolute discretion of the Issuer. Notwithstanding the foregoing, the Issuer may, at any time, in its discretion, accept more than the Quota of Warrants of a Series or Tranche for exercise on any Exercise Date.

(k) ***Record Date***

Each payment in respect of:

(i) a Registered Warrant represented by a Global Security will be paid to the person shown as the Holder in the Register as at the close of business on the clearing system business day before the due date for the payment thereof, unless otherwise specified in the relevant Pricing Supplement (in respect of such Registered Warrant represented by a Global Security, the "**Record Date**"). In this General Condition 11.3(k)(i), "**clearing system business day**" means, in relation to Euroclear and Clearstream, Luxembourg, each day which is not a Saturday or a Sunday, 25 December or 1 January, and, in relation to any other Relevant Clearing System, each day on which such Relevant Clearing System is open for business;

(ii) a Registered Warrant in definitive form will be paid to the person shown as the Holder in the Register at the close of business on the fifteenth day before the due date for the payment thereof (in respect of such Registered Warrant in definitive form, the "**Record Date**"). Where payment in respect of a Registered Warrant in definitive form is to be made by cheque, the cheque will be mailed to the address of the Holder appearing in the Register (or to the first-named of joint holders);

(iii) a Swedish Warrant shall be made to the Holders registered as such on the fourth business day or, where the Swedish Warrants are denominated in EUR, on the fifth business day (in each case as such business day is defined by the then applicable Swedish CSD Rules) before the due date for such payment, or on such other business day falling closer to the due date as then may be stipulated in the Swedish CSD Rules (in respect of Swedish Warrants, the "**Swedish Record Date**") and will be made in accordance with the Swedish CSD Rules and shall in all cases be made outside the United States;

(iv) a Swiss Warrant (other than Swiss Warrants in definitive form) shall be made to the Holder on the due date for such payment; and

(v) a Finnish Warrant will be paid to the person shown as the Holder in accordance with the Euroclear Finland Rules. The Record Date in respect of Finnish Warrants shall be the first Euroclear Finland register day before the due date for payment (in respect of Finnish Warrants, the "**Finnish Record Date**"). In this General Condition 11.3(k)(v) "**Euroclear Finland register day**" means a day on which the Finnish book-entry securities system is open pursuant to the Euroclear Finland Rules.

F. PROVISIONS APPLICABLE TO NOTES, WARRANTS AND CERTIFICATES

12. **Business Day**

12.1 **Business Day Convention**

If any date referred to in these General Conditions or the relevant Pricing Supplement that is specified to be subject to adjustment in accordance with a Business Day Convention would otherwise fall on a day that is not a Business Day, then, if the Business Day Convention specified is (A) the Floating Rate Business Day Convention, such date shall be postponed to the next day that is a Business Day unless it would thereby fall into the next calendar month, in which event (i) such date shall be brought forward to the immediately preceding Business Day and (ii) each subsequent such date (if any) shall be the last Business Day of the month in which such date would have fallen had it not been subject to adjustment, (B) the Following Business Day Convention, such date shall be postponed to the next day that is a Business Day, (C) the Modified Following Business Day Convention, such date shall be postponed to the next day that is a Business Day unless it would thereby fall into the next calendar month, in which event such date shall be brought forward to the immediately preceding Business Day or (D) the Preceding Business Day Convention, such date shall be brought forward to the immediately preceding Business Day, provided that, where the Modified Following Business Day Convention or Preceding Business Day Convention applies to any relevant date, and the Pricing Supplement provides that such Business Day Convention is "subject to adjustment for Unscheduled Holiday", then if that date would otherwise fall on a day that is not a Business Day as a result of an Unscheduled Holiday, that date will instead fall on the first following day that is a Business Day.

12.2 **Payments on Payment Days**

If the date for payment of any amount in respect of any Security is not a Payment Day, the Holder shall not be entitled to payment until the next following Payment Day and shall not be entitled to any interest or other sum in respect of such postponed payment. For these purposes, "**Payment Day**" means any day which is:

(a) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in each Additional Financial Centre (if any) specified in the relevant Pricing Supplement; and

(b) either (1) in relation to any sum payable in a Specified Currency other than euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the relevant Specified Currency (if other than the place of presentation and any Additional Financial Centre and which if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney or Auckland, respectively) or (2) in relation to any sum payable in euro, a day on which TARGET2 is open.

13. **Payment Disruption**

13.1 **Occurrence of a Payment Disruption Event**

In the event that the Calculation Agent, at any time and from time to time, determines that a Payment Disruption Event has occurred or is likely to occur, then the Calculation Agent shall as soon as practicable notify the Holders of the relevant Securities of the occurrence of a Payment Disruption Event in accordance with General Condition 27 (*Notices*).

13.2 **Consequences of a Payment Disruption Event**

Upon the occurrence of a Payment Disruption Event:

(a) ***Extension of relevant dates***

The Interest Payment Date, the Maturity Date, the Exercise Date, the Redemption Date, the Coupon Payment Date, the Settlement Date or any other date on which the Securities may be

exercised or redeemed or any amount shall be due and payable in respect of the relevant Securities shall, subject to General Condition 13.2(d) (*Payment Event Cut-off Date and Payment Event Payment Date*), be extended to a date falling 14 calendar days (or such other date as may be determined by the Calculation Agent and notified to the Holders in accordance with General Condition 27 (*Notices*)) after the date on which the Payment Disruption Event is no longer occurring and notice thereof shall be given to the relevant Holders in accordance with General Condition 27 (*Notices*).

(b) ***Obligation to pay postponed***

The Issuer's obligation to pay the Settlement Amount, Exercise Amount, Interest Amount, Coupon Amount, Final Redemption Amount, Redemption Amount or any such other amounts in respect of the relevant Securities (the "**Affected Amount**"), subject to General Condition 13.2(d) (*Payment Event Cut-off Date and Payment Event Payment Date*), shall be postponed until 14 calendar days (or such other date as may be determined by the Calculation Agent and notified to the Holders in accordance with General Condition 27 (*Notices*)) after the date on which the Payment Disruption Event is no longer operating. Notwithstanding the foregoing, the Issuer may elect to satisfy in part its obligation to pay the amounts as may be due and payable under the relevant Securities by making a partial payment(s) (the "**Partial Distributions**"). Any Partial Distribution made by the Issuer to the Holders will be calculated and/or determined by the Calculation Agent and shall be paid to the Holders pro rata to the proportion of the Securities of the same series held by the relevant Holder. In the event that any Partial Distribution is made by the Issuer, the Calculation Agent may make any such corresponding adjustment to any variable relevant to the settlement, redemption or payment terms of the relevant Securities as it deems necessary and shall notify the relevant Holders thereof in accordance with General Condition 27 (*Notices*).

(c) ***Payments net of expenses***

Notwithstanding any provisions to the contrary, (a) any payments made in accordance with this General Condition 13.2 shall be made after deduction of any costs, expenses or liabilities incurred or to be incurred by the Calculation Agent or Issuer in connection with or arising from the resolution of the relevant Payment Disruption Event and (b) a Holder shall not be entitled to any payment, whether of interest or otherwise, on the Securities in the event of any delay which may occur in the payment of any amounts due and payable under the Securities as a result of the operation of this General Condition 13.2 and no liability in respect thereof shall attach to the Issuer.

(d) ***Payment Event Cut-off Date and Payment Event Payment Date***

In the event that a Payment Disruption Event is still occurring on the Payment Event Cut-off Date, then the Interest Payment Date, the Maturity Date, the Exercise Date, the Redemption Date, the Settlement Date, the Coupon Payment Date or any other date for the relevant Securities in respect of which redemption amounts in relation to any of the Securities would otherwise be due and payable but for the occurrence of such Payment Disruption Event shall be postponed to the Payment Event Payment Date and the Calculation Agent shall determine the USD Equivalent Amount of the Affected Amount based on the USD/Affected Currency Exchange Rate as of the Payment Disruption Valuation Date and Issuer shall make payment of the USD Equivalent Amount of the Affected Amount on the Payment Event Payment Date in full and final settlement of its obligations to pay such Affected Amount in respect of the Securities. The Calculation Agent shall as soon as practicable after the Payment Event Cut-off Date notify the Holders of the time on the Payment Disruption Valuation Date on which the USD/Affected Currency Exchange Rate will be determined. In the event the Calculation Agent is unable to determine the USD Equivalent Amount in respect of the Affected Amount on the Payment Disruption Valuation Date, the Holders will not receive any amounts. Thereafter, the Issuer shall have no obligations whatsoever under the Securities.

14. Physical Settlement

14.1 *Physical Settlement in respect of Securities*

If the relevant Pricing Supplement specifies "Physical Settlement" to be applicable (and, in respect of the requirements relating to a Reference Asset Transfer Notice only, specifies "Reference Asset Transfer Notice" to be applicable), in order to obtain delivery of the Reference Asset Amount(s) in respect of the Securities, the relevant Holder must deliver, not later than the close of business in each place of receipt on the relevant Physical Settlement Cut-off Date, (i) if the Securities are represented by a Global Security, a positive confirmation to the Relevant Clearing System that it makes all of the required certifications, representations, undertakings and authorisations, together with the provision of the required specifications, in the Reference Asset Transfer Notice (any such confirmation will be made in electronic form or in such other manner as is acceptable to the Relevant Clearing System), or (ii) if the Securities are in definitive form, a duly completed Reference Asset Transfer Notice to any Paying Agent, in each case with a copy to each of the Issuer, the Relevant Programme Agent and the Delivery Agent. The foregoing requirement shall not apply to Swiss Securities or to German Securities save, in the case of German Securities, where "Reference Asset Transfer Notice" is specified to be applicable in the relevant Pricing Supplement.

A Reference Asset Transfer Notice (or, where the Securities are represented by a Global Security, the required certifications, representations, undertakings and authorisations, together with the provision of the required specifications, in the Reference Asset Transfer Notice) may only be delivered (i) if the Securities are represented by a Global Security, in electronic form or in such other manner as is acceptable to the Relevant Clearing System, or (ii) if the Securities are in definitive form, in writing or in such other manner as is acceptable to the Relevant Programme Agent.

The delivery of the Reference Asset Amount(s) shall be made (i) if practicable and in respect of Securities represented by a Global Security, to the Relevant Clearing System for the credit of the account of the Holder (or, in the case of German Securities or Swiss Securities, the relevant accountholder in the Relevant Clearing System), (ii) in the manner specified in the relevant Pricing Supplement or (iii) in such other commercially reasonable manner as the Issuer shall determine to be appropriate for such delivery and shall notify to the Holders in accordance with General Condition 27 (*Notices*).

No delivery and/or transfer of any Reference Asset Amount(s) shall be made until all Delivery Expenses arising from the delivery and/or transfer of any Reference Asset Amount(s) have been paid to the satisfaction of the relevant Issuer by the relevant Holder.

14.2 **Reference Asset Transfer Notice**

(a) ***Verification of details in a Reference Asset Transfer Notice***

Upon receipt of a Reference Asset Transfer Notice, in the case of (i) Securities represented by a Global Security, the Relevant Clearing System or (ii) Securities in definitive form, the Relevant Programme Agent, shall verify that the person specified therein as the Holder is the holder of the specified principal amount of Notes or, as the case may be, number of Warrants or Certificates according to its books.

(b) ***No Withdrawal of Reference Asset Transfer Notice***

No Reference Asset Transfer Notice may be withdrawn after (i) in the case of Global Securities, receipt thereof by the Relevant Clearing System or (ii) in the case of Securities in definitive form, receipt thereof by the Relevant Programme Agent. After delivery of a Reference Asset Transfer Notice, the relevant Holder may not transfer the Securities which are the subject of such notice.

(c) ***Failure to properly complete a Reference Asset Transfer Notice***

Failure to properly complete and deliver a Reference Asset Transfer Notice may result in such notice being treated as null and void. Any determination as to whether such notice has been properly completed and delivered as provided in these General Conditions shall be made (i) in the case of Securities represented by a Global Security, by the Relevant Clearing System, after consultation with the Relevant Programme Agent, and shall be conclusive and binding on the

Issuer and the relevant Holder and (ii) in the case of Securities in definitive form, by the Relevant Programme Agent, and shall be conclusive and binding on the Issuer and the relevant Holder. The relevant Issuer may determine whether to waive the requirement to deliver a properly completed Reference Asset Transfer Notice prior to the Physical Settlement Cut-off Date in order for such Holder to receive the Interest Amount, Coupon Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, by obtaining delivery of the Reference Asset Amount in respect of such Securities and shall give notice of such waiver to the Relevant Clearing System (if applicable), and to each of the Paying Agents, the Relevant Programme Agent, the Calculation Agent and the Delivery Agent.

(d) ***Failure to provide the certifications in a Reference Asset Transfer Notice***

If the relevant Pricing Supplement specifies "Equity Certification" and "Non-U.S. Certification" or, as the case may be, an "Eligible Investor Certification" to be applicable (in each case in the form set out in the Reference Asset Transfer Notice), and the relevant Holder has not provided the certifications as so required by the relevant Physical Settlement Cut-off Date, the Issuer may, instead of delivering, or having delivered on its behalf, the Reference Asset Amount, satisfy its obligations in respect of the relevant Security by payment to the relevant Holder of a cash amount, calculated by the Calculation Agent to represent the fair market value of the deliverable Reference Assets comprising such Reference Asset Amount on such day as shall be selected by the Issuer and adjusted to take account fully for any losses, expenses and costs to the Issuer and/or any affiliate of the Issuer of unwinding or adjusting any underlying or related hedging arrangements (including but not limited to any options or selling or otherwise realising any relevant Share or other instruments or assets of any type whatsoever which the Issuer and/or any of its affiliates may hold as part of such hedging arrangements).

14.3 **Delivery of Reference Asset Amount**

Subject as provided in this General Condition 14, in relation to each Security which is to be redeemed or satisfied by delivery of a Reference Asset Amount, provided, if required, that the Reference Asset Transfer Notice is duly delivered not later than the close of business in each place of receipt on the relevant Physical Settlement Cut-off Date, the Reference Asset Amount will be delivered on behalf of the Issuer by the Delivery Agent at the risk of the relevant Holder in the manner provided above on, or as soon as reasonably practicable after, the Interest Payment Date, Coupon Payment Date, Settlement Date or the Maturity Date (or, if any such date is not a business day, on the next following business day), as the case may be (each such date, subject to adjustment in accordance with this General Condition 14, a "**Delivery Date**").

Subject as provided in this General Condition 14, in relation to each Security which is to be redeemed or satisfied by delivery of a Reference Asset Amount, if a Reference Asset Transfer Notice is duly delivered later than the close of business on the relevant Physical Settlement Cut-off Date in each place of receipt, then the Issuer may deliver the Reference Asset Amount as soon as practicable after the relevant Interest Payment Date, Coupon Payment Date, Settlement Date or the Maturity Date, as the case may be (in which case, such date of delivery shall be the relevant Delivery Date). In such circumstances, the Holder shall not be entitled to any payment, whether of interest or otherwise, in the event that it receives delivery of the Reference Asset Amount after the Delivery Date, and no liability in respect thereof shall attach to the Issuer or to the Delivery Agent.

14.4 **Dividends or other distributions**

Where the Reference Asset Amount comprises Shares, any dividend or other distribution in respect of such Reference Asset Amount will be payable to the party that would receive such dividend or other distribution according to market practice for a sale of the Share executed on the Interest Payment Date, Coupon Payment Date, Settlement Date or the Maturity Date, as the case may be, and to be delivered in the same manner as the Reference Asset Amount. Any such dividend or other distribution to be paid to a Holder shall be paid to the account specified in the relevant Reference Asset Transfer Notice or, in the case of Swiss Securities or German Securities (in respect of German Securities, unless a Reference Asset Transfer Notice is specified to be applicable in the relevant Pricing Supplement), to the Relevant Clearing System for the credit of the account of the relevant accountholder in the Relevant Clearing System.

14.5 **Residual Cash Amount**

Where the Reference Asset Amount comprises, in the sole and absolute determination of the Calculation Agent, fractions of Reference Assets, the Holders will receive a Reference Asset Amount comprising of the nearest number (rounded down) of Reference Assets capable of being delivered by the Issuer (taking into account that a Holder's entire holding may be aggregated at the Issuer's discretion for the purpose of delivering the Reference Asset Amounts, unless otherwise specified in the relevant Pricing Supplement), and, if specified in the relevant Pricing Supplement, the Holders will also receive a Residual Cash Amount (if any) in respect of each Security capable of being paid by the Issuer (taking into account that a Holder's entire holding may be aggregated at the Issuer's discretion for the purpose of paying the Residual Cash Amounts, unless otherwise provided in the relevant Pricing Supplement).

14.6 **Settlement Disruption Event**

(a) ***Postponement of Delivery Date***

If a Settlement Disruption Event prevents delivery of a Reference Asset Amount on a Delivery Date, then the Delivery Date will be the first succeeding date on which delivery of the Reference Asset Amount can take place through the Relevant Clearing System unless a Settlement Disruption Event prevents settlement on each of the eight Clearing System Business Days immediately following the original date that, but for the occurrence of the Settlement Disruption Event, would have been the Delivery Date. In that case, (i) if such Reference Asset Amount can be delivered in any other commercially reasonable manner (in the determination of the Calculation Agent), then the Delivery Date will be the first date on which settlement of a sale of the Reference Assets comprising the Reference Asset Amount executed on that eighth Clearing System Business Day customarily would take place using such other commercially reasonable manner of delivery (which other manner of delivery will be deemed the Relevant Clearing System for the purposes of delivery of the relevant Reference Asset Amount), and (ii) if such Reference Asset Amount cannot be delivered in any other commercially reasonable manner (in the determination of the Calculation Agent), then the Delivery Date will be postponed until delivery can be effected through the Relevant Clearing System or in any other commercially reasonable manner.

(b) ***Application of Settlement Disruption Event in respect of Securities referencing a basket of Shares***

Where the Securities relate to a basket of Shares, if as a result of a Settlement Disruption Event some but not all of the Shares comprised in the basket of Shares are affected, the Delivery Date for Shares not affected by the Settlement Disruption Event will be the original Delivery Date and the Delivery Date for the Shares that are affected by the Settlement Disruption Event shall be determined as provided above. In the event that a Settlement Disruption Event will result in the delivery on a Delivery Date of some but not all of the Shares comprised in a basket of Shares, the Calculation Agent shall determine the appropriate pro rata portion of the amount payable to be paid to each Holder in respect of that partial settlement (provided that the obligation to make any such payment, including the date on which such payment is made and whether such payment is made, shall be subject to General Condition 13 (*Payment Disruption*)).

(c) ***No liability for delayed settlement***

A Holder shall not be entitled to any payment, whether of interest or otherwise, on the Security in the event of any delay in the delivery of the Reference Asset Amount pursuant to this General Condition 14.6 and no liability in respect thereof shall attach to the Issuer or the Delivery Agent.

(d) ***Disruption Cash Settlement Price***

For so long as delivery of the Reference Asset Amount is not practicable by reason of a Settlement Disruption Event pursuant to the terms of this General Condition 14.6, then notwithstanding that Physical Settlement is specified to be applicable in the relevant Pricing Supplement, or any other provision of the General Conditions, the Issuer or (if applicable) the Guarantor may elect to satisfy its obligations in respect of the relevant Security by payment to

the relevant Holder of the Disruption Cash Settlement Price not later than on the third Clearing System Business Day following the date that the notice of such election is given to the Holders in accordance with General Condition 27 (*Notices*) (provided that the obligation to make any such payment, including the date on which such payment is made and whether such payment is made, shall be subject to the provisions of General Condition 13 (*Payment Disruption*)). Payment of the relevant Disruption Cash Settlement Price will be made (i) in such manner as shall be notified to the Holders in accordance with General Condition 27 (*Notices*) or (ii) in respect of Securities which are represented by a Global Security or Swiss Securities issued in uncertificated form and if practicable, to the Relevant Clearing System for the credit of the account of the relevant accountholder in the Relevant Clearing System.

(e) ***Intervening Period***

If during the period of time after the Interest Payment Date, Coupon Payment Date, Settlement Date or Maturity Date, as the case may be, and the Delivery Date (the "**Intervening Period**"), the Issuer or any subsidiary or affiliate of the Issuer or any other entity acting on behalf of the Issuer is the legal owner of any securities that may comprise a part of any Reference Assets whether owned in connection with such entity's hedge of its obligations, directly or indirectly, under the Securities or otherwise held in its normal course of business, neither the Issuer nor any of its subsidiaries or affiliates or such other entities shall be under any obligation or liability to any Holder in respect of such Reference Assets, including (i) any obligation to deliver or procure delivery to the relevant Holder or any subsequent beneficial owner of such Securities, any letter, certificate, notice, circular or any other document or payment (including any interest, dividend or any other distribution) in respect of any Reference Asset(s) whatsoever received by the Issuer or any of its subsidiaries or affiliates or any such other entities in its capacity as the holder of such Reference Asset(s), (ii) any obligation to exercise or procure exercise of any or all rights (including voting rights) attaching to such Reference Asset(s) during the Intervening Period or (iii) any liability to the relevant Holder, as the case may be, or any subsequent beneficial owner of such Securities in respect of any loss or damage which the relevant Holder, as the case may be, or subsequent beneficial owner may sustain or suffer as a result, whether directly or indirectly, of that person being the legal owner of such Securities during such Intervening Period.

15. **Events of Default**

15.1 **Occurrence of Event of Default**

"**Event of Default**" means the occurrence of any one or more of the following events:

(a) ***Failure to pay Instalment Amount, Early Payment Amount, Optional Redemption Amount, Final Redemption Amount, Redemption Amount or Settlement Amount (all Issuers) or failure to deliver Reference Asset Amount and/or pay Residual Cash Amount (all Issuers except JPMCFC)***

(i) In respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., the Issuer, or failing whom in the case of Securities issued by JPMSP, the JPMSP Guarantor (if applicable) does not pay any Instalment Amount, Early Payment Amount, Optional Redemption Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, in respect of the Securities when the same is due and payable or deliver any Reference Asset Amount and/or pay any Residual Cash Amount in respect of any Securities when the same is deliverable, and such failure continues for 30 days; or

(ii) In respect of Securities issued by JPMCFC, the Issuer does not pay any Instalment Amount, Early Payment Amount, Optional Redemption Amount, Final Redemption Amount, Redemption Amount or Settlement Amount, as applicable, in respect of the Securities when the same is due and payable; or

(b) ***Failure to pay interest on Notes or coupon amount on Certificates or Warrants (all Issuers)***

(i) In respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., the Issuer, or failing whom in the case of Securities issued by JPMSP, the JPMSP Guarantor (if applicable) does not pay interest on any of the Notes or a coupon amount on any of the Certificates or Warrants when the same is due and payable, and such failure continues for 30 days; or

(ii) In respect of Securities issued by JPMCFC, the Issuer does not pay interest on any of the Notes or a coupon amount on any of the Certificates when the same is due and payable, and such failure continues for 30 days; or

(c) ***Insolvency of JPMCFC or repudiation of the JPMorgan Chase & Co. Guarantee***

In respect of Securities issued by JPMCFC:

(i) a court having jurisdiction in the premises shall enter a decree or order for relief in respect of the Issuer in an involuntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of the Issuer or for any substantial part of its property or ordering the winding up or liquidation of its affairs, and such decree or order shall remain unstayed and in effect for a period of 60 consecutive days; or

(ii) the Issuer shall commence a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or consent to the entry of an order for relief in an involuntary case under any such law, or consent to the appointment or taking possession by a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of the Issuer or for any substantial part of its property, or make any general assignment for the benefit of creditors; or

(iii) the JPMorgan Chase & Co. Guarantee ceases to be in full force and effect or the JPMCFC Guarantor denies or disaffirms its obligations under the JPMorgan Chase & Co. Guarantee, provided that no Event of Default described herein shall occur as a result of, or because it is related directly or indirectly to, the insolvency of the JPMCFC Guarantor or the commencement of any proceedings relative to the JPMCFC Guarantor under Title 11 of the United States Code, or the appointment of a receiver for the JPMCFC Guarantor under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 or the Federal Deposit Insurance Corporation having separately repudiated the JPMorgan Chase & Co. Guarantee in any receivership of the JPMCFC Guarantor, or the commencement of any other applicable federal or state receivership, bankruptcy, insolvency, liquidation, resolution or other similar proceeding, or a receiver, assignee, or trustee in bankruptcy or reorganisation, liquidator, sequestrator or similar official having been appointed for or having taken possession of the JPMCFC Guarantor or its property, or the institution of any other comparable judicial or regulatory proceedings relative to the JPMCFC Guarantor, or to the creditors or property of the JPMCFC Guarantor; or

(d) ***Insolvency of JPMSP or repudiation of the JPMorgan Chase Bank, N.A. Guarantee***

In respect of Securities issued by JPMSP:

(i) the Issuer applies for suspension of payments (*surséance van betaling*) or has been declared bankrupt (*failliet verklaard*), in both cases within the meaning of the Netherlands Bankruptcy Act (*Faillissementswet*), or has become subject to analogous proceedings under the Netherlands Financial Supervision Act (*Wet op het financieel toezicht*) and, in each case, any such proceedings remain unstayed and in effect for a period of 90 consecutive calendar days; or

(ii) an order is made by any competent court or an effective resolution passed for the winding-up or dissolution of JPMSP or JPMSP ceases or threatens to cease to carry on all or a substantial part of its business or operations, in each case except for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation on terms approved by an Extraordinary Resolution of the Holders (provided that, where the relevant event also comes within the terms of paragraph (i)

above, then the terms of paragraph (i) above shall prevail over the terms of this paragraph (ii)); or

(iii) the JPMorgan Chase Bank, N.A. Guarantee is not (or is claimed by JPMorgan Chase Bank, N.A. not to be) in full force and effect; or

(e) ***Insolvency of JPMorgan Chase & Co.***

In respect of Securities issued by JPMorgan Chase & Co.:

(i) a court having jurisdiction in the premises enters a decree or order for relief in respect of JPMorgan Chase & Co. in an involuntary case under any applicable United States federal or state bankruptcy, insolvency or other similar law now or hereafter in effect, and such decree or order remains unstayed and in effect for a period of 90 consecutive days; or

(ii) JPMorgan Chase & Co. commences a voluntary case under any applicable United States federal or state bankruptcy, insolvency or other similar law now or hereafter in effect or consent to the entry of an order for relief in an involuntary case under any such law; or

(f) ***Insolvency of JPMorgan Chase Bank, N.A.***

In respect of Securities issued by JPMorgan Chase Bank, N.A. or JPMSP:

(i) a decree or order of a court or supervisory authority having jurisdiction in the premises for the appointment of a receiver, liquidator, trustee, assignee, custodian, sequestrator or other similar official of JPMorgan Chase Bank, N.A., or of all or substantially all of the property of JPMorgan Chase Bank, N.A., or for the winding-up or liquidation of the affairs of JPMorgan Chase Bank, N.A., has been entered, and such decree or order remains unstayed and in effect for a period of 90 consecutive days; or

(ii) JPMorgan Chase Bank, N.A. consents to the appointment of, or the taking possession by, a receiver, liquidator, trustee, assignee, custodian, sequestrator, or similar official of JPMorgan Chase Bank, N.A., or of all or substantially all of the property of JPMorgan Chase Bank, N.A.

15.2 **Consequences of an Event of Default**

(a) ***Event of Default in respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co.***

In respect of Securities issued by JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., if an Event of Default has occurred and is continuing, (i) the Holder of any Note may give written notice to the Issuer and the Relevant Programme Agent at their specified offices declaring such Note to be immediately due and payable (or in the case of Norwegian Notes, Swedish Notes and Finnish Notes, on such later date on which the relevant Notes have been transferred to the account designated by the Relevant Programme Agent and blocked for further transfer by said Agent (such date will be the first date of a closed period for the purposes of General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)) and (ii) the Holder of any Warrant or Certificate may give written notice to the Issuer and the Relevant Programme Agent at their specified offices declaring such Warrant or Certificate to be immediately due and payable, whereupon such Security shall become immediately due and payable on such date (such date, the "**Acceleration Date**") for an amount (such amount, the "**Early Payment Amount**"), which amount shall be, in respect of:

(i) each Security that is a Zero Coupon Note (irrespective of whether such Security is a New York Law Note or a Security that has a Minimum Redemption Amount (as defined in General Condition 32.1 (*Definitions*))), the Amortised Face Amount in respect of the Acceleration Date as determined by the Calculation Agent in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*);

(ii) each Security that has a Minimum Redemption Amount and that is not a Zero Coupon Note or a New York Law Note, the greater of (I) the Minimum Redemption Amount and (II) Early Payment Amount 1, Early Payment Amount 2 or Early Payment Amount 3, as specified to be applicable in the relevant Pricing Supplement calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount;

(iii) each Security that is a New York Law Note and that is not a Zero Coupon Note (and irrespective of whether such Security has a Minimum Redemption Amount), Early Payment Amount 3 (as defined in General Condition 32.1 (*Definitions*)); and

(iv) each Security that is not a Zero Coupon Note, a New York Law Note or a Security that has a Minimum Redemption Amount, Early Payment Amount 1, Early Payment Amount 2 or Early Payment 3, as specified to be applicable in the relevant Pricing Supplement, or such other amount as may be specified in the relevant Pricing Supplement, calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount,

unless the Event of Default shall have been cured by the Issuer or waived by the Holders prior to receipt of such notice by the Issuer and the Relevant Programme Agent.

(b) ***Event of Default in respect of Securities issued by JPMCFC***

In respect of Securities issued by JPMCFC:

(i) if an Event of Default as described in General Condition 15.1(a)(ii) or 15.1(b)(ii) has occurred and is continuing, (i) in respect of Notes, the Holders of not less than 25 per cent. of the aggregate principal amount of the outstanding Notes of the relevant Series affected thereby may give written notice to the Issuer and the Relevant Programme Agent at their specified offices declaring all of the Notes of such Series to be immediately due and payable and (ii) in respect of Certificates, the Holders of not less than 25 per cent. of the total number of the outstanding Certificates of the relevant Series may give written notice to the Issuer and the Relevant Programme Agent at their specified offices declaring such Certificates to be immediately due and payable; or

(ii) if an Event of Default as described in General Condition 15.1(c) has occurred and is continuing, such Securities shall automatically, and without any declaration or any other action on the part of the Holders of such Securities, become immediately due and payable,

whereupon each such Security shall become immediately due and payable on such date (such date, the "**Acceleration Date**") for an amount (such amount, the "**Early Payment Amount**"), which amount shall be, in respect of:

(A) each Security that is a Zero Coupon Note (irrespective of whether such Security is a Security that has a Minimum Redemption Amount (as defined in General Condition 32.1 (*Definitions*)), the Amortised Face Amount in respect of the Acceleration Date as determined by the Calculation Agent in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*);

(B) each Security that has a Minimum Redemption Amount and that is not a Zero Coupon Note, the greater of (I) the Minimum Redemption Amount and (II) Early Payment Amount 1, Early Payment Amount 2 or Early Payment Amount 3, as specified to be applicable in the relevant Pricing Supplement calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount; and

(C) each Security that is not a Zero Coupon Note or a Security that has a Minimum Redemption Amount, Early Payment Amount 1, Early Payment Amount 2 or Early Payment 3, as specified to be applicable in the relevant Pricing Supplement, or such other amount as may be specified in the relevant Pricing Supplement, calculated in respect of the Acceleration Date provided that the Calculation Agent shall disregard any change in the credit worthiness of the Issuer and the relevant Guarantor (if applicable) since the Issue Date of the Securities in its determination of such amount,

unless in the case of 15.2(b)(i) above only the Event of Default shall have been cured by the Issuer or waived by the Holders prior to receipt of such notice by the Issuer and the Relevant Programme Agent.

15.3 ***Events of Default in respect of Swiss Certificates (UBS-cleared) only***

In the case of Swiss Certificates (UBS-cleared) only, if the Calculation Agent determines that any of the following have occurred, then the Calculation Agent may determine and UBS Switzerland AG shall (under the terms of the SPI Agreement) give notice to Holders that, the Securities shall be redeemed on a date determined by the Calculation Agent, in which event the Issuer shall redeem the Securities and cause to be paid in respect of each Security an amount equal to the Early Payment Amount:

(i) any order shall be made by the Swiss Financial Market Supervisory Authority FINMA or any competent court or other authority or resolution passed for the dissolution or winding-up of UBS Switzerland AG or for the appointment of a liquidator, receiver or administrator of UBS Switzerland AG or of all or a substantial part of its respective assets, or anything analogous occurs, in any jurisdiction, to UBS Switzerland AG, other than in connection with a solvent reorganisation, reconstruction, amalgamation or merger which shall be material, as determined by the Calculation Agent, in the context of UBS Switzerland AG acting as issuing and paying agent and providing custody services under the SPI Agreement and/or the Custody Agreement; or

(ii) UBS Switzerland AG breaches its obligations (i) as issuing and paying agent and/or (ii) to provide custody services under the SPI Agreement and/or the Custody Agreement which are material in the context of the Swiss Certificates (UBS-cleared) as determined by the Calculation Agent.

16. **Early Redemption or Termination for Illegality**

The Issuer may, at its option, redeem or terminate (as applicable) the Securities early (on giving not less than seven nor more than 30 days' irrevocable notice to the Holders (or such other notice period as may be specified in the relevant Pricing Supplement)) in the event that it (in the case of (ii) below, the relevant Guarantor (if any)) determines in its sole and absolute discretion that (i) its performance of its obligations under the terms of the Securities or (ii) (if applicable) the performance by the relevant Guarantor under the relevant Guarantee, has become unlawful in whole or in part as a result of (x) any change in financial, political or economic conditions or currency exchange rates, or (y) compliance in good faith by the Issuer (or, in the case of the relevant Guarantee (if any), the relevant Guarantor) or any relevant subsidiaries or affiliates with any applicable present or future law, rule, regulation, judgement, order or directive of any governmental, administrative or judicial authority or power or in interpretation thereof (such event, a "**Termination Event**"). In the event of an early redemption or termination (as applicable) of the Securities following a Termination Event, the Issuer will cause to be paid to each Holder in respect of each such Security held by it the Early Payment Amount.

17. **Extraordinary Hedge Disruption Event**

Upon the occurrence of an Extraordinary Hedge Disruption Event in relation to any Securities, the Issuer may (but shall not be obliged to) redeem the Securities on such day as shall be notified to the Holders in accordance with General Condition 27 (*Notices*) and will, if and to the extent permitted by applicable law, pay to the Holders in respect of each such Security the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect

of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

An "**Extraordinary Hedge Disruption Event**" means, in relation to any Securities, the occurrence of any of the following events (as applicable):

(a) if specified to be applicable in the relevant Pricing Supplement, an Extraordinary Hedge Sanctions Event;

(b) if specified to be applicable in the relevant Pricing Supplement, an Extraordinary Hedge Bail-in Event; and

(c) if specified to be applicable in the relevant Pricing Supplement, an Extraordinary Hedge Currency Disruption Event.

For the avoidance of doubt, in the event of an inconsistency between the applicable terms of this General Condition 17 and the applicable terms of the Specific Product Provisions, the applicable terms of the Specific Product Provisions shall prevail (including, without limitation, that if an event may be both an Extraordinary Hedge Disruption Event and an applicable Additional Disruption Event under the Specific Product Provisions, such event shall be deemed to be an Additional Disruption Event).

If an event may be both an Extraordinary Hedge Disruption Event and a Payment Disruption Event and the Issuer elects to redeem the Securities pursuant to this General Condition 17, General Condition 13 (*Payment Disruption*) shall be deemed not to apply.

For such purpose, the following terms shall have the following meanings:

"**Extraordinary Hedge Sanctions Event**" means (and shall be deemed to have occurred where), in relation to any Securities, the Calculation Agent determines that, on or after the Issue Date, due to:

(a) the adoption of, or announcement of, any change in, any applicable law, rule, regulation, judgment, order, sanction, or directive of any governmental, administrative, legislative or judicial authority or power, in each case, relating to financial sanctions and embargo programmes, including but not limited to any restrictions applicable to designated or blocked persons, as enacted, administered and/or enforced, from time to time, by the U.S. Department of the Treasury's Office of Foreign Assets Control, the U.S. Department of State, the UK Treasury Department, the United Nations, the European Union, or other relevant authority (for the purposes of this definition, "**applicable law**"); or

(b) the promulgation of, or any change in, the formal or informal interpretation of any applicable law by a court, tribunal or regulatory authority with competent jurisdiction,

the performance by the Hedging Entity under the related Underlying Hedge Transactions has become or (based on any announcements of any of the authorities referred to in paragraph (a) above or any other publicly available information which the Calculation Agent reasonably considers relevant) there is a substantial likelihood that it will become within the next 90 days, unlawful in whole or in part, and the Hedging Entity is unable, through commercially reasonable efforts, to modify the Underlying Hedge Transactions and/or establish alternate hedging arrangements such that performance thereunder would not be unlawful and the risks and/or costs of the Issuer and the Hedging Entity would not be materially increased thereby.

"**Extraordinary Hedge Bail-in Event**" means (and shall be deemed to have occurred where), in relation to any Securities, on or after the Issue Date, the Hedging Entity or the counterparty (or counterparties) to the Hedging Entity under the related Underlying Hedge Transactions become(s) the subject of a resolution regime by an applicable resolution authority and, as a direct or indirect result (including without limitation due to the exercise, or publicly announced exercise, or (based on any publicly available information which the Calculation Agent reasonably considers relevant) there is a substantial likelihood that the relevant resolution authority will exercise within the next 90 days, a "bail-in" or other power by such authority

under such regime), the Calculation Agent determines that (i) the obligations of the Hedging Entity or the counterparty (or counterparties) to the Hedging Entity under the related Underlying Hedge Transactions are or will be the subject of the exercise of a "bail-in" or (ii) there has otherwise been (or there will be) a material adverse effect on the related Underlying Hedge Transactions, and the Hedging Entity is unable, through commercially reasonable efforts, to modify the Underlying Hedge Transactions and/or establish alternate hedging arrangements which do not materially increase the risks and/or costs of the Issuer and the Hedging Entity.

"**Extraordinary Hedge Currency Disruption Event**" means (and shall be deemed to have occurred where), in relation to any Securities, on or after the Issue Date, the Calculation Agent determines that:

(a) (i) a Relevant Governmental Authority has introduced, or has announced its intention to introduce or (based on any publicly available information which the Calculation Agent reasonably considers relevant) there is a substantial likelihood that it will introduce within the next 90 days, a new currency (the "**Substitute Currency**") as the lawful currency within its territory or any part of its territory (and including beyond its territory where a bloc of countries has jointly agreed to adopt the Substitute Currency) in substitution for (or to circulate together with) its existing lawful currency (the "**Initial Currency**") (such event, a "**Currency Substitution Event**"); and/or

(ii) a Relevant Governmental Authority has introduced, or has announced its intention to introduce or (based on any publicly available information which the Calculation Agent reasonably considers relevant) there is a substantial likelihood that it will introduce within the next 90 days, restrictions on movements of capital or on payments and transfers into or out of its territory or any part of its territory (and including beyond its territory where a bloc of countries has jointly agreed to adopt the Substitute Currency) (such event, an "**Exchange Control Event**"),

and, in the case of each of paragraphs (a)(i) and (a)(ii) above:

(x) whether or not such event is in accordance with or in breach of applicable international treaties or other obligations; and

(y) for the avoidance of doubt, including the circumstance whereby a country (a "**Departing Country**") within a bloc of countries in a currency union effects, or announces its intention to effect, its withdrawal from the currency bloc and the replacement of the common currency of the currency union with another currency as the lawful currency of the Departing Country; and

(b) any of, as a direct or indirect result:

(i) the payment obligations under the Underlying Hedge Transactions are redenominated into another currency following the Currency Substitution Event and/or the Exchange Control Event; and/or

(ii) the payment obligations under the Underlying Hedge Transactions are subject to capital controls due to the Exchange Control Event; and/or

(iii) the Underlying Hedge Transactions in respect of the Securities have been (or will be) otherwise materially adversely affected by the Currency Substitution Event and/or the Exchange Control Event,

and the Hedging Entity is unable, through commercially reasonable efforts, to modify the Underlying Hedge Transactions and/or establish alternate hedging arrangements which do not materially increase the risks and/or costs of the Issuer and the Hedging Entity.

For such purpose, "**Relevant Governmental Authority**" means, in relation to any applicable territory, any *de facto* or *de jure* government (or any agency or instrumentality thereof), court,

tribunal, administrative or other governmental authority or any other entity (private or public) charged with the regulation of the financial markets (including the central bank) of such territory.

18. Taxation and Early Redemption or Termination for Taxation

18.1 Obligation to pay Additional Amounts

Subject to the deduction of any Delivery Expenses or Expenses in accordance with these General Conditions, payments of principal and interest on the Securities will be made without deduction or withholding for or on account of any present or future tax, assessment or other governmental charge, of whatever nature, imposed or levied on such payment, except as required by law or under an agreement with the relevant taxing authority or in connection with an intergovernmental agreement. In that case, unless the relevant Pricing Supplement specifies "Gross Up" not to be applicable or the relevant Pricing Supplement specifies "Exclude Section 871(m) Taxes from Gross Up" to be applicable in respect of taxes imposed pursuant to Section 871(m) of the Code, the Issuer or, as the case may be, the Guarantor will, subject to certain limitations and exceptions set forth below in General Condition 18.2 (*Circumstances in which Additional Amounts will not be paid*), pay to a Holder of Securities such additional amounts ("**Additional Amounts**") as may be necessary so that every net payment by the Issuer or the Guarantor or any of their Paying Agents of principal or interest with respect to the Securities after deduction or withholding for or on account of any such present or future tax, assessment or other governmental charge on such payment imposed by or within a Relevant Jurisdiction upon such Holder (other than with respect to a Holder that is a resident of such Relevant Jurisdiction), will not be less than the amount provided for in such Securities to be then due and payable.

18.2 Circumstances in which Additional Amounts will not be paid

Neither the Issuer nor the Guarantor will be required to make any payment of Additional Amounts for or on account of:

(a) any tax, assessment or other governmental charge or withholding which would not have been so imposed but for (A) the existence of any present or former connection between such Holder (or between a fiduciary, settlor, beneficiary, member or shareholder of, or possessor of a power over, such Holder, if such Holder is an estate, a trust, a partnership or a corporation) and the Relevant Jurisdiction including, without limitation, such Holder (or such fiduciary, settlor, beneficiary, member, shareholder or possessor) being or having been present therein, being or having been a citizen or resident thereof, being or having been engaged in a trade or business therein or having had a permanent establishment therein, or (B) the failure of such Holder, any agent in the chain of custody over the payment, or the beneficial owner to comply with any certification, identification or information reporting requirements including, under an applicable tax treaty, to establish entitlement to exemption from or reduction of such tax, assessment or other governmental charge;

(b) any estate, inheritance, gift, sales, transfer, personal property, or any similar tax, assessment or governmental charge;

(c) any tax, assessment or other governmental charge which is payable other than by withholding from payments of principal of or interest on such Security;

(d) in respect of any Securities issued by JPMCFC, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., any tax, assessment or other governmental charge imposed by reason of such Holder's past or present status as a personal holding company, private foundation or other tax exempt organisation, passive foreign investment company, controlled foreign corporation with respect to the United States; a dealer in securities, commodities or currency or a corporation that accumulates earnings to avoid United States federal income tax;

(e) in respect of any Rule 144A Security issued by JPMCFC, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., any U.S. withholding taxes imposed on such Security;

(f) any tax, assessment or other governmental charge which is required to be withheld by a Paying Agent from payments of principal or of interest on any Security, if such payment can be made without such withholding by at least one other Paying Agent;

(g) in respect of any Securities issued by JPMCFC, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., any tax, assessment or other governmental charge imposed by reason of (i) such Holder's past or present status as the actual or constructive owner of ten per cent. or more of the total combined voting power of all classes of stock that is entitled to vote of (A) such Issuer or (B) in the case of Securities issued by JPMCFC, JPMorgan Chase & Co., (ii) such Holder being a bank receiving interest described in Section 881(c)(3)(A) of the Code, (iii) such Holder being a controlled foreign corporation that is treated as a "related person" (within the meaning of the Code) with respect to (A) such Issuer or (B) in the case of Securities issued by JPMCFC, JPMorgan Chase & Co., or (iv) such Holder being within a foreign country for which the United States Secretary of the Treasury has made a determination under Section 871(h)(6) of the Code or Section 881(c)(6) of the Code that payments to any person within such foreign country (or payments addressed to, or for the account of, persons within such foreign country) shall not constitute portfolio interest under either Section 871(h) or Section 881(c) of the Code;

(h) any tax required to be withheld or deducted from a payment where such withholding or deduction is made pursuant to laws enacted by Switzerland providing for the taxation of payments according to principles similar to those laid down in the draft legislation proposed by the Swiss Federal Council on 3 April 2020 or otherwise changing the Swiss federal withholding tax system from an issuer-based system to a paying-agent-based system;

(i) in respect of any Securities, any tax, assessment, or other governmental charge payable by a Holder, or by a third party on behalf of a Holder, who is liable for such taxes, assessments or governmental charges in respect of any Security by reason of the Holder or the third party's having some connection with the Relevant Jurisdiction other than the mere holding of the Security;

(j) any tax assessment, or other governmental charge payable by way of withholding or deduction by a Holder, or by a third party on behalf of a Holder, who could lawfully avoid (but has not so avoided) such deduction or withholding by complying or procuring that any third party complies with any statutory requirements or by making or procuring that any third party makes a declaration of non-residence or other similar claim for exemption to any tax authority in the place where the relevant Security (or the registered certificate representing it) is presented for payment;

(k) any Security presented for payment by or on behalf of a Holder who would be able to avoid such withholding or deduction by presenting the relevant Security to another Paying Agent in a European Union Member State;

(l) in the case of German Securities, any taxes, duties, or other governmental charges payable by any person acting as a custodian bank or collecting agent on behalf of a Holder, or otherwise in any manner which does not constitute a deduction or withholding by the Issuer or the Guarantor (if applicable) from payments of principal or interest made by it;

(m) any withholding or deduction imposed in connection with FATCA on payments to a Holder, beneficial owner, or any agent having custody or control over a payment made by the Issuer, the Guarantor or any agent in the chain of payment;

(n) any withholding or deduction imposed under Section 871(m) of the Code, if, in the reasonable judgment of the Issuer, withholding would not have been imposed but for the Holder or beneficial owner (or a related party thereof) engaging in one or more

transactions (other than the mere purchase of the Security) whether or not in connection with the acquisition, holding or disposition of the Security that establishes the withholding obligation;

(o) any deduction or withholding for or on account of any present or future tax, assessment or other governmental charge where it is imposed by or within a jurisdiction other than a Relevant Jurisdiction;

(p) any deduction or withholding for or on account of any tax, assessment or other governmental charge imposed by or within a Relevant Source Jurisdiction to the extent the deduction or withholding arises as a result of a Relevant Change of Law, save where such deduction or withholding arises through any present or former connection of the Issuer or the Guarantor to the Relevant Source Jurisdiction; or

(q) any combination of the above (as applicable),

nor shall Additional Amounts be paid with respect to a payment of principal or interest on any Security to a Holder that is not the beneficial owner of such Security to the extent that the beneficial owner thereof would not have been entitled to the payment of such Additional Amounts had such beneficial owner been the Holder of such Security.

18.3 **Early Redemption or Termination for Taxation – FATCA**

The relevant Issuer may, at its option, redeem or terminate (as applicable) some or all of the Securities (on giving not less than seven or more than 30 days' irrevocable notice to Holders (or such other notice period as may be specified in the relevant Pricing Supplement)) in the event that the Issuer determines that:

(a) it has, or there is a substantial likelihood that it will, become subject to withholding imposed on a payment made to it on account of the Issuer's inability to comply with the reporting requirements imposed by FATCA, provided that (1) such inability to comply with the reporting requirements is attributable to non-compliance by any Holder of such Securities (or a withholding agent (if any) in the chain of custody of payments made to the Holders) with the Issuer's requests for certifications, beneficial ownership information or identifying information and (2) compliance with the reporting requirements would (or there is a substantial likelihood that it would) preclude such withholding;

(b) there is a substantial likelihood that it will otherwise violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA; or

(c) there is a substantial likelihood that the Securities will be treated, for U.S. federal income tax purposes, as being in bearer form,

each such event, a "**Tax Termination Event**".

Upon the occurrence of a Tax Termination Event described in paragraphs (a) or (b), Securities held by compliant Holders, in addition to those held by non-compliant Holders, may be redeemed or terminated. Upon a Tax Termination Event described in paragraph (c), all of the Securities of such Series will be redeemed or terminated.

In the event of an early redemption or termination of the Securities following a Tax Termination Event, the Issuer will cause to be paid to each such Holder in respect of each such Security held by it the Early Payment Amount.

18.4 **Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions**

The Securities may be redeemed or terminated (as applicable) at the option of the Issuer in whole, but not in part, at any time on giving not less than 30 nor more than 60 calendar days' notice to the Holders (which notice shall be irrevocable), at their Early Payment Amount, where:

(a) the Issuer (or the Guarantor, as the case may be) has or will (or there is a substantial likelihood that it will) become obliged to pay any Additional Amounts as provided or referred to in General Condition 18.1 (*Obligation to pay Additional Amounts*); or

(b) if "Early Redemption for Tax on Underlying Hedge Transactions" is specified as applicable in the relevant Pricing Supplement, an Underlying Hedge Entity has incurred or will (or there is a substantial likelihood that it will) incur a materially increased cost with respect to taxes (including, without limitation, grossing-up payments or receiving payments net of withholding) in performing its obligations in relation to the Underlying Hedge Transactions (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position with respect to an Underlying Hedge Tax Jurisdiction),

in each case (x) as a result of (I) any action taken by a Relevant Jurisdiction or an Underlying Hedge Tax Jurisdiction (as applicable) or any political subdivision or any authority thereof or therein having power to tax or brought in a court of competent jurisdiction on or after the Issue Date; or (II) the proposal, adoption, finalisation or expiration of any laws, regulations, or administrative guidance (including, due to the mere passage of time) of a Relevant Jurisdiction or an Underlying Hedge Tax Jurisdiction or any political subdivision or any authority thereof or therein having power to tax, or any change in, or amendment to (or proposed change or amendment to), proposed or final laws, regulations, or administrative guidance, or any change in the application or official interpretation of proposed or final laws, regulations or administrative guidance (including by inaction, such as the failure to finalise proposed regulations or administrative guidance, or due to the mere passage of time), which proposal, adoption, finalisation, expiration, change or amendment becomes effective on or after the Issue Date or with respect to payments made on or after the Issue Date; and (y) such obligation or cost with respect to taxes cannot be avoided by the Issuer, the Guarantor or Underlying Hedge Entity (as applicable) taking reasonable measures available to it (as determined by the Issuer or the Guarantor or the Calculation Agent on their behalf),

PROVIDED THAT the Securities may be redeemed by giving less than 30 calendar days' or more than 60 calendar days' notice to the Holders (which notice shall be irrevocable) if compliance with the 30 calendar day minimum or 60 calendar day maximum notice period would (or there is a substantial likelihood that compliance would) cause the Issuer or the Guarantor (as applicable) to become obligated to pay Additional Amounts (or an increased amount of Additional Amounts) or cause an Underlying Hedge Entity to incur a materially increased tax cost in performing its obligations in relation to the Securities.

Before the publication of any notice of redemption pursuant to this General Condition 18.4, the Issuer shall deliver to the Relevant Programme Agent a certificate duly signed by the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Issuer (or the Guarantor, as the case may be) has or will (or there is a substantial likelihood that it will) become obliged to pay Additional Amounts or that an Underlying Hedge Entity has incurred or will (or there is a substantial likelihood that it will) incur a materially increased cost (with respect to taxes) in performing its obligations in relation to the Underlying Hedge Transactions, in each case as a result of such action, proposal, adoption, finalisation, expiration, change, or amendment.

For the purposes of this General Condition 18.4, the term "Relevant Jurisdiction" shall also include any jurisdiction that enters into an intergovernmental agreement with the United States in furtherance of FATCA.

19. Disruption Event

If the Specific Product Provisions are not applicable to the Securities and the Calculation Agent determines that a Disruption Event has occurred, then the Calculation Agent may, in its discretion:

(a) make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Disruption Event; and/or

(b) determine and give notice to Holders that the Securities shall be redeemed on a date determined by the Calculation Agent, in which event the Issuer shall redeem the Securities and cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) in respect of the Securities.

"**Disruption Event**" means in relation to any Securities the occurrence of any of the following events (as applicable):

(a) if specified to be applicable in the relevant Pricing Supplement, a Change in Law (Hedge); and

(b) if specified to be applicable in the relevant Pricing Supplement, a Hedging Disruption.

For such purpose, the following terms shall have the following meanings:

"**Change in Law (Hedge)**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Redemption Date or Settlement Date, as is applicable to the Securities, become illegal to hold, acquire or dispose of any asset in relation to the Underlying Hedge Transactions, or (y) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Hedging Disruption**" means that the Underlying Hedge Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

In the event of any inconsistency between the applicable terms of (i) this General Condition 19 and (ii) any of (where applicable) General Condition 17 (*Extraordinary Hedge Disruption Event*), General Condition 18.4 (*Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions*) and/or the terms of any applicable Specific Product Conditions, the applicable terms of (ii) shall prevail over (i).

20. Agents

20.1 Status of Agents

The Agents act solely as agents of the Issuer and the Guarantor and do not assume any obligations or duty to, or relationship of agency or trust for or with, any Holder.

20.2 Variation or termination of appointment of Agents

The Issuer and the Guarantor, if applicable, reserve the right at any time to vary or terminate the appointment of any Agents and to appoint other or additional Agents, provided that at all times the following shall be maintained:

(a) a Relevant Programme Agent;

(b) a Registrar in respect of all Registered Securities;

(c) a Transfer Agent in respect of all Registered Securities (other than French Registered Securities, Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, Swiss Securities and Swiss Certificates (UBS-cleared));

(d) one or more Calculation Agent(s) and Delivery Agent(s) where these General Conditions so require;

(e) a Paying Agent having its specified office in Luxembourg so long as the Securities are listed on the Official List and admitted to trading on the Luxembourg Stock Exchange's Euro MTF, and the applicable rules so require;

(f) a Danish Programme Agent (and such Danish Programme Agent shall be a Paying Agent in respect of Danish Notes), so long as any Danish Notes are outstanding, a Finnish Programme Agent (and such Finnish Programme Agent shall be a Paying Agent in respect of Finnish Securities), so long as any Finnish Securities are outstanding, a Swedish Programme Agent (and such Swedish Programme Agent shall be a Paying Agent in respect of Swedish Securities) and a Swedish CSD, so long as any Swedish Securities are outstanding and a Norwegian Programme Agent (and such Norwegian Programme Agent shall be a Paying Agent in respect of Norwegian Securities), so long as any Norwegian Securities are outstanding;

(g) a French Programme Agent (and such French Programme Agent shall be a Paying Agent in respect of French Securities), so long as French Securities are cleared through Euroclear France;

(h) a German Programme Agent (and such German Programme Agent shall be a Paying Agent in respect of German Securities), so long as any Securities cleared through Clearstream Frankfurt are outstanding;

(i) a Swiss Programme Agent (and such Swiss Programme Agent shall be a Paying Agent in respect of Swiss Securities) which is a Swiss bank or a Swiss securities firm supervised by the Swiss Financial Market Supervisory Authority (FINMA), so long as any Swiss Securities listed on SIX Swiss Exchange are outstanding; and

(j) for as long as any Swiss Certificates (UBS-cleared) have been issued and remain outstanding, a Swiss Certificates (UBS-cleared) Agent.

The Agency Agreement contains provisions permitting any entity into which an Agent is merged or converted or with which it is consolidated as to which it transfers all or substantially all of its assets to become the successor agent.

Notice of any such change or any change of any specified office shall promptly be given to the Holders of the affected Securities in accordance with General Condition 27 (*Notices*).

21. Calculation Agent, Determination, Disclaimer of Liability and other terms

21.1 Status of Calculation Agent

The Calculation Agent acts solely as agent of the Issuer and the Guarantor and does not assume any obligations or duty to, or relationship of agency or trust for or with, any Holder. In making any determination or exercising any discretion, the Calculation Agent is not obliged to (and shall not) consider the individual interests or circumstances of any particular Holder.

21.2 Standard of care for calculation, determination or other exercise of discretion

All calculations and determinations and other exercises of discretion made by the Calculation Agent, the Issuer or the Guarantor under the Conditions shall be made in (i) good faith and (ii) unless the Conditions specifically provide that the relevant calculation or determination or other exercise of discretion shall be made in the sole and absolute discretion (or another standard of care) of the relevant entity, a commercially reasonable manner and (where and to the extent that such calculation or determination or other exercise of discretion or outcome thereof is subject to a regulatory obligation of the relevant entity to ensure fair treatment) which takes into account

whether fair treatment is achieved by any such calculation, determination or other exercise of discretion or outcome thereof in accordance with such applicable regulatory obligations.

Notwithstanding anything else in the Conditions to the contrary, in the case of French Securities, any determination to be made by the Calculation Agent, the Issuer or the Guarantor will be made in good faith and in a commercially reasonable manner.

Notwithstanding anything else in the Conditions to the contrary, in the case of Italian Certificates, any determination to be made by the Calculation Agent or the Issuer will be made in good faith and in a reasonable manner.

Notwithstanding anything else in the Conditions to the contrary, in the case of German Securities, any determination to be made by the Calculation Agent or the Issuer shall be made in their reasonable disrection (*billigem Ermessen*) pursuant to section 315 of the German Civil Code ("**BGB**").

21.3 **Disclaimer of liability**

No liability shall attach to the Calculation Agent, the Issuer or the Guarantor for errors or omissions in respect of any calculation, determination or other exercise of discretion by such relevant entity under the Conditions provided that it has acted in accordance with General Condition 21.2 (*Standard of care for calculation, determination or other exercise of discretion*).

No liability shall attach to the Issuer or the Guarantor for any calculation or determination or other exercise of discretion made by the Calculation Agent in respect of the Securities.

21.4 **Delegation**

The calculation functions and other discretionary actions (including, but not limited to duties to make determinations) required of the Calculation Agent may be delegated to any such person as the Calculation Agent, in its sole and absolute discretion, may decide.

21.5 **Calculations and determinations all binding**

All calculations and determinations made by the Calculation Agent in respect of the Securities shall be final and binding on the Issuer and Holders in the absence of manifest error.

21.6 **Two or more Calculation Agents**

Where more than one Calculation Agent is appointed in respect of the Securities, references in these General Conditions to the Calculation Agent shall be construed as each Calculation Agent performing its respective duties under the Conditions of the Securities.

21.7 **Replacement of Calculation Agent**

If the Calculation Agent is unable to act as such or if the Calculation Agent fails duly to establish any rate or any amount, whether in cash or in kind, specified in the relevant Pricing Supplement, to make any other required determination or to comply with any of its other obligations, the Issuer shall appoint a leading bank or investment banking firm engaged in the interbank market (or, if appropriate, money, swap or over-the-counter options market) that is most closely connected with the calculation or determination to be made by the Calculation Agent (acting through its principal London office or any other office actively involved in such market) to act as such in its place provided that if an Event of Default specified in General Condition 15.1(c), (d), (e) or (f) (as applicable) has occurred with respect to the Issuer, the Holders may appoint such a replacement in accordance with General Condition 24.1(c)(i) (*Majority Consent*) in respect of Securities other than German Securities, and General Condition 24.1(e) (*Modification of German Securities with Holder consent*) in respect of German Securities.

22. **European Monetary Union**

22.1 **Redenomination of Notes**

Where "Redenomination, Renominalisation and Reconventioning Provisions" is specified to be applicable in the relevant Pricing Supplement, the Issuer may, without the consent of the Holders on giving prior notice to the Relevant Programme Agent, any Relevant Clearing System and at least 30 days' prior notice to the Holders in accordance with General Condition 27 (*Notices*), elect that, with effect from the Redenomination Date specified in the notice, the Notes shall be redenominated in euro.

The election will have effect as follows:

(a) the Notes shall be deemed to be redenominated in euro in the denomination of euro 0.01 with a nominal amount for each Note equal to the nominal amount of that Note in the Specified Currency, converted into euro at the Established Rate, provided that, if the Issuer determines that the then market practice in respect of the redenomination in euro of internationally offered securities is different from the provisions specified above, such provisions shall be deemed to be amended so as to comply with such market practice and the Issuer shall promptly notify the Holders, the stock exchange (if any) on which the Notes may be listed and the Paying Agents of such deemed amendments;

(b) save to the extent that an Exchange Notice has been given in accordance with paragraph (d), the amount of interest due in respect of the Notes will be calculated by reference to the aggregate nominal amount of Notes presented for payment by the relevant Holder and the amount of such payment shall be rounded down to the nearest euro 0.01;

(c) if Notes in definitive form are required to be issued after the Redenomination Date, they shall be issued at the expense of the Issuer in the denominations of euro 1,000, euro 10,000, euro 100,000 and (but only to the extent of any remaining amounts less than euro 1,000 or such smaller denominations as the Relevant Programme Agent may approve) euro 0.01 and such other denominations as the Relevant Programme Agent shall determine and notify to the Holders;

(d) if issued prior to the Redenomination Date, the payment obligations of all Notes will become void with effect from the date on which the Issuer gives notice (the "**Exchange Notice**") that replacement euro-denominated Notes are available for exchange (provided that such securities are so available) and no payments will be made in respect of them, although those Notes will continue to constitute valid exchange obligations of the Issuer. New euro-denominated Notes will be issued in exchange for Notes denominated in the Specified Currency in such manner as the Relevant Programme Agent may specify and as shall be notified to the Holders in the Exchange Notice. No Exchange Notice may be given less than 15 days prior to any date for payment of principal or interest on the Notes;

(e) after the Redenomination Date, all payments in respect of the Notes other than payments of interest in respect of periods commencing before the Redenomination Date, will be made solely in euro as though references in the Notes to the Specified Currency were to euro. Payments will be made in euro by credit or transfer to a euro account (or any other account to which euro may be credited or transferred) specified by the payee or, at the option of the payee, by a euro cheque;

(f) if the Notes are Fixed Rate Notes and interest for any period ending on or after the Redenomination Date is required to be calculated for a period ending other than on an Interest Payment Date, it will be calculated:

(i) in the case of the Notes represented by a Global Note, by applying the Rate of Interest to the aggregate outstanding nominal amount of the Notes represented by such Global Note; and

(ii) in the case of Notes in definitive form, by applying the Rate of Interest to the Specified Denomination,

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency,

half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention;

(g) if the Notes are Notes other than Floating Rate Notes, the relevant Pricing Supplement will specify any relevant changes to the provisions relating to interest; and

(h) such other changes shall be made to this General Condition 22.1 as the Issuer may decide, after consultation with the Relevant Programme Agent, and as may be specified in the notice, to conform it to conventions applicable to instruments denominated in euro.

22.2 **Adjustments to Warrants or Certificates for European Monetary Union**

The Issuer may, without the consent of the Holders, on giving notice to the Holders in accordance with General Condition 27 (*Notices*):

(a) elect that, with effect from the Adjustment Date specified in the notice, certain terms of the Warrants or, as the case may be, the Certificates shall be redenominated in euro.

The election will have effect as follows:

(i) where the Specified Currency of the Warrants or, as the case may be, Certificates is the National Currency Unit of a country which is participating in the third stage of European Economic and Monetary Union, such Specified Currency shall be deemed to be an amount of euro converted from the original Specified Currency into euro at the Established Rate, subject to such provisions (if any) as to rounding as the Calculation Agent may decide and as may be specified in the notice, and after the Adjustment Date, all payments of the Settlement Amount in respect of the Warrants or the Redemption Amount in respect of Certificates, as the case may be, will be made solely in euro as though references in the Warrants or Certificates, as the case may be, to the Specified Currency were to euro; and

(ii) such other changes shall be made to these General Conditions as the Issuer may decide, in its discretion, to conform them to conventions then applicable to instruments expressed in euro; and/or

(b) require that the Calculation Agent make such adjustments to the exercise, settlement, payment and/or any other terms of these General Conditions as the Calculation Agent, in its discretion, may determine to be appropriate to preserve the economic terms of the Warrants or, as the case may be, Certificates following implementation of the third stage of European Economic and Monetary Union.

Notwithstanding the foregoing, neither the Issuer, any of its affiliates or agents, the Calculation Agent nor any Relevant Programme Agent shall be liable to any Holder or other person for any commissions, costs, losses or expenses in relation to or resulting from the transfer of euro or any currency conversion or rounding effected in connection therewith.

23. **Rounding**

23.1 For the purposes of any calculations required pursuant to these Conditions (unless otherwise specified in any applicable Specific Product Provision or the relevant Pricing Supplement):

(a) all percentages resulting from such calculations shall be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with halves being rounded up);

(b) (subject to (c) below) all figures shall be rounded to the seventh decimal place (with halves being rounded up); and

(c) all currency amounts that fall due and payable shall be rounded to the nearest unit of such currency (with halves being rounded up), save in the case of yen, which shall be rounded down to the nearest yen. For these purposes "unit" means the lowest amount of such currency that is available as legal tender in the country of such currency and in the case of euro means euro 0.01.

23.2 Notwithstanding anything to the contrary in the Conditions or the Agency Agreement, in respect of each Security which is not in definitive form (and save where a Fixed Coupon Amount or other specific amounts is expressed to be payable in respect of a Specified Denomination or Notional Amount or number of Securities (as applicable), the entitlement to and calculation of each amount payable in cash in respect of such Security shall be based on the aggregate nominal amount or aggregate notional amount (as applicable) of all Securities of that Series outstanding on such date (or the relevant affected portion thereof (and not the Specified Denomination or Notional Amount (as applicable)), rounded in accordance with the method provided in General Condition 23.1 above and distributed in accordance with the Relevant Rules.

24. Meeting of Holders and Modifications

24.1 Modifications and Waivers

(a) ***Modification without Holder consent (Securities other than French Securities and German Securities)***

The Issuer may from time to time modify and amend the Securities (other than French Securities and German Securities) (including the Conditions) or the Agency Agreement in each case without the consent of the Holders in accordance with, respectively, this General Condition 24.1(a) or the Agency Agreement, in such manner as the Issuer deems necessary or desirable, if the modification or amendment:

(i) is of a formal, minor or technical nature; or

(ii) is made to cure a manifest or proven error; or

(iii) is made to cure any ambiguity, or is made to correct or supplement any defective provisions of the Securities or the Agency Agreement (as applicable); or

(iv) is made to correct an error or omission such that, in the absence of such correction, the terms of the Securities would not otherwise represent the intended terms of the Securities on which the Securities were sold and have since traded; or

(v) will not materially and adversely affect the interests of the Holders of the Securities in respect of the Securities.

Any such modification or amendment shall take effect in accordance with its terms and be binding on the Holders and shall be notified to the Holders in accordance with General Condition 27 (*Notices*) as soon as practicable (but failure to give such notice, or non-receipt thereof, shall not affect the validity of such modification or amendment).

(b) ***Modification of German Securities without Holder consent***

(i) The Issuer may in its reasonable discretion, without the consent of the Holders, correct any manifest clerical or calculation errors or similar manifest incorrectness in the Conditions. A clerical or calculation error or similar incorrectness shall be deemed manifest if a Holder who is well-informed in the relevant type of Securities is able to perceive such error, especially when taking into account the Issue Price and the further factors that determine the value of the Securities. Any corrections within the meaning of this paragraph (i) shall be effective and binding upon notification to the Holders in accordance with General Condition 27 (*Notices*).

(ii) In addition, the Issuer may, without the consent of the Holders, amend or supplement in its reasonable discretion (*billigem Ermessen*, Section 315 BGB) any contradictory or incomplete provisions of the Conditions, provided that only amendments and supplements which are reasonably acceptable to the Holder having regard to its interests shall be permitted, i.e. those which do not materially prejudice the interests of the Holders or which, when read together with the other information included in the Offering Circular dated 22 September 2022 (as supplemented from time to time) and the relevant Pricing Supplement, are manifest within the meaning of paragraph (i). Any corrections within

the meaning of this paragraph (ii) shall be effective and binding upon notification to the Holders in accordance with General Condition 27 (*Notices*).

(iii) In the event of a correction pursuant to paragraph (i) or an amendment or supplement pursuant to paragraph (ii), that adversely affects the Holder, such Holder may terminate its Securities with immediate effect by written termination notice to the Relevant Programme Agent at any time during the period of six weeks following notification of such correction, amendment or supplement. In the notice pursuant to paragraph (i) or paragraph (ii), as applicable, the Issuer shall advise the Holder of its potential termination right at the Early Payment Amount. The termination by the Holder requires the following to be effective: the receipt of a termination notice bearing a legally binding signature and (A) the transfer of the Securities to the account of the Relevant Programme Agent or (B) the irrevocable instruction to the Relevant Programme Agent to withdraw the Securities from a securities account maintained with the Relevant Programme Agent (by transfer posting or assignment), in each case within such six-week period. The termination notice must contain the following information: (A) the name of the Holder, (B) the designation and number of the Securities terminated, and (C) a specification of the bank account to which the Early Payment Amount shall be credited. The termination date for the purposes of this paragraph (iii) shall be the day on which the termination notice or the Securities is/are received by the Relevant Programme Agent, whichever occurs later.

(iv) Notwithstanding paragraphs (i) and (ii), the Issuer may call the Securities for redemption in whole, but not in part, by giving notice in accordance with General Condition 27 (*Notices*) if the conditions for avoidance pursuant to Section 119 et seq. BGB are fulfilled in relation to the Holders. The termination date for the purposes of this paragraph (iv) shall be the day on which the notice is given. Notice of termination must be given immediately after the Issuer has gained knowledge of the reason for termination.

(v) If an effective termination pursuant to paragraphs (iii) or (iv) has been made, the Issuer will pay the Early Payment Amount per Security to the Holders. The Issuer shall transfer the Early Payment Amount to the Relevant Clearing System for the credit of the account of the relevant holder in the Relevant Clearing System or, in case of termination by the Holder, to the account specified in the termination notice. The provisions of General Condition 12.2 (*Payments on Payment Days*) shall apply mutatis mutandis. Upon payment of the Early Payment Amount, all rights arising from the surrendered Securities shall be extinguished. The foregoing shall not affect any rights of the Holder to claim damages (*Ersatz eines Vertrauensschadens*) pursuant to Section 122 para. 1 BGB unless such claims are excluded due to knowledge or negligent lack of knowledge of the reason of termination on the part of the Holder pursuant to Section 122 para. 2 BGB.

(vi) The provisions of the BGB on the interpretation (*Auslegung*) and avoidance (*Anfechtung*) of declarations of intent shall remain unaffected. This General Condition 24.1(b) shall be without prejudice to any avoidance rights which a Holder may have under general provisions of law.

(c) ***Modification and waiver with Holder consent (Securities other than French Securities and German Securities)***

This General Condition 24.1(c) shall not apply to French Securities and German Securities.

(i) *Majority Consent*: Subject as provided in paragraph (ii) below (and in each case subject to the consent of the Issuer and the Guarantor (if applicable)), in order to modify and amend the Agency Agreement and the Securities (including the General Conditions), or to waive past Issuer defaults, a resolution in writing signed by the Holders of at least a majority in aggregate principal amount of the Securities at the time outstanding or Holders of a majority in number, or of such lesser percentage as may attend and vote at a meeting of Holders of the Securities held in accordance with the Agency Agreement shall be required.

(ii) *Consent by Extraordinary Resolution*: Any modification which will:

(A) extend the stated maturity of the principal of or any instalment of interest on any such Security or extend the date for expiration, settlement or payment of any coupon in relation to such Security;

(B) reduce the principal amount, redemption price of, or settlement price of, or interest on (as applicable), any such Security;

(C) change the obligation of the Issuer to pay Additional Amounts;

(D) change the currency of payment of such Security or interest thereon;

(E) impair the right to institute suit for the enforcement of any such payment on or with respect to any such Security;

(F) reduce the percentage in aggregate principal amount of Securities outstanding necessary to modify or amend the Agency Agreement, or to waive any past default; or

(G) reduce the voting or quorum requirements or the percentage of aggregate principal amount, redemption price or settlement price of Securities outstanding (in the case of Notes) or number held (in the case of Warrants or Certificates) required to take any other action authorised to be taken by the Holders of a specified principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) of Securities,

may only be made if sanctioned by an Extraordinary Resolution. A resolution in writing signed or electronically approved using the systems and procedures in place from time to time of a Relevant Clearing System by or on behalf of 75 per cent. or more of Holders of Securities, by reference to their original aggregate principal amount (in the case of Notes) or the number of Securities outstanding (in the case of Warrants and Certificates), who for the time being are entitled to receive notice of a meeting shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of the Holders of the Securities. Such resolution in writing may be contained in one document or in several documents in like form each signed by or on behalf of one or more of the relevant Holders of Securities or may be in the form of SWIFT or other electronic instructions as permitted by the rules and procedures of the Relevant Clearing System, and in each case the date of such resolution shall be the date that such 75 per cent. majority is reached.

(d) ***Modification of French Securities***

The Issuer may from time to time amend the Conditions of any French Notes in accordance with General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*) and of French Securities other than French Notes in accordance with General Condition 24.4 (*Meeting of Holders of French Securities (other than French Notes which are obligations under French law and for which "Full Masse" or "Contractual Masse" is applicable***)**).

In respect of French Notes which have a Specified Denomination of at least EUR 100,000 or which can be traded in amounts of at least EUR 100,000 (or its equivalent in the relevant currency as of the Issue Date), the Issuer may modify the Conditions of the Securities without the consent of the Holders to correct a manifest error.

(e) ***Modification of German Securities with Holder consent***

(i) In accordance with the German Bond Act of 2009 (*Schuldverschreibungsgesetz* – "**SchVG**") and the provisions set out in Appendix 1 (*Provisions regarding Resolutions of Holders of German Securities*) to the General Conditions, the Holders may agree, by resolution with the majority specified in paragraph (ii), with the Issuer on amendments of the Conditions with regard to matters permitted by the SchVG. Majority resolutions shall be binding on all Holders. Resolutions which do not provide for identical conditions

for all Holders shall be void, unless Holders who are disadvantaged have expressly consented to their being treated disadvantageously.

(ii) Resolutions relating to material amendments to the Conditions, in particular consents to the measures set out in Section 5 paragraph 3, no. 1 to 9 of the SchVG, shall be passed by a majority of not less than 75 per cent. of the votes cast. Resolutions relating to amendments of the Conditions which are not material, require a simple majority of the votes cast. Each Holder participating in any vote shall cast votes in accordance with the nominal amount or the notional share of its entitlement to the outstanding Securities.

(iii) All votes will be taken exclusively by vote taken without a meeting (*Abstimmung ohne Versammlung*) in accordance with Section 18 of the SchVG. A meeting of Holders and the assumption of the fees by the Issuer for such a meeting will only take place in the circumstances of Section 18 paragraph 4 sentence 2 of the SchVG.

(iv) The vote will be chaired by a notary appointed by the Issuer or, if the Joint Representative (as defined below) has convened the vote, by the Joint Representative.

(v) If no Joint Representative is designated in the relevant Pricing Supplement, the Holders may by majority resolution appoint a common representative (the "**Joint Representative**") to exercise the rights of the Holders on behalf of each Holder.

In all other cases, the common representative of the Holders shall be the Joint Representative appointed as such in the relevant Pricing Supplement. The liability of the Joint Representative shall be limited to ten times the amount of its annual remuneration, unless the Joint Representative has acted wilfully or with gross negligence.

The Joint Representative shall have the duties and powers conveyed by law or granted by majority resolution of the Holders. The Joint Representative shall comply with the instructions of the Holders. To the extent that the Joint Representative has been authorised to assert rights of Holders, the Holders shall not be entitled to assert such rights themselves, unless explicitly provided for in the relevant majority resolution. The Joint Representative shall provide reports to the Holders on its activities. The regulations of the SchVG apply with regard to the removal and the other rights and obligations of the Joint Representative.

(vi) In the case of Securities issued by JPMSP, the provisions set out above applicable to the Securities shall apply mutatis mutandis to the Guarantee of JPMorgan Chase Bank, N. A.

24.2 ***Meetings of Holders (other than Holders of French Securities and German Securities)***

The Agency Agreement contains provisions for convening meetings of Holders to consider matters affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of any of these General Conditions or any provisions of the Agency Agreement, as applicable. Such a meeting may be convened by the Issuer (either at its own instigation or on the request of Holders holding at least ten per cent. in aggregate principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) of Securities outstanding). At a meeting of the Holders of the Securities for the purpose of approving a modification or amendment to, or obtaining a waiver of, any covenant, Condition, Specific Product Provision or the Agency Agreement, the Holders of a clear majority in aggregate principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) at the time outstanding shall constitute a quorum. In the absence of a quorum at any such meeting, within 30 minutes of the time appointed for such meeting, the meeting may be adjourned for a period of not less than ten days; in the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than ten days; at the reconvening of any meeting further adjourned for lack of a quorum, the persons entitled to 25 per cent. in aggregate principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) of the Securities at the time outstanding shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. At a meeting or an adjourned meeting duly convened and at which a quorum is present as aforesaid, any resolution to modify or amend

the Conditions or any provisions of the Agency Agreement (other than those items specified in General Condition 24.1(c)(ii)(A) to 24.1(c)(ii)(G), or to waive compliance with, any of the Conditions shall be effectively passed if passed by the persons entitled to the lesser of (i) a clear majority in aggregate principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) of the Securities then outstanding or (ii) 75 per cent. in aggregate principal amount (in the case of Notes) or number held (in the case of Warrants or Certificates) of the Securities represented and voting at the meeting.

24.3 **Meetings of Holders of French Notes (Masse)**

No Masse

In respect of (i) issues of French Notes with a Specified Denomination of at least 100,000 Euros (or for which the minimum purchase amount per investor and per transaction is at least 100,000 Euros) (or its equivalent in the relevant currency as of the Issue Date), or (ii) issues of French Notes outside France ("*à l'étranger*"), if the Pricing Supplement specifies "No Masse/Not Applicable" with respect to "Representation of Holders of Notes / Masse", the Holders will not, in respect of all Tranches in any Series, be grouped for the defence of their common interests in a Masse and the provisions of the General Condition 24.4 shall apply instead of this General Condition 24.3.

Full Masse

In respect of French domestic issues of French Notes with a Specified Denomination of less than 100,000 Euros (or for which the minimum purchase amount per investor and per transaction is less than 100,000 Euros) (or its equivalent in the relevant currency as of the Issue Date), the Pricing Supplement specifies "Full Masse" with respect to "Representation of Holders of Notes / Masse". "Full Masse" may also be specified in respect of French Notes with a Specified Denomination of at least EUR 100,000 or for which the minimum purchase amount per investor and per transaction is at least EUR 100,000 (or its equivalent in the relevant currency as of the Issue Date), or are issued outside France. If the relevant Pricing Supplement specify "Full Masse" with respect to "Representation of Holders of Notes / Masse", the provisions of this General Condition 24.3 shall apply with respect to the full provisions of French *Code de commerce* relating to the Masse. In this case, the Holders will, in respect of all Tranches in any Series, be grouped automatically for the defence of their common interests in a Masse in accordance with the full provisions of the French *Code de commerce* relating to the Masse.

Contractual Masse

In respect of (i) issues of French Notes which are not "obligations" under French law, (ii) issues of French Notes with a Specified Denomination of at least 100,000 Euros (or for which the minimum purchase amount per investor and per transaction is at least 100,000 Euros) (or its equivalent in the relevant currency as of the Issue Date), or (iii) issues of French Notes outside France ("*à l'étranger*"), if the Pricing Supplement specifies "Contractual Masse" with respect to "Representation of Holders of Notes / Masse", Holders of French Notes will, in respect of all Tranches in any Series, be grouped automatically for the defence of their common interests in a Masse in accordance with this General Condition 24.3. The Masse will be governed by the provisions of the French *Code de commerce* relating to the Masse (with the exception of the provisions of Articles L. 228-48, L. 228-59, R. 228-63, R. 228-67, and R. 228-69 thereof) as summarised and supplemented by the conditions set forth below.

(a) ***Legal Personality***

The Masse will be a separate legal entity and will act in part through a representative (the "**Representative**") and in part through a general meeting of the Holders (the "**General Meeting**").

The Masse alone, to the exclusion of all individual Holders, shall exercise the common rights, actions and benefits which now or in the future may accrue respectively with respect to the French Notes.

(b) ***Representative***

The office of Representative may be conferred on a person of any nationality who agrees to perform such a function.

However, the following persons may not be chosen as Representatives:

(i) the Issuer, the members of its Board of Directors (*Conseil d'administration*), their Supervisory Board (*Conseil de surveillance*), its general managers (*directeurs généraux*), its statutory auditors, its employees as well as its ascendants, descendants and spouse; or

(ii) the Guarantor, and more generally companies guaranteeing all or part of the obligations of the Issuer, their respective managers (*gérants*), general managers (*directeurs généraux*), members of their Board of Directors (*Conseil d'administration*), Executive Board (*Directoire*), or Supervisory Board (*Conseil de surveillance*), their statutory auditors, or employees as well as their ascendants, descendants and spouse; or

(iii) companies holding ten per cent. or more of the share capital of the Issuer or companies having ten per cent. or more of their share capital held by the Issuer; or

(iv) persons to whom the practice of banker is forbidden or who have been deprived of the right of directing, administering or managing an enterprise in whatever capacity.

The names and addresses of the initial Representative of the Masse and its alternate will be set out in the relevant Pricing Supplement. The Representative appointed in respect of the first Tranche of any Series of Notes will be the Representative of the single Masse of all Tranches in such Series.

The Representative will be entitled to such remuneration in connection with its functions or duties as set out in the relevant Pricing Supplement.

In the event of death, retirement or revocation of appointment of the Representative, such Representative will be replaced by another Representative. In the event of death, retirement or revocation of appointment of the alternate Representative, an alternate will be elected by the General Meeting.

All interested parties will at all times have the right to obtain the names and addresses of the Representative and the alternate Representative at the head office of the Issuer and the specified offices of any of the Relevant Programme Agents.

(c) ***Powers of Representative***

The Representative shall (in the absence of any decision to the contrary of the General Meeting) have the power to take all acts of management necessary in order to defend the common interest of the Holders.

All legal proceedings against the Holders or initiated by them, must be brought by or against the Representative.

The Representative may not be involved in the management of the affairs of the Issuer.

The Representative may delegate his powers to a third party, subject to the prescriptions specified in Articles L. 228-49, L. 228-62 and L. 228-63 of the French *Code de commerce*.

(d) ***General Meeting***

As further set out in General Condition 24.3(e), a General Meeting may be held at any time, on convocation by, in particular, the Issuer or the Representative. One or more Holders of French Notes, holding together at least one-thirtieth of the principal amount of the French Notes outstanding, may address to the Issuer and the Representative a demand for convocation of the General Meeting.

In accordance with Article R. 228-71 of the French *Code de commerce*, the rights of each Holder of French Notes to participate in General Meetings will be evidenced by the entries in the books of the relevant Euroclear France Account Holder of the name of such Holders of French Notes on the second business day in Paris preceding the date set for the meeting of the relevant General Meeting at 0:00, Paris time.

Each Holder of French Notes has the right to participate in a General Meeting in person, by proxy, correspondence, videoconference or any other means of telecommunication allowing the identification of the participating Holders of French Notes. Each French Note carries the right to one vote, in the case of French Notes issued with more than one Specified Denomination, one vote in respect of each multiple of the lowest Specified Denomination comprised in the principal amount of the Specified Denomination of such French Note.

(e) ***Convening of the General Meeting***

The General Meeting shall be convened in accordance with Article L. 228-58 et seq. of the French *Code de commerce*, i.e. (without prejudice to any law change subsequent to the date of the Agency Agreement) by the relevant representative of the Issuer, by the Representatives of the Masse or by the liquidators or natural or physical persons performing equivalent functions during any possible winding-up or equivalent insolvency period.

Notice of the date, time, place and agenda of any General Meeting will be published as provided under General Condition 27.4 (*Notices to Holders of French Securities*) and not less than 15 days prior to the General Meeting on first convocation and, five days on second convocation.

One or more Holder of French Notes, together holding at least one-thirtieth of the French Notes of the General Meeting, may submit to the Issuer and to the Representatives of the Masse a request for a meeting to be convened. In the latter case, if the Issuer or the relevant Representatives do not convene the Masse within two months (or within such longer or shorter period of time as may be specified from time by *décret en Conseil d'Etat* or otherwise), the Holder of French Notes requesting the convening of the meeting may bring legal proceedings for the appointment of a representative who shall convene the meeting.

(f) ***Powers of the General Meetings***

The General Meeting is empowered to deliberate on the dismissal and replacement of the Representative and the alternate Representative and also may act with respect to any other matter that relates to the common rights, actions and benefits which now or in the future may accrue with respect to the French Notes, including authorising the Representative to act at law as plaintiff or defendant.

The General Meeting may further deliberate on any proposal relating to the modification of the Conditions including any proposal, whether for arbitration or settlement, relating to rights in controversy or which were the subject of judicial decisions, it being specified, however, that the General Meeting may not increase amounts payable by Holders of French Notes, nor establish any unequal treatment between the Holders of French Notes, nor decide to convert French Notes into shares, except in accordance with Article L. 228-106 of the French *Code de commerce*.

General Meetings may deliberate validly on first convocation only if Holders of French Notes present or represented hold at least a fifth of the principal amount of the French Notes then outstanding. On second convocation, no quorum shall be required. Decisions at meetings shall be taken by a two-third majority of votes cast by Holders of French Notes attending such General Meetings or represented thereat.

Decisions of General Meetings must be published in accordance with the provisions set forth in General Condition 27.4 (*Notices to Holders of French Securities*).

(g) ***Written Decision and Electronic Consent***

Pursuant to Article L.228-46-1 of the French *Code de commerce*, the Issuer shall be entitled, in lieu of convening a General Meeting, to seek approval of a decision from the Holders by way of a written decision (the "**Written Decision**"). Such Written Decision shall be signed by or

behalf of Holders holding not less than two-third of the French Notes without having to comply with formalities and time limit set out for the General Meetings. Subject to the following sentence, a Written Decision may be contained in one document or in several documents in like form, each signed by or on behalf of one or more of the Holders. Pursuant to Article L. 228-46-1 of the French *Code de commerce*, approval of a Written Decision may also be given by way of electronic communication ("**Electronic Consent**").

Notice seeking the approval of a Written Decision (including by way of Electronic Consent) will be published as provided under Condition 27.4 (*Notices to Holders of French Securities*) not less than five days prior to the date fixed for the passing of such Written Decision (the "**Written Decision Date**"). Notices seeking the approval of a Written Decision will contain the conditions of form and time-limits to be complied with by the Holders who wish to express their approval or rejection of such proposed Written Decision. Holders expressing their approval or rejection before the Written Decision Date will undertake not to dispose of their French Law Instrument until after the Written Decision Date.

(h) ***Effect of decisions made by a General Meeting or Written Decisions***

A decision passed at a General Meeting or a Written Decision (including by Electronic Consent), shall be binding on all Holders, whether or not present or represented at the General Meeting and whether or not, in the case of a Written Decision (including by Electronic Consent), they have participated in such Written Decision (including by Electronic Consent) and each of them shall be bound to give effect to the decision accordingly.

Information to Holders

Each Holder or Representative thereof will have the right, (i) during the 15-day period preceding the holding of each General Meeting on first convocation, (ii) during the 5-day period preceding the holding of the relevant General Meeting on second convocation, or (iii) in the case of a Written Decision, a period of not less than five days preceding the Written Decision Date, as the case may be, to consult or make a copy of the text of the resolutions which will be proposed and of the reports which will be presented at the General Meeting, all of which will be available for inspection by the relevant Holders at the registered office of the Issuer, at the specified offices of any of the relevant Programme Agent during usual business hours and at any other place specified in the notice of the General Meeting or the Written Decision.

Decisions of General Meeting and Written Decision, once approved, will be published in accordance with General Condition 27.4 (*Notices to Holders of French Securities*).

Expenses

The Issuer will pay all expenses relating to the operation of the Masse, including expenses relating to the calling and holding of General Meetings and seeking the approval of a Written Decision, and more generally, all administrative expenses resolved upon by the General Meeting or in writing through Written Decision by the Holders, it being expressly stipulated that no expenses may be imputed against interest payable under the French Notes.

Single Masse

Where the applicable Pricing Supplement specify "Full Masse" or "Contractual Masse", the Holders of French Notes of the same Series, and the Holders of French Notes of any other Tranche which have been consolidated (*assimilées*) with the French Notes of another Series in accordance with General Condition 26 (*Further Issues*), shall, for the defence of their respective common interests, be grouped in a single Masse. The Representative appointed in respect of the first Tranche of any Series of French Notes will be the Representative of the single Masse of all such Series.

Single Holder

Where the applicable Pricing Supplement specify "Full Masse" or "Contractual Masse", if and for so long as the French Notes of a given Series are held by a single Holder, the relevant Holder will exercise directly the powers delegated to the Representative and General Meetings of

Holder under General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*), as the case may be, whether or not a Representative has been appointed. For the avoidance of doubt, if a Representative has been appointed while the French Notes of a given Series are held by a single Holder, such Representative shall be devoid of powers.

24.4 **Meeting of Holders of French Securities (other than French Notes which are obligations under French law and for which "Full Masse" or "Contractual Masse" is applicable)**

The Issuer may convene (either at its own instigation or on the request of Holders of French Warrants or French Certificates holding at least ten per cent. of the number of Warrants or Certificates outstanding by giving notice to Holders of French Warrants or French Certificates in accordance with General Condition 27 (*Notices*)) a meeting of Holders of French Warrants and French Certificates under French law for the purpose of approving a modification or amendment to, or obtaining a waiver of, any covenant, General Condition or Specific Product Provision. The Holders of a clear majority of the number of French Warrants or French Certificates held at the time outstanding shall constitute a quorum. In the absence of a quorum at any such meeting, within 30 minutes of the time appointed for such meeting, the meeting may be adjourned for a period of not less than ten days; in the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than ten days; at the reconvening of any meeting further adjourned for lack of a quorum, the persons entitled to hold 25 per cent. of the number of French Warrants or French Certificates outstanding shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. At a meeting or an adjourned meeting duly convened and at which a quorum is present as aforesaid, any resolution to modify or amend the Conditions, or to waive compliance with, any of the Conditions shall be effectively passed if passed by the persons entitled to the lesser of (i) a clear majority of the number of French Warrants or French Certificates then outstanding or (ii) 75 per cent. of the number of French Warrants or French Certificates represented and voting at the meeting.

In addition, a resolution in writing signed by or on behalf of all Holders of French Warrants or French Certificates who are for the time being entitled to receive notice of a meeting of Holders of French Warrants or French Certificates will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or in several documents in the same form, each signed by or on behalf of one or more Holders of French Warrants or French Certificates.

24.5 **Modification of Swiss Certificates (UBS-cleared)**

General Condition 24.1(c) shall apply in the case Swiss Certificates (UBS-cleared), provided that (in the case of General Condition 24.1(c)(i)) majority consent or (in the case of General Condition 24.1(c)(ii)) an extraordinary resolution shall be via a resolution in writing signed or electronically approved using the systems and procedures in place from time to time of UBS Switzerland AG by or on behalf of a majority of 75 per cent. or more of Holders (as applicable) by reference to the number of Swiss Certificates (UBS-cleared) outstanding of the particular series at the relevant time, and in each case determined in accordance with the rules, procedures and other requirements of UBS Switzerland AG.

25. **Purchase and Cancellation**

25.1 **Purchase**

The Issuer, the JPMCFC Guarantor in respect of Securities issued by JPMCFC, the JPMSP Guarantor in respect of Securities issued by JPMSP or any of their subsidiaries or affiliates may at any time purchase Securities. Purchases may be made at any price in the open market or by tender or private treaty. Any Securities so purchased may be held or resold or surrendered for cancellation.

25.2 **Cancellation**

The obligations of the Issuer and the Guarantor (if applicable) in respect of Securities surrendered for cancellation shall be discharged following redemption and cancellation of the

Securities by the Issuer (together, in the case of Registered Securities in definitive form, by surrendering the registered certificate representing such Securities to the Registrar). French Securities shall be cancelled by being transferred to an account in accordance with the rules of procedures of Euroclear France.

26. **Further Issues**

The relevant Issuer may from time to time without the consent of the Holders create and issue further securities of any Series or Tranche, having the same terms and conditions as the relevant Securities (with the exception of the first Interest Payment Date, the first Coupon Payment Date and the Issue Price of the further securities) (so that, for the avoidance of doubt, references in the conditions of such securities to "**Issue Date**" shall be to the first issue date of the Securities) and so that the same shall be consolidated (with respect to French Securities, *assimilées*) and form a single series with the applicable Securities of that Series or Tranche and references in these General Conditions to "**Securities**" shall be construed accordingly.

27. **Notices**

27.1 **Notices to the Holders of Registered Securities in definitive form**

Notices to the Holders of Registered Securities in definitive form shall be mailed to them at their respective addresses in the Register and deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the date of mailing.

27.2 **Notices to Holders of interests in Global Securities**

For Global Securities representing the Securities that are held in their entirety on behalf of Euroclear and/or Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France or DTC notices to the Holders of the Securities may be made by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France or DTC for communication by them to the Holders of the Securities. Any such notice shall be deemed to have been given to the Holders of the Securities on the day after the day on which such notice was given to Euroclear and/or Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France or DTC.

27.3 **Notices to Holders of Swiss Securities that are not listed on the SIX Swiss Exchange and Swiss Certificates (UBS-cleared)**

Notices to Holders of Swiss Securities that are not listed on the SIX Swiss Exchange shall be validly given if published on the website or in the newspaper specified in the relevant Pricing Supplement.

Notices to Holders of Swiss Certificates (UBS-cleared) shall be validly given if published on the website specified in the relevant Pricing Supplement.

27.4 **Notices to Holders of French Securities**

(a) Notices to the Holders of French Securities in registered dematerialised form (*au nominatif*) shall be valid if either, (i) they are mailed to them at their respective addresses, in which case they will be deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the mailing, or, (ii) at the option of the Issuer, they are published (a) as long as such French Securities are listed and admitted to trading on Euronext Paris, in a leading daily newspaper having general circulation in Paris (which is expected to be Les Echos), or (b) they are published in a leading daily newspaper of general circulation in Europe (which is expected to be the Financial Times) or (c) they are published in accordance with Articles 221-3 and 221-4 of the *Règlement Général* of the AMF and so long as such French Securities are listed and admitted to trading on any regulated market in a leading daily newspaper with general circulation in the city where the regulated market on which such French Securities are listed and admitted to trading is located and on the website of any other competent authority or regulated market of the EEA member state where the French Securities are listed and admitted to trading.

(b) Notices to the Holders of French Securities in bearer form (*au porteur*) shall be valid if published (a) so long as such French Securities are listed and admitted to trading on Euronext Paris, in a leading daily newspaper of general circulation in Paris (which is expected to be Les Echos), or (b) they are published in a leading daily newspaper of general circulation in Europe (which is expected to be the Financial Times) or (c) they are published in accordance with Articles 221-3 and 221-4 of the *Règlement Général* of the AMF and so long as such French Securities are listed and admitted to trading on any regulated market in a leading daily newspaper with general circulation in the city where the regulated market on which such French Securities are listed and admitted to trading is located and on the website of any other competent authority or regulated market of the EEA member state where the French Securities are listed and admitted to trading.

(c) If any such publication is not practicable, notice shall be validly given if published in another leading daily English language newspaper with general circulation in Europe. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once or on different dates, on the date of the first such publication.

(d) Notices required to be given to the Holders of French Securities (whether in registered or in bearer form) pursuant to these Conditions may be given by delivery of the relevant notice to Euroclear France, Euroclear, Clearstream, Luxembourg and any other clearing system through which the French Securities are for the time being cleared in substitution for the mailing and publication of a notice required by General Conditions 27.4 (a), (b) and (c) above; except that so long as the French Securities are listed and admitted to trading on a regulated market or other stock exchange and the rules of such regulated market or other stock exchange so require, notices shall also be published in a leading daily newspaper of general circulation in the city where the regulated market or other stock exchange on which such French Securitie(s) is/are listed and admitted to trading is located.

(e) Notices relating to convocation and decision(s) pursuant to General Condition 24.3 and pursuant to Articles R.228-79 and R.236-11 of the French *Code de commerce* shall be given by delivery of the relevant notice to Euroclear France, Euroclear, Clearstream, Luxembourg and any other clearing system through which the French Notes are for the time being cleared. For the avoidance of doubt, General Conditions 27.4 (a), (b), (c), (d) shall not apply to such notices.

27.5 **Notices to Holders of German Securities**

Notices to Holders of German Securities will be valid if published (a) on the website maintained on behalf of the Issuer, https://sp.jpmorgan.com/spweb/index.html, or (b) in accordance with General Condition 27.2 (*Notices to Holders of interests in Global Securities*).

27.6 **Notices in respect of Securities listed on the Luxembourg Stock Exchange's Euro MTF**

So long as the Securities are listed on the Official List and admitted to trading on the Luxembourg Stock Exchange's Euro MTF and the rules of the Luxembourg Stock Exchange so require all notices regarding the Securities will be deemed to be validly given if published in a daily newspaper with general circulation in Luxembourg (which is expected to be the *Luxemburger Wort*) or on the website of the Luxembourg Stock Exchange (www.bourse.lu).

27.7 **Notices in respect of Securities listed on the SIX Swiss Stock Exchange**

For so long as any Securities are listed on the SIX Swiss Exchange, all notices in respect of such Securities shall be published in accordance with the rules of the SIX Swiss Exchange.

27.8 **Notices in respect of Securities listed on any other stock exchange**

For so long as any Securities are listed on any other stock exchange or listing authority, notices shall be published in accordance with the rules of such stock exchange or listing authority.

27.9 **Notices by Holders of German Securities**

In respect of German Securities, notices which are required to be given by the Holder to the Issuer or Relevant Programme Agent pursuant to General Condition 5.2 (*Redemption at the Option of Holders*), General Condition 9.2 (*Redemption at the Option of Holders*), General Condition 11.2 (*Automatic Exercise Warrant Notice Requirement*) and General Condition 11.3 (*Exercise Procedure*) must be given (and will only be validly given) if:

(a) the Holder submits to the Relevant Programme Agent a written notice in the form available from the Relevant Programme Agent which has been completed by such Holder or which includes any statements and declarations required by such form, in particular:

(i) the name and address of the Holder;

(ii) the specification (including ISIN/WKN) and number of Securities to which the notice is applicable;

(iii) the account of the Holder with a bank in the Federal Republic of Germany to which any payments that may be owed or delivery which may be due under the Securities are to be credited; and

(iv) in respect of Securities to which Physical Settlement applies, a Non-U.S. Certification; and

(b) delivers the Securities to which the notice relates to the Relevant Programme Agent either (i) by means of an irrevocable instruction to the Relevant Programme Agent to debit the Securities from the depository account, if any, maintained with the Relevant Programme Agent, or (ii) by transfer of the Securities to the account of the Relevant Programme Agent with the Relevant Clearing System.

If the number of Securities to which the notice relates differs from the number of Securities transferred to the Relevant Programme Agent, the notice shall be deemed to apply only for the smaller of both numbers of Securities. Any Securities transferred in excess of the number of Securities to which the notice relates shall be re-transferred to the Holder at its risk and expense.

No Securities so delivered and options so exercised may be withdrawn without the prior consent of the Issuer.

27.10 **Notices from the Calculation Agent**

Notices from the Calculation Agent shall be given in accordance with General Conditions 27.1 (*Notices to the Holders of Registered Securities in definitive form*) to 27.8 (*Notices in respect of Securities listed on any other stock exchange*) above, as applicable.

28. **Substitution**

28.1 **Right of Substitution**

The Issuer may (provided it has complied with the requirements set out in General Conditions 28.2(a) to 28.2(e) (inclusive) (for Securities other than German Securities and French Securities) or General Conditions 28.3(a) to 28.3(e) (inclusive) (for German Securities and French Securities)) at any time, without the consent of the Holders, substitute for itself any company from JPMorgan Chase & Co. and its consolidated subsidiaries (including the Guarantors) (the "**Substitute**") provided, however, that (i) in respect of Securities issued by JPMCFC, either JPMCFC or JPMorgan Chase & Co. has or will (or based on an opinion of counsel to JPMCFC (or to JPMorgan Chase & Co., in its capacity as guarantor, as the case may be) there is a substantial likelihood that it will) or (ii) in respect of Securities issued by JPMSP, either JPMSP or JPMorgan Chase Bank, N.A. has or will (or based on an opinion of counsel to JPMSP (or to JPMorgan Chase Bank, N.A. in its capacity as guarantor, as the case may be) there is a substantial likelihood that it will), in each case, become obliged to pay Additional Amounts as provided or referred to in General Condition 18.1 (*Obligation to pay Additional Amounts*) or (iii) an Underlying Hedge Entity has incurred or will (or based on an opinion of counsel to such Underlying Hedge Entity there is a substantial likelihood that it will) incur a materially increased cost with respect to taxes (including, without limitation, grossing-up payments or receiving

payments net of withholding) in performing its obligations in relation to the Underlying Hedge Transactions (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position with respect to an Underlying Hedge Tax Jurisdiction), in each case (x) as a result of (I) any action taken by a Relevant Jurisdiction or an Underlying Hedge Tax Jurisdiction (as applicable) or any political subdivision or any authority thereof or therein having power to tax or brought in a court of competent jurisdiction on or after the Issue Date; or (II) the proposal, adoption, finalisation or expiration of any laws, regulations, or administrative guidance (including, due to the mere passage of time) of a Relevant Jurisdiction or an Underlying Hedge Tax Jurisdiction or any political subdivision or any authority thereof or therein having power to tax, or any change in, or amendment to (or proposed change or amendment to), proposed or final laws, regulations, or administrative guidance, or any change in the application or official interpretation of proposed or final laws, regulations or administrative guidance (including by inaction, such as the failure to finalise proposed regulations or administrative guidance, or due to the mere passage of time), which proposal, adoption, finalisation, expiration, change or amendment becomes effective on or after the Issue Date or with respect to payments made on or after the Issue Date; and (y) such obligation or cost with respect to taxes cannot be avoided by the Issuer, the Guarantor or Underlying Hedge Entity (as applicable) taking reasonable measures available to it (as determined by the Issuer or the Guarantor or the Calculation Agent on their behalf).

For the purposes of this General Condition 28.1, the term "Relevant Jurisdiction" shall also include any jurisdiction that enters into an intergovernmental agreement with the United States in furtherance of FATCA.

With regard to Italian Certificates, for so long as the Securities are admitted to trading on an Italian MTF, any substitution of the Issuer will be subject to the rules, instructions and requirements of the relevant Italian MTF. The obligations of the Substitute in respect of the Italian Certificates will be unconditionally and irrevocably guaranteed by the Issuer.

28.2 **Means of Substitution (Securities other than German Securities and French Securities)**

The right of substitution granted to Securities other than German Securities and French Securities is subject to fulfilment of the following:

(a) the Substitute having, by means of a deed poll (the "**Deed Poll**"), substantially in the form scheduled to the Agency Agreement:

(i) become a party to the Agency Agreement with any appropriate consequential amendments, as if it had been an original party to it;

(ii) indemnified each Holder against (x) any tax, duty, assessment or governmental charge that is imposed on it by (or by any authority in or of) the jurisdiction of the country of the Substitute's residence for tax purposes and, if different, of its incorporation with respect to any Security or the Deed of Covenant arising from or in connection with the substitution and (y) any tax, duty, assessment or governmental charge, and any cost or expense relating to the substitution;

(iii) completed all actions, conditions and things required to be taken, fulfilled and done in respect of the substitution (including the obtaining of any necessary consents from the Swedish CSD in respect of Swedish Securities), and to ensure that the Deed Poll, the Securities and Deed of Covenant represent valid, legally binding and enforceable obligations of the Substitute and, in the case of the Deed Poll, of the relevant Guarantor, and a supplement to the Offering Circular describing the Programme having been prepared if required to describe the Substitute;

(b) in respect of Securities issued by JPMCFC, where JPMCFC is substituted as issuer, and where JPMorgan Chase & Co. is not the Substitute, JPMorgan Chase & Co. shall guarantee the obligations of the Substitute under the Deed Poll, the Securities and the Deed of Covenant by means of the Deed Poll;

(c) in respect of Securities issued by JPMSP or JPMorgan Chase Bank, N.A., where JPMSP or JPMorgan Chase Bank, N.A. is substituted as issuer, and where JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. is not the Substitute, JPMorgan Chase Bank, N.A. shall guarantee the obligations of the Substitute under the Deed Poll, the Securities and the Deed of Covenant by means of the Deed Poll;

(d) in respect of Securities issued by JPMorgan Chase & Co., where JPMorgan Chase & Co. is substituted as issuer, and where JPMorgan Chase Bank, N.A. is not the Substitute, JPMorgan Chase & Co. shall guarantee the obligations of the Substitute under the Deed Poll, the Securities and the Deed of Covenant by means of the Deed Poll; and

(e) the Issuer shall give at least 14 days' (or, in the case of Italian Certificates, at least 30 days) prior notice of such substitution to the Holders (which shall be announced in accordance with General Condition 27 (*Notices*)), stating that copies, or pending execution the agreed text, of all documents in relation to the substitution that are referred to above, or that might otherwise reasonably be regarded as material to Holders, shall be available for inspection at the specified office of each of the Paying Agents.

28.3 **Means of Substitution in respect of German Securities and French Securities**

The right of substitution granted to German Securities and French Securities is subject to the following:

(a) the Substitute assuming all obligations of the Issuer or any previous substituted company arising from or in connection with the German Securities or the French Securities;

(b) the Issuer and the Substitute having obtained all necessary authorisations and being able to transfer all amounts required for the fulfilment of the payment obligations under the German Securities or the French Securities to the Relevant Programme Agent (in the currency required under the German Securities and French Securities) without being obliged to deduct or withhold any taxes or other duties of whatever nature levied by the country in which the Substitute or the Issuer has its domicile or tax residence;

(c) the Substitute agreeing to indemnify and hold harmless each Holder of German Securities or French Securities against (i) any tax, duty, assessment or governmental charge imposed on such Holder of German Securities or French Securities by (or by any authority in or of) the jurisdiction of the country of the Substitute's residence for tax purposes and, if different, of its incorporation which would not have been so imposed if the Substitution had not been made and (ii) any tax, duty, assessment or governmental charge, any cost or expense in respect of such Substitution;

(d) if the German Securities or the French Securities are listed on a stock exchange and the rules of such exchange (or other regulatory authority) so require, the Issuer notifying such substitution in accordance with applicable rules and regulations;

(e) in the case of German Securities or French Securities issued by JPMSP, the obligations of the Substitute arising under the German Securities or French Securities remaining guaranteed by the JPMSP Guarantor; and

(f) in the case of German Securities issued by JPMCFC, the obligations of the Substitute arising under the German Securities remaining guaranteed by the JPMCFC Guarantor.

A notice of any Substitution in accordance with this General Condition 28.3 will be published in accordance with General Condition 27 (*Notices*).

28.4 **References to Issuer deemed to be to Substitute**

Where the relevant Issuer is substituted for a Substitute, any reference to such Issuer in these General Conditions shall be deemed to be a reference to the Substitute.

29. **Prescription**

29.1 **Securities other than German Securities**

Claims against the Issuer or, as the case may be, the Guarantor for payment or delivery in respect of the Securities (including without limitation, claims for any applicable redemption amounts payable) shall be prescribed and become void unless made within (and no claims shall be made after such Relevant Payment Date):

(a) ten years (in the case of principal or any Reference Asset Amount(s)) from the appropriate Relevant Payment Date in respect of the relevant Notes;

(b) five years (in the case of interest) from the appropriate Relevant Payment Date in respect of the relevant Notes; or

(c) five years from the Settlement Date in respect of Warrants and Certificates.

29.2 **German Securities**

In the case of principal or any Reference Asset Amount(s), the period for presentation of German Securities (pursuant to section 801 paragraph 1 sentence 1 BGB) shall be ten years from the date on which the relevant obligation of the Issuer under the German Securities first becomes due, and the period of limitation for claims under the German Securities presented during the period for presentation shall be two years calculated from the expiration of the presentation period. For the avoidance of doubt, in the case of interest, section 195 and 199 BGB apply.

30. **Governing Law and Jurisdiction**

30.1 **Governing Law**

(a) ***Securities other than French Securities, German Securities, New York Law Notes, Rule 144A Warrants and Rule 144A Certificates***

Save as provided in General Condition 30.1(b) (*Danish Notes, Finnish Securities, Norwegian Securities and Swedish Securities*) below (if applicable), the Securities (other than French Securities, German Securities, New York Law Notes, Rule 144A Warrants and Rule 144A Certificates), (i) the JPMorgan Chase Bank, N.A. Guarantee in respect of Securities issued by JPMSP and (ii) the Agency Agreement (and any dispute, controversy, proceedings or claim of whatever nature (whether contractual, non-contractual or otherwise) arising out of or in any way relating to the Securities, the relevant Guarantee or the Agency Agreement or their respective formation) are governed by English law. The JPMorgan Chase & Co. Guarantee in respect of Securities issued by JPMCFC shall be construed in accordance with the laws of the State of New York (without reference to the principles of conflicts of law thereof).

(b) ***Danish Notes, Finnish Securities, Norwegian Securities and Swedish Securities***

Danish law will be applicable in respect of the registration (including transfer of title redemption and payments) of Danish Notes in the VP. Finnish law will be applicable in respect of the title to and registration of Finnish Securities in Euroclear Finland. Norwegian law will be applicable in respect of the registration of Norwegian Securities in the VPS. Swedish law will be applicable in respect of the registration of Swedish Securities in Euroclear Sweden.

(c) ***French Securities***

French Securities (and any dispute, controversy, proceedings or claim of whatever nature (whether contractual, non-contractual or otherwise) arising out of or in any way relating to French Securities, or their formation) are governed by and shall be construed in accordance with French law. The JPMorgan Chase Bank, N.A. Guarantee in respect of French Securities issued by JPMSP and the Agency Agreement (and any dispute, controversy, proceedings or claim of whatever nature (whether contractual, non-contractual or otherwise) arising out of or in any way relating to the JPMorgan Chase Bank, N.A. Guarantee or the Agency Agreement, or its formation) shall be governed by English law.

(d) ***German Securities***

German Securities are governed by and shall be construed in accordance with German law. The JPMorgan Chase Bank, N.A. Guarantee in respect of Securities issued by JPMSP shall be governed by and construed in accordance with English law. The JPMorgan Chase & Co. Guarantee in respect of Securities issued by JPMCFC shall be governed by and construed in accordance with the laws of the State of New York.

(e) ***New York Law Notes, Rule 144A Warrants and Rule 144A Certificates***

New York Law Notes, Rule 144A Warrants and Rule 144A Certificates are governed by, and shall be construed in accordance with the laws of the State of New York (without reference to the principles of conflicts of law thereof). The JPMorgan Chase Bank, N.A. Guarantee in respect of Securities issued by JPMSP and the Agency Agreement (including any claim, controversy or dispute arising or related to the relevant Guarantee or the Agency Agreement) shall be construed in accordance with English law (without reference to the principles of conflicts of law thereof). The JPMorgan Chase & Co. Guarantee in respect of Securities issued by JPMCFC shall be construed in accordance with the laws of the State of New York (without reference to the principles of conflicts of law thereof).

30.2 **Jurisdiction**

(a) ***Securities other than French Securities, German Securities, New York Law Notes, Rule 144A Warrants and Rule 144A Certificates***

The Courts of England are to have exclusive jurisdiction to settle any disputes, controversy, proceedings or claim of whatever nature that may arise out of or in connection with any Securities (other than French Securities, German Securities, New York Law Notes, Rule 144A Warrants and Rule 144A Certificates) (including their formation), including the JPMorgan Chase Bank, N.A. Guarantee in respect of Securities issued by JPMSP, and accordingly any such legal action or proceedings ("**Proceedings**") may be brought in such courts. Each of the Issuer and the JPMSP Guarantor (if applicable) irrevocably submits to the exclusive jurisdiction of the courts of England and waives any objection to Proceedings in such courts on the ground of venue or on the ground that the Proceedings have been brought in an inconvenient forum. These submissions are made for the benefit of each of the Holders of the Securities and shall not affect the right of any of them to take Proceedings in any other court of competent jurisdiction nor shall the taking of Proceedings in one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction (whether concurrently or not).

(b) ***French Securities***

Any claim against the Issuer in connection with any French Securities may be brought before any competent court of the jurisdiction of the Paris Court of Appeal.

(c) ***German Securities***

The courts of Frankfurt am Main are to have jurisdiction to settle any Proceedings that may arise out of or in connection with any German Securities (including their formation) and accordingly any Proceedings may be brought in such court. In respect of German Securities, each of the Issuer and the relevant Guarantor (if applicable) irrevocably submits to the jurisdiction of the courts of Frankfurt am Main and waives any objection to Proceedings in such court on the ground of venue or on the ground that the Proceedings have been brought in an inconvenient forum. These submissions are made for the benefit of each of the holders of the Securities and shall not affect the right of any of them to take Proceedings in any other court of competent jurisdiction nor shall the taking of Proceedings in one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction (whether concurrently or not).

(d) ***New York Law Notes, Rule 144A Warrants and Rule 144A Certificates***

Any federal or state court in the Borough of Manhattan, The City of New York, State of New York is to have jurisdiction to settle any legal action or proceedings arising out of or in connection with New York Law Notes, Rule 144A Warrants and Rule 144A Certificates (including their formation), and the JPMorgan Chase & Co. Guarantee in respect of Securities issued by JPMCFC (the "**Proceedings**") that may be brought in such courts. Each of the Issuer

and the relevant Guarantor (if applicable) irrevocably submits to the jurisdiction of such courts and waives any objection to Proceedings in such courts on the ground of venue or on the ground that the Proceedings have been brought in an inconvenient forum.

30.3 **Service of Process**

(a) ***Securities other than German Securities, New York Law Notes, Rule 144A Warrants and Rule 144A Certificates***

Each of JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. appoints the Company Secretary of J.P. Morgan Securities plc of 25 Bank Street, Canary Wharf, London E14 5JP, England as their respective agent in England to receive, for them and on their behalf, service of process in any Proceedings in England. Such service shall be deemed completed on delivery to the relevant process agent (whether or not, it is forwarded to and received by JPMCFC, JPMSP, JPMorgan Chase Bank, N.A or JPMorgan Chase & Co., as the case may be). If for any reason the process agent ceases to be able to act as such or no longer has an address in London, each of JPMCFC, JPMSP, JPMorgan Chase Bank, N.A or JPMorgan Chase & Co., as the case may be, irrevocably agrees to appoint a substitute process agent and shall immediately notify Holders of such appointment in accordance with General Condition 27 (*Notices*). Nothing shall affect the right of Holders to serve process in any manner permitted by law.

(b) ***German Securities***

Each of the Issuer and the relevant Guarantor (if applicable) appoints the Head of the Legal Department of J.P. Morgan SE, TaunusTurm, Taunustor 1, 60310 Frankfurt am Main, Germany as its agent in Germany to receive, for it and on its behalf, service of process in any Proceedings in Germany. Such service shall be deemed completed on delivery to the relevant process agent (whether or not, it is forwarded to and received by the Issuer or the relevant Guarantor (if applicable)). If for any reason the relevant process agent ceases to be able to act as such or no longer has an address in Germany, the Issuer and the relevant Guarantor (if applicable) irrevocably agree to appoint a substitute process agent and shall immediately notify Holders of such appointment in accordance with General Condition 27.5 (*Notices to Holders of German Securities*). Nothing shall affect the right to serve process in any manner permitted by law.

(c) ***Rule 144A Warrants and Rule 144A Certificates***

JPMSP appoints JPMorgan Chase Bank, N.A. as its authorised agent upon which process may be served in any Proceedings that may be instituted in any federal or state court in the Borough of Manhattan, The City of New York, State of New York, but for that purpose only. Service of process upon such agent at 383 Madison Avenue, 5th Floor, New York, New York 10179, United States of America. Attention: Corporate Secretary, and written notice of such service to JPMSP by the person serving the same, shall be deemed in every respect effective service of process upon JPMSP in any such Proceedings. Such appointment shall be irrevocable so long as the Holders shall have any rights pursuant to the terms of the Rule 144A Warrants, or the Rule 144A Certificates, as the case may be, until the appointment of a successor by JPMSP, as applicable, and such successor's acceptance of such appointment. Upon such acceptance, JPMSP shall notify the Principal Programme Agent of the name and address of such successor. JPMSP further agrees to take any and all action, including the execution and filing of any and all such documents and instruments, as may be necessary to continue such designation and appointment of such agent or successor for so long as Holders shall have any rights pursuant to the terms of the Rule 144A Warrants, or the Rule 144A Certificates, as the case may be or for so long as Holders shall have any rights pursuant to the terms of the Rule 144A Warrants, or the Rule 144A Certificates, as the case may be issued by them, respectively. The Principal Programme Agent shall not be obliged and shall have no responsibility with respect to any failure by JPMSP to take any such action.

(d) ***New York Law Notes***

This General Condition 30.3 (*Service of Process*) shall not apply in respect of New York Law Notes.

31. **Third Parties and Waiver of Trial by Jury**

(a) ***Contracts (Rights of Third Parties) Act 1999***

In respect of any Securities which are governed by English law, no person shall have any right to enforce any term or condition of the Securities under the Contracts (Rights of Third Parties) Act 1999, but this does not affect any right or remedy of any person which exists or is available apart from that Act.

(b) ***For the sole benefit of Holders of New York Law Notes, Rule 144A Warrants and Rule 144A Certificates; no third-party beneficiaries***

In respect of New York Law Notes, Rule 144A Warrants and Rule 144A Certificates, nothing in the Conditions, expressed or implied, shall give or be construed to give to any person, firm or corporation, other than the Holders, any legal or equitable right, remedy or claim under the Conditions, the Conditions being for the sole benefit of the Holders. There shall not be any third-party beneficiaries of the Conditions in respect of New York Law Notes, Rule 144A Warrants and Rule 144A Certificates.

(c) ***Waiver of any rights to a trial by jury***

In respect of New York Law Notes, Rule 144A Warrants and Rule 144A Certificates, each Holder hereby knowingly, voluntarily and intentionally waives (to the extent permitted by applicable law) any rights it may have to a trial by jury in respect of any litigation based hereon, or arising out of, under, or in connection with, these Securities or any other related documents, or any course of conduct, course of dealing, statements (whether verbal or written), or actions of the Holders.

32. **Definitions and Interpretation**

32.1 **Definitions**

In these General Conditions, unless the context otherwise requires, the following terms shall have the respective meanings set out below:

"**Acceleration Date**" has the meaning given in General Condition 15.2 (*Consequences of an Event of Default*).

"**Additional Amounts**" has the meaning given in General Condition 18 (*Taxation and Early Redemption or Termination for Taxation*).

"**Adjusted Arithmetic Mean**" means the arithmetic mean after eliminating the highest quotation (or, in the event of equality, one of the highest) and the lowest quotation (or, in the event of equality, one of the lowest), unless only two quotations are provided, in which case neither the highest quotation nor the lowest quotation will be eliminated.

"**Adjustment Date**" means a date specified by the Issuer in the notice given to the Holders pursuant to General Condition 22.2 (*Adjustments to Warrants or Certificates for European Monetary Union*) which falls on or after the date on which the country of the Specified Currency first participates in the third stage of European Economic and Monetary Union pursuant to the Treaty.

"**Administrator/Benchmark Event**" means, in respect of any Securities and a Relevant Benchmark, the occurrence or existence, as determined by the Calculation Agent, of any of the following events in respect of such Relevant Benchmark:

(a) any authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register in respect of a Relevant Benchmark or the administrator or sponsor of a Relevant Benchmark has not been, or will not be, obtained or has been, or will be, rejected, refused, suspended or withdrawn by the relevant competent authority or other relevant official body, or any prohibition by a relevant competent authority or other relevant official body, in each case with the effect that the

Issuer and/or the Calculation Agent (as applicable) and/or any other relevant entity is not, or will not be, permitted under any applicable law or regulation to use the Relevant Benchmark to perform its or their respective obligations under the Securities; or

(b) any material change to the methodology or formula for the Relevant Benchmark or any other means of calculating the Relevant Benchmark, as determined by the Calculation Agent ("**Material Methodology Change Event**").

"**Administrator/Benchmark Event Effective Date**" means:

(a) in the case of paragraph (a) of the definition of "Administrator/Benchmark Event", the date from which the Relevant Benchmark may no longer be used under any applicable law or regulation by the Issuer and/or the Calculation Agent (as applicable) and/or any other relevant entity to perform its or their respective obligations under the Securities; or

(b) in the case of paragraph (b) of the definition of "Administrator/Benchmark Event", the date on which the change to the methodology or formula for the Relevant Benchmark becomes effective.

"**Affiliate**" has the meaning given in Rule 405 under the Securities Act.

"**Agency Agreement**" has the meaning given in Part A (*Introduction*).

"**Agents**" means the Principal Programme Agent, the Paying Agents, the Registrar, the Transfer Agent, the Calculation Agent, the Delivery Agent as appointed by the Issuer and, if applicable, the relevant Guarantor, and each Relevant Programme Agent.

"**Alternative Settlement Date**" means such date as the Calculation Agent reasonably determines.

"**American Style**" has the meaning given in General Condition 11.1(a) (*Exercise Style and Period*).

"**Amortised Face Amount**" has the meaning given in General Condition 5.5 (*Early Redemption of Zero Coupon Notes*).

"**Amortisation Yield**" means the yield specified as such in the relevant Pricing Supplement or, if none is specified, the yield determined in accordance with General Condition 5.5 (*Early Redemption of Zero Coupon Notes*).

"**Automatic Exercise**" means, if specified to be applicable in the relevant Pricing Supplement, that the relevant Warrants or Certificates not exercised prior to the Expiration Date shall be deemed to have been exercised on the Expiration Date.

"**Automatic Exercise Warrant Notice**" means, in respect of Warrants, the notice specified in General Condition 11.2 (*Automatic Exercise Warrant Notice Requirement*).

"**Bank**" means a bank in the principal financial centre for such currency or, in the case of euro, in a city in which banks have access to TARGET2 provided however, that payment will not be made by mail to an address in the United States or by transfer to an account maintained in the United States.

"**Base Currency**" has the meaning given to it in FX Linked Provision 10 (*Definitions*).

"**Bearer Global Security**" means a Permanent Bearer Global Security or a Temporary Bearer Global Security.

"**Bearer Notes**" means any Notes specified to be a Bearer Security in the relevant Pricing Supplement.

"**Bearer Securities**" means any Securities specified as such in the relevant Pricing Supplement.

"**Benchmark**" means the benchmark or other rate specified in the relevant Pricing Supplement.

"**Bermudan Style**" has the meaning given in General Condition 11.1(a) (*Exercise Style and Period*).

"**Bond**" has the meaning given in the Bond Linked Provisions.

"**Bond Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**Bond Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "Bond Linked Interest".

"**Bond Linked Securities**" means any Securities in respect of which the "Bond Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Broken Amount**" means the amount specified as such in the relevant Pricing Supplement.

"**Business Day**" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for business in the relevant place of presentation (in the case of Securities in definitive form), in such jurisdictions as shall be specified as "**Additional Financial Centres**" in the relevant Pricing Supplement and:

(a) in the case of a payment in a currency other than euro, where payment is to be made by transfer to an account maintained with a bank in the relevant currency, a day on which foreign exchange transactions may be claimed on and commercial banks settle payments in the relevant currency in the principal financial centre of the control of such currency;

(b) in the case of a payment in euro, a day which is a TARGET2 Settlement Day and/or

(c) in the case of one or more Additional Financial Centres, a day on which commercial banks and foreign exchange markets settle payments in such currency in the Additional Financial Centre(s) or, if no currency is indicated, generally in each of the Additional Financial Centres,

provided that if the Additional Financial Centres are specified in the relevant Pricing Supplement to be or to include "TARGET" or "TARGET2", then Business Day shall also be a day which is a TARGET2 Settlement Day (in addition to the terms of the foregoing paragraphs (a), (b) and (c), as applicable); and in cases where payments and/or deliveries are to be made through a Relevant Clearing System, a day on which such Relevant Clearing System is (or, but for the occurrence of a Settlement Disruption Event, would have been) also open for the acceptance and execution of settlement instructions.

"**Business Day Convention**" has the meaning given in General Condition 12 (*Business Day*).

"**Calculation Agent**" means J.P. Morgan Securities plc and includes any alternative calculation agent appointed from time to time in respect of a Series of Securities identified as such in the relevant Pricing Supplement.

"**Cash Settlement**" means payment of the Settlement Amount or Redemption Amount, as applicable, in cash, as specified in the relevant Pricing Supplement.

"**Certificates**" has the meaning given in Part A (*Introduction*).

"**Clearing System Business Day**" means, in respect of any Relevant Clearing System, any day on which such Relevant Clearing System is (or, but for the occurrence of a Settlement Disruption Event, would have been) open for the acceptance and execution of settlement instructions.

"**Clearstream Frankfurt**" means Clearstream Banking AG, Eschborn, Germany or any successor or replacement thereto.

"**Clearstream, Luxembourg**" means Clearstream Banking, société anonyme or any successor or replacement thereto.

"**Closed Periods**" has the meaning given in General Condition 2.1(g) (*Closed Periods in respect of Danish Notes, Norwegian Securities, Swedish Securities and Finnish Securities*)).

"**Code**" means the U.S. Internal Revenue Code of 1986, as amended.

"**Commodity Exchange Act**" means the U.S. Commodity Exchange Act, as amended.

"**Commodity Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "Commodity Linked Interest".

"**Commodity Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**Commodity Linked Securities**" means any Securities in respect of which the "Commodity Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Compounded Daily €STR Recommended Fallback Rate**" means:

(a) the rate (if any) recommended as the replacement for €STR by (i) the European Central Bank (or any successor administrator of €STR) or (ii) a committee officially endorsed or convened by (i) the European Central Bank (or any successor administrator of €STR) and/or (ii) the European Securities and Markets Authority, in each case for such purpose ("**Fallback €STR**"); or

(b) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback €STR, and (ii) neither the administrator of €STR nor any authorised distributor has provided or published Fallback €STR for the day in respect of which it is required, the last provided or published Fallback €STR; or

(c) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback €STR, (ii) neither the administrator of €STR nor any authorised distributor has provided or published Fallback €STR for the day in respect of which it is required, and (iii) there is no last provided or published Fallback €STR, the last provided or published €STR; or

(d) if the Calculation Agent determines that:

(i) Fallback €STR has not been published or provided before the end of the first TARGET2 Settlement Day following the Index Cessation/Benchmark Event Effective Date with respect to €STR; or

(ii) an Index Cessation/Benchmark Event Effective Date has occurred with respect to Fallback €STR,

the sum of (x) the rate on the deposit facility that banks may use to make overnight deposits with the Eurosystem ("**EDFR**") and (y) such spread as the Calculation Agent considers to be reasonable taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

"**Compounded Daily SOFR Recommended Fallback Rate**" means:

(a) the rate (if any) recommended as the replacement for SOFR by the Federal Reserve Board or the Federal Reserve Bank of New York, or by a committee officially endorsed or convened by the Federal Reserve Board or the Federal Reserve Bank of New York for such purpose ("**Fallback SOFR**"); or

(b) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback SOFR, and (ii) neither the

administrator of SOFR nor any authorised distributor has provided or published Fallback SOFR for the day in respect of which it is required, the last provided or published Fallback SOFR; or

(c) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback SOFR, (ii) neither the administrator of SOFR nor any authorised distributor has provided or published Fallback SOFR for the day in respect of which it is required, and (iii) there is no last provided or published Fallback SOFR, the last provided or published SOFR; or

(d) if the Calculation Agent determines that (i) Fallback SOFR has not been published or provided before the end of the first U.S. Government Securities Business Day following the Index Cessation/Benchmark Event Effective Date with respect to SOFR, or (ii) an Index Cessation/Benchmark Event Effective Date has occurred with respect to Fallback SOFR, the Overnight Bank Funding Rate (known as "**OBFR**)" administered by the Federal Reserve Bank of New York or any successor administrator.

"**Compounded Daily SONIA Recommended Fallback Rate**" means:

(a) the rate (if any) recommended as the replacement for SONIA by (i) the administrator of SONIA if the administrator of SONIA is a national central bank, or (ii) if the national central bank administrator of SONIA does not make a recommendation or the administrator of SONIA is not a national central bank, a committee designated for such purpose by one or both of the Financial Conduct Authority (or any successor thereto) and the Bank of England ("**Fallback SONIA**"); or

(b) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback SONIA, and (ii) neither the administrator of SONIA nor any authorised distributor has provided or published Fallback SONIA for the day in respect of which it is required, the last provided or published Fallback SONIA; or

(c) if the Calculation Agent determines that (i) an Index Cessation/Benchmark Event Effective Date has not occurred with respect to Fallback SONIA, (ii) neither the administrator of SONIA nor any authorised distributor has provided or published Fallback SONIA for the day in respect of which it is required, and (iii) there is no last provided or published Fallback SONIA, the last provided or published SONIA; or

(d) if the Calculation Agent determines that (i) Fallback SONIA has not been published or provided before the end of the first London Banking Day following the Index Cessation/Benchmark Event Effective Date with respect to SONIA, or (ii) an Index Cessation/Benchmark Event Effective Date has occurred with respect to Fallback SONIA, the last provided official bank rate as determined by the Monetary Policy Committee of the Bank of England and published by the Bank of England.

"**Compounded Daily TONA Recommended Fallback Rate**" means:

(a) means the rate (inclusive of any spreads or adjustments) recommended as the replacement for TONA by a committee officially endorsed or convened by the Bank of Japan for the purpose of recommending a replacement for TONA (which rate may be produced by the Bank of Japan or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorised distributor ("**Fallback TONA**"); or

(b) if there is Fallback TONA before the end of the first Tokyo Banking Day following the Index Cessation/Benchmark Event Effective Date but neither the administrator nor authorised distributors provide or publish the Fallback TONA, then, subject to the below, in respect of any day for which the Fallback TONA is required, references to the Fallback TONA will be deemed to be references to the last provided or published Fallback TONA. However, if there is no last provided or published Fallback TONA, then in respect of any

day for which the Fallback TONA is required, references to Fallback TONA will be deemed to be references to the last provided or published TONA; or

(c) if the Calculation Agent determines that (i) there is no Fallback TONA before the end of the first Tokyo Banking Day following the Index Cessation/Benchmark Event Effective Date; or (ii) there is Fallback TONA and an Index Cessation/Benchmark Event Effective Date subsequently occurs with respect to Fallback TONA, then the rate for a TONA Fixing Day occurring on or after Index Cessation/Benchmark Event Effective Date or a Fallback TONA Fixing Day occurring on or after the Index Cessation Effective Date with respect to Fallback TONA will be a commercially reasonable alternative for TONA or Fallback TONA (as applicable) determined by the Calculation Agent, taking into account any rate implemented by central counterparties and/or futures exchanges, in each case with trading volumes in derivatives or futures referencing TONA or Fallback TONA (as applicable) that the Calculation Agent considers sufficient for that rate to be a representative alternative rate,

where "**Fallback TONA Fixing Day**" means, in respect of Fallback TONA and a Tokyo Banking Day "i", the publication day specified by the administrator of Fallback TONA for Fallback TONA in its benchmark methodology.

"**Compounded Index**" means the SONIA Compounded Index, the SOFR Compounded Index, or any other rate which the Calculation Agent determines to be a Compounded Index.

"**Compounded RFR**" means each of Compounded Daily SONIA, Compounded Daily SOFR, Compounded Daily TONA, Compounded Daily €STR, or any other rate which the Calculation Agent determines to be a Compounded RFR.

"**Conditions**" has the meaning given in Part A (*Introduction*).

"**Coupon Amount**" means the amount specified as such in the relevant Pricing Supplement.

"**Coupon Payment Date**" means each date specified as such in the relevant Pricing Supplement.

"**Coupon Period**" means the period commencing on, and including (or in the case of Swedish Warrants and Swedish Certificates, excluding) the Issue Date and ending on, but excluding (or in the case of Swedish Warrants and Swedish Certificates, including), the first Coupon Payment Date and each successive period beginning on, and including (or in the case of Swedish Warrants and Swedish Certificates, excluding) a Coupon Payment Date and ending on, but excluding (or in the case of Swedish Warrants and Swedish Certificates, including) the next succeeding Coupon Payment Date.

"**Credit Linked Notes**" means any Notes in respect of which the "Credit Linked Note Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**CREST CDI Securities**" has the meaning given in General Condition 1.1(b)(xi) (*CREST CDI Securities*).

"**Danish Notes**" has the meaning given in General Condition 1.1(b)(iii) (*Danish Notes*).

"**Danish Programme Agent**" means Skandinaviska Enskilda Banken AB (publ), or any successor or additional agent appointed in connection with the relevant Danish Notes in accordance with the Agency Agreement.

"**Danish Record Date**" means, in respect of Danish Notes, the record date as set out in the applicable Danish rules regarding dematerialised securities issued through the VP.

"**Danish Registrar**" means the VP.

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these General Conditions or the relevant Pricing Supplement and:

(a) if "**Actual/Actual (ICMA)**" is so specified, means:

(i) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year; and

(ii) where the Calculation Period is longer than one Regular Period, the sum of:

(A) the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods normally ending in any year; and

(B) the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods normally ending in any year;

(b) if "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);

(c) "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(d) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(e) if "**30/360**" "**360/360**" or "**Bond Basis**" is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1) + (D_2 - D_1)]}{360}$$

Where:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day of the Calculation Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D_1 is greater than 29, in which case D_2 will be 30;

(f) if "**30E/360**" or "**Eurobond Basis**" is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1) + (D_2 - D_1)]}{360}$$

Where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day of the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D_2 will be 30; and

(g) if "**30E/360 (ISDA)**" is so specified, means the number of days in the Calculation Period in respect of which payment is being made divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1) + (D_2 - D_1)]}{360}$$

Where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D_2 will be 30.

"**Dealer**" means any dealer specified in the relevant Pricing Supplement.

"**Deed of Covenant**" has the meaning given in Part A (*Introduction*).

"**Deed Poll**" has the meaning given in General Condition 28.2 (*Means of Substitution (Securities other than German Securities and French Securities)*).

"**Delivery Agent**" means J.P. Morgan Securities plc or any successor thereof (or such other Delivery Agent as may be appointed from time to time and as specified in the relevant Pricing Supplement).

"**Delivery Date**" has the meaning given in General Condition 14.3 (*Delivery of Reference Asset Amount*).

"**Delivery Expenses**" means all expenses, including any applicable depository charges, transaction or exercise charges, stamp duty, stamp duty reserve tax and/or other taxes or duties, that arise from the delivery and/or transfer of any Reference Asset Amount(s).

"**Disruption Cash Settlement Price**" means such amount as specified in the relevant Pricing Supplement, or, if not so specified, an amount equal to the fair market value of the relevant Security (but not taking into account any interest accrued on any Security) on such day as shall be selected by the Calculation Agent in its discretion adjusted to take account fully for any losses, expenses and costs to the Issuer and/or any affiliate of the Issuer of unwinding or adjusting any underlying or related hedging arrangements (including but not limited to any options or selling or otherwise realising any relevant Share or other instruments or assets of any type whatsoever which the Issuer and/or any of its affiliates may hold as part of such hedging arrangements), all as calculated by the Calculation Agent.

"**DTC**" means The Depository Trust Company or any successor or replacement thereto.

"**DTC Custodian**" means the custodian on behalf of DTC.

"**Dual Currency Notes**" means any Notes in respect of which the "Dual Currency Note Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Early Payment Amount**" means,

(a) for the purposes of General Condition 15.2 (*Consequences of an Event of Default*), as defined therein; and

(b) for all other purposes, unless otherwise specified in the Conditions, where:

(i) "Early Payment Amount 1" is specified to be applicable in the relevant Pricing Supplement, Early Payment Amount 1;

(ii) "Early Payment Amount 2" is specified to be applicable in the relevant Pricing Supplement, Early Payment Amount 2; or

(iii) "Early Payment Amount 3" is specified to be applicable in the relevant Pricing Supplement, Early Payment Amount 3.

"**Early Payment Amount 1**" means an amount determined by the Calculation Agent on the second Business Day immediately preceding the due date for the early redemption or settlement of the Securities, representing the fair market value of such Securities, determined using its internal models and methodologies by reference to such factors as the Calculation Agent may consider to be appropriate including, without limitation:

(a) market prices or values for the underlying(s) and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid or offer prices of the underlying(s) (as relevant);

(b) the remaining term of the Securities had they remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption;

(c) the value at the relevant time of any minimum redemption or cancellation amount which would have been payable had the Securities remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption or exercise date;

(d) if applicable, accrued interest;

(e) internal pricing models;

(f) prices at which other market participants might bid for securities similar to the Securities; and

(g) any other information which the Calculation Agent considers to be relevant (but ignoring the event which resulted in such early redemption).

"**Early Payment Amount 2**" means an amount determined by the Calculation Agent on the second Business Day immediately preceding the due date for the early redemption or settlement of the Securities, representing the fair market value of such Securities, determined using its internal models and methodologies by reference to such factors as the Calculation Agent may consider to be appropriate including, without limitation:

(a) market prices or values for the underlying(s) and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid or offer prices of the underlying(s) (as relevant);

(b) the remaining term of the Securities had they remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption;

(c) the value at the relevant time of any minimum redemption or cancellation amount which would have been payable had the Securities remained outstanding to scheduled maturity or expiry and/or any scheduled early redemption or exercise date;

(d) if applicable, accrued interest;

(e) internal pricing models;

(f) prices at which other market participants might bid for securities similar to the Securities; and

(g) any other information which the Calculation Agent considers to be relevant (but ignoring the event which resulted in such early redemption),

provided that such amount shall be adjusted to account for all costs incurred by the Issuer and/or the Hedging Entity in connection with such early redemption or settlement, including, without limitation, any costs to the Issuer and/or the Hedging Entity associated with unwinding any funding relating to the Securities, any costs associated with unwinding any related Underlying Hedge Transactions, and all other expenses related thereto, as determined by the Calculation Agent.

"**Early Payment Amount 3**" means an amount equal to the outstanding nominal amount of the relevant Security, including, if applicable, any accrued interest to (but excluding) the date of redemption or settlement of the Securities, as determined by the Calculation Agent.

"**ECP**" means "eligible contract participants" as defined in Section 1(a)(12) of the Commodity Exchange Act.

"**EC Treaty**" means the Consolidated Version of the Treaty on European Union 2012 C326.

"**Effective Date**" means, with respect to any Rate of Interest to be determined on an Interest Determination Date, the date specified as such in the relevant Pricing Supplement or, if none is so specified, the first day of the Interest Period to which such Interest Determination Date relates.

"**Eligible Investor Certification**" means, with respect to:

(i) Rule 144A Securities, the certification by a Holder included in an Exercise Notice and Reference Asset Transfer Notice to the effect that it is an Eligible Investor, including, among other things, it is (i) a QIB, (ii) in relation to Securities issued by JPMSP, a QP, (iii) an ECP and (iv) in relation to Securities issued by JPMSP either (a) a MUSIV or (b) a Qualified Offshore Client, and that it is able to make the representations, warranties, acknowledgments and agreements required in the relevant Investor Letter of Representations as of the certification date and as of the date the underlying Reference Assets are delivered to it or by it or the Settlement Amount, Exercise Amount or Redemption Amount is paid to it or by it, as the case may be; and

(ii) Regulation S/Rule 144A Securities, either (a) each of the certifications required in (i) above or (b) a Non-U.S. Certification, as applicable.

"**Eligible Investors**" are transferees of Securities satisfying (or who upon transfer of Securities shall satisfy) each of the terms set forth in General Condition 2.3(a)(iii) (*Rule 144A Securities and Rule 144A New York Law Notes*) or General Condition 2.3(a)(iv) (*Regulation S/Rule 144A Securities*) in connection with any transfer and holding of such Securities.

"**Equity Certification**" means, in respect of Physical Settlement and a Reference Asset Transfer Notice, certain representations with respect to Shares as set out in the form of the Reference Asset Transfer Notice set out in the Agency Agreement (and which may be obtained during normal business hours from the specified office of the Relevant Programme Agent).

"**Established Rate**" means the rate for the conversion of the Specified Currency (including compliance with rules relating to rounding in accordance with applicable European Community regulations) into euro established by the Council of the European Union pursuant to Article 123 of the Treaty.

"**EU Prospectus Regulation**" means Regulation (EU) 2017/1129, as amended.

"**EURIBOR**" means the Euro Interbank Offered Rate.

"**euro**", "**EUR**" and "**€**" means the lawful single currency of the member states of the European Union that have adopted and continue to retain a common single currency through monetary union in accordance with European Union treaty law (as amended from time to time).

"**Euroclear**" means Euroclear Bank SA/NV or any successor or replacement thereto.

"**Euroclear Finland**" means Euroclear Finland Oy, the Finnish Central Securities Depository or any successor or replacement thereto.

"**Euroclear Finland register day**" has the meaning given in General Condition 6.2(d) (*Payments in respect of Finnish Notes*) in respect of Finnish Notes and the meaning given in General Condition 11.3(k)(v) (*Record Date*) in respect of Finnish Warrants.

"**Euroclear Finland Rules**" means Finnish laws, regulations, decisions and operating procedures from time to time applicable to the Finnish Securities and/or issued by Euroclear Finland.

"**Euroclear France**" means Euroclear France S.A. or any successor or replacement thereto.

"**Euroclear France Account Holder**" means any authorised financial intermediary institution entitled to hold, directly or indirectly, accounts on behalf of its customers with Euroclear France, and includes Euroclear and the depository bank for Clearstream, Luxembourg.

"**Euroclear Sweden**" means Euroclear Sweden AB or any successor or replacement thereto.

"**European Style**" has the meaning given in General Condition 11.1(a) (*Exercise Style and Period*).

"**Euro-zone**" means the region comprised of member states of the European Union that adopt the single currency in accordance with the Treaty establishing the European Community, as amended.

"**Event of Default**" has the meaning given in General Condition 15.1 (*Occurrence of Event of Default*).

"**Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended.

"**Exchange Date**" means, in relation to a Temporary Global Security, the day falling after the expiry of 40 days after its issue date and, in relation to a Permanent Global Security, a day falling not less than 60 days, or in the case of failure to pay principal, the redemption amount or settlement amount in respect of any Securities when due, 30 days, after the day on which the notice requiring exchange is given and on which banks are open for business in the city in which

the specified office of the Relevant Programme Agent is located and in the city in which the Relevant Clearing System is located.

"**Exercise Amount**" means, in the case of Securities for which Physical Settlement applies, the amount payable by the intended recipient of the Reference Assets upon exercise of such Securities, as specified in the relevant Pricing Supplement.

"**Exercise Date**" means the day, as specified in the relevant Pricing Supplement, during the Exercise Period on which a Security is, or is deemed to be, exercised in accordance with the General Conditions.

"**Exercise Notice**" means:

(a) in respect of Warrants other than Warrants which are German Securities, a notice (substantially in the form provided by the Relevant Programme Agent), with any such amendments as the Issuer may specify, and which shall:

(i) specify the number of Warrants of each Series or Tranche being exercised and, if applicable, attach the Warrants in definitive form being exercised;

(ii) specify the number of the Holder's account at the Relevant Clearing System(s) (if applicable) to be debited with the Warrants being exercised;

(iii) irrevocably instruct the Relevant Clearing System(s), or the Relevant Programme Agent in the case of Warrants in definitive form or Finnish Warrants, Norwegian Warrants and Swedish Warrants, as applicable, to debit on or before the Settlement Date the account of the relevant Holder with the Warrants being exercised and to credit the account of the Relevant Programme Agent;

(iv) if the relevant Pricing Supplement confer on the Holder an option to receive upon exercise either (A) Cash Settlement, (B) Issuer Physical Settlement or (C) Holder Physical Settlement, specify whether the Holder requires Cash Settlement or Physical Settlement. If the relevant Pricing Supplement confer on the Issuer an option to deliver either Cash Settlement or Physical Settlement, its choice shall be notified to the Holders in accordance with General Condition 27 (*Notices*);

(v) if the Warrants are to be, or may be, settled by Issuer Physical Settlement (whether in accordance with the relevant Pricing Supplement or at the option of the Issuer or the Holder) include an irrevocable undertaking to pay the Exercise Amount on or prior to the relevant Settlement Date or otherwise in accordance with the relevant Pricing Supplement;

(vi) if the Warrants are to be, or may be, settled by Holder Physical Settlement (whether in accordance with the relevant Pricing Supplement or at the option of the Holder or the Issuer) include an irrevocable undertaking to deliver the Reference Asset on or prior to the relevant Settlement Date or otherwise in accordance with the relevant Pricing Supplement:

(A) include an irrevocable undertaking to pay (i) any applicable Expenses due by reason of the exercise of Warrants by such Holder including, for the avoidance of doubt, any Expenses which are required by law to be deducted or withheld from any payments or as a result of a transfer of a Reference Asset following the exercise of Warrants and (ii) in the case where Expenses are required to be deducted or withheld by the Holder from payments it makes to the Issuer, such additional amount as is necessary to ensure that the net amount actually received by the Issuer (free and clear of Expenses, whether assessed against Issuer or Holder) will equal the full amount the Issuer would have received had no such deduction or withholding been required;

(B) include an authorisation to the Issuer (i) (in the case of Cash Settlement) to deduct any Expenses from the Settlement Amount, (ii) (in the case of

Holder Physical Settlement) to deduct any Expenses from the Exercise Amount or any other amount payable by the Issuer to the Holder in connection with the exercise of such Warrants or (iii) (in the case of Issuer Physical Settlement) to delay delivery of the Reference Asset until such Expenses have been paid by the Holder;

(C) except with respect to Swedish Warrants and to Finnish Warrants (if applicable) include a Warrant Account Notice;

(D) except with respect to Swedish Warrants and Finnish Warrants (if applicable) include a Non-U.S. Certification if "Physical Settlement" is applicable to the Warrants; and

(E) authorise the production of such certification in applicable administrative or legal proceedings; and

(b) in respect of Warrants which are German Securities, a notice pursuant to General Condition 27.9 (*Notices by Holders of German Securities*) which also meets the requirements of paragraphs (iv) to (vi)(B) (inclusive) of paragraph (a) above.

"**Exercise Period**" means, in respect of:

(a) Securities designated in the relevant Pricing Supplement as "American Style", in respect of (i) Securities to which the Share Linked Provisions, Index Linked Provisions and/or Fund Linked Provisions apply, all Scheduled Trading Days (or such other types of days as may be specified in the relevant Pricing Supplement) from, and including, the Issue Date to, and including, the Expiration Date, and (ii) all other Securities, the period commencing on, and including, the Issue Date and ending on, and including, the Expiration Date;

(b) Securities designated in the relevant Pricing Supplement as "European Style", the Expiration Date; and

(c) Securities designated in the relevant Pricing Supplement as "Bermudan Style", each Potential Exercise Date and the Expiration Date.

"**Expenses**" means all expenses, costs, charges, levies, tax, duties, withholding, deductions or other payments including without limitation, all depository, custodial, registration, transaction and exercise charges and all stamp, issues, registration or, securities transfer or other similar taxes or duties incurred by the Issuer and/or a Hedging Entity in respect of the Issuer's obligations under the Securities.

"**Expiration Date**" means the date specified as such in the relevant Pricing Supplement, provided that if "Expiration Date subject to Valuation Date adjustment" is stated to be applicable in the relevant Pricing Supplement, then the provisions of the Specific Product Provisions shall apply to the Expiration Date as if such date were a Valuation Date.

"**Extraordinary Resolution**" means a resolution passed at a meeting duly convened and held in accordance with the Agency Agreement by a majority of at least 75 per cent. of the principal amount (in the case of Notes) or number outstanding held (in the case of Warrants or Certificates) of the Securities represented and voting at such meeting. A resolution in writing signed or electronically approved using the systems and procedures in place from time to time of a Relevant Clearing System by or on behalf of 75 per cent. or more of Holders of Securities, by reference to their original aggregate principal amount (in the case of Notes) or the number of Securities outstanding (in the case of Warrants and Certificates), who for the time being are entitled to receive notice of a meeting shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of the Holders of the Securities. Such resolution in writing may be contained in one document or in several documents in like form each signed by or on behalf of one or more of the relevant Holders of Securities or may be in the form of SWIFT or other electronic instructions as permitted by the rules and procedures of the Relevant Clearing System, and in each case the date of such resolution shall be the date that such 75 per cent. majority is reached.

"**FATCA**" means (a) Sections 1471 to 1474 of the Code or any associated regulations or other official guidance; (b) any treaty, law, regulation or other official guidance enacted in any other jurisdiction, or relating to an intergovernmental agreement between the U.S. and any other jurisdiction, which (in either case) facilitates the implementation of clause (a) above; or (c) any agreement pursuant to the implementation of clauses (a) or (b) above with a taxing authority in any jurisdiction.

"**FDIC**" has the meaning given in General Condition 3.1(c) (*Status of the Guarantees*).

"**Final Redemption Amount**" has the meaning given in the relevant Pricing Supplement.

"**Finnish Certificates**" means any Certificates which are specified to be Finnish Securities in the relevant Pricing Supplement. Finnish Certificates will be registered as notes or warrants in the Finnish Register pursuant to the Euroclear Finland Rules.

"**Finnish Notes**" means any Notes which are specified to be Finnish Securities in the relevant Pricing Supplement.

"**Finnish Programme Agent**" means Skandinaviska Enskilda Banken (AB) (publ), or any successor or additional agent appointed in connection with the relevant Finnish Securities in accordance with the Agency Agreement.

"**Finnish Record Date**" has the meaning given in General Condition 6.2(d) (*Payments in respect of Finnish Notes*) in respect of Finnish Notes and the meaning given in General Condition 11.3(k)(v) (*Record Date*) in respect of Finnish Warrants.

"**Finnish Register**" has the meaning given in General Condition 1.2(d) (*Title to Finnish Securities*).

"**Finnish Registrar**" has the meaning given in General Condition 1.1(b)(iv) (*Finnish Securities*).

"**Finnish Securities**" has the meaning given in General Condition 1.1(b)(iv) (*Finnish Securities*) and means Finnish Notes, Finnish Warrants and/or Finnish Certificates as the context may require.

"**Finnish Warrants**" means any Warrants which are specified to be Finnish Securities in the relevant Pricing Supplement.

"**Fixed Coupon Amount**" means the amount specified as such in the relevant Pricing Supplement.

"**Fixed Rate Coupon**" means the rate specified in the relevant Pricing Supplement.

"**Fixed Rate Notes**" means any Notes in respect of which the "Fixed Rate Note Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Floating Rate Coupon**" means the rate of interest payable from time to time in respect of a Certificate in respect of which the "Certificate Floating Rate Coupon Provisions" are specified to be applicable in the relevant Pricing Supplement and that is either specified or calculated in accordance with the provisions in such relevant Pricing Supplement.

"**Floating Rate Coupon Commencement Date**" means the Issue Date or such other date as may be specified in the relevant Pricing Supplement.

"**Floating Rate Coupon Determination Date**" means, with respect to a Floating Rate Coupon and a Floating Rate Coupon Period, the date specified as such in the relevant Pricing Supplement or, if none is so specified:

(a) subject where any of (b), (c) or (d) below applies:

(i) the first day of such Floating Rate Coupon Period if the Specified Currency is Sterling;

(ii) the day falling two TARGET2 Settlement Days prior to the first day of such Floating Rate Coupon Period if the Specified Currency is euro;

(iii) the day falling two Business Days in London for the Specified Currency prior to the first day of such Floating Rate Coupon Period if the Specified Currency is neither Sterling nor euro;

(b) in case of ISDA Determination (unless otherwise provided in the relevant Pricing Supplement) the Floating Rate Coupon Determination Date will be the date on which the applicable rate is determined in accordance with the applicable Floating Rate Option as determined by the Calculation Agent;

(c) where SONIA Floating Rate Determination is specified in the relevant Pricing Supplement and:

(i) SONIA Floating Rate Determination (Non-Index Determination) is specified to be applicable in the relevant Pricing Supplement, the fifth day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in London prior to the Floating Rate Coupon Period End Date in respect of each Floating Rate Coupon Period, or

(ii) SONIA Floating Rate Determination (Index Determination) is specified to be applicable in the relevant Pricing Supplement, the day falling the Relevant Number of London Banking Days prior to the Floating Rate Coupon Period End Date in respect of the relevant Floating Rate Coupon Period;

(d) where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement and:

(i) Index Determination is specified to be not applicable in the relevant Pricing Supplement, the second U.S. Government Securities Business Day prior to the Floating Rate Coupon Period End Date in respect of each Floating Rate Coupon Period; or

(ii) Index Determination is specified to be applicable in the relevant Pricing Supplement, the day falling the Relevant Number of U.S. Government Securities Business Days prior to the Floating Rate Coupon Period End Date in respect of each Floating Rate Coupon Period;

(e) where TONA Floating Rate Determination is specified in the relevant Pricing Supplement, "p" Business Days prior to the Floating Rate Coupon Period End Date of the relevant Floating Rate Coupon Period; or

(f) where €STR Floating Rate Determination is specified in the relevant Pricing Supplement, "p" TARGET2 Settlement Days prior to the Floating Rate Coupon Period End Date in respect of each Floating Rate Coupon Period.

"**Floating Rate Coupon Payment Date**" means each date specified as such in the relevant Pricing Supplement, adjusted in accordance with the Business Day Convention.

"**Floating Rate Coupon Period**" means the period commencing on, and including (or in the case of Swedish Certificates, excluding) the Issue Date and ending on, but excluding (or in the case of Swedish Certificates, including), the first Floating Rate Coupon Period End Date and each successive period beginning on, and including (or in the case of Swedish Certificates, excluding) a Floating Rate Coupon Period End Date and ending on, but excluding (or in the case of Swedish Certificates, including) the next succeeding Floating Rate Coupon Period End Date.

"**Floating Rate Coupon Period End Date**" means the Floating Rate Coupon Payment Date unless otherwise specified in the relevant Pricing Supplement (provided that, in the case of SONIA Floating Rate Determination, SOFR Floating Rate Determination, TONA Floating Rate Determination, €STR Floating Rate Determination or any other Compounded RFR or

Compounded Index, in the event that the Securities are redeemed early other than on a scheduled date for redemption (and on a date that would otherwise not be a Floating Rate Coupon Period End Date), the final Floating Rate Coupon Period End Date shall be the final payment date under the Securities).

"**Floating Rate Notes**" means any Notes in respect of which the "Floating Rate Note Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**French Bearer Securities**" has the meaning given in General Condition 1.1(a)(ii) (*French Bearer Securities*).

"**French Certificates**" means any Certificates which are specified to be French Bearer Securities (*au porteur*) or French Registered Securities in a registered dematerialised form (*au nominatif*), as specified in the relevant Pricing Supplement.

"**French Notes**" means any Notes which are specified to be French Bearer Securities (*au porteur*) or French Registered Securities in a registered dematerialised form (*au nominatif*), as specified in the relevant Pricing Supplement.

"**French Programme Agent**" means BNP Paribas Securities Services, Paris Branch, or any successor or additional agent appointed in connection with the relevant French Securities in accordance with the Agency Agreement.

"**French Registered Securities**" has the meaning given in General Condition 1.1(b)(ii) (*French Registered Securities*).

"**French Registration Agent**" has the meaning given in General Condition 1.1(b)(ii) (*French Registered Securities*).

"**French Securities**" has the meaning given in General Condition 1.1(b)(ii) (*French Registered Securities*).

"**French Warrants**" means any Warrants which are specified to be French Securities in the relevant Pricing Supplement.

"**Fund**" has the meaning given in the Fund Linked Provisions.

"**Fund Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**Fund Linked Securities**" means any Securities in respect of which the "Fund Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Fund Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "Fund Linked Interest".

"**FX Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "FX Linked Interest".

"**FX Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**FX Linked Securities**" means any Securities in respect of which the "FX Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**General Conditions**" means these General Conditions.

"**General Meeting**" has the meaning given in General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*).

"**German Programme Agent**" means BNP PARIBAS Securities Services S.C.A. Frankfurt Branch or any successor or additional agent appointed in connection with the relevant German Securities in accordance with the Agency Agreement.

"**German Securities**" means Bearer Securities which are governed by German law.

"**Global Bearer Note**" means a Bearer Note in global form.

"**Global Certificates**" means Certificates in global form.

"**Global Notes**" means Notes in global form.

"**Global Security**" means a Security in global form representing interests in Securities, and "**Global Securities**" shall be construed accordingly.

"**Global Warrants**" means Warrants in global form.

"**Guarantee**" has the meaning given in Part A (*Introduction*).

"**Guarantor**" has the meaning given in Part A (*Introduction*).

"**Hedging Entity**" means the Issuer or any affiliate(s) of the Issuer or any entity (or entities) acting on behalf of the Issuer engaged in any underlying or hedging transactions relating to the Securities and/or Reference Assets in respect of the Issuer's obligations under the Securities.

"**Holder**" has the meaning given in General Condition 1.2 (*Title*).

"**Holder Physical Settlement**" means the payment of the Exercise Amount by the Issuer to the Holder against delivery of the Reference Asset by the Holder to the Issuer as provided in General Condition 11.3(e) (*Holder Physical Settlement*).

"**Index Cessation/Benchmark Event**" means, in respect of any Securities and a Reference Rate (each, the "**Applicable Rate**"), the occurrence or existence, as determined by the Calculation Agent, of one or more of the following events:

(a) a public statement or publication of information by or on behalf of the administrator of the Applicable Rate announcing that it has ceased or will cease to provide the Applicable Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Applicable Rate;

(b) a public statement or publication of information by the regulatory supervisor for the administrator of the Applicable Rate, the central bank for the currency of the Applicable Rate, an insolvency official with jurisdiction over the administrator for the Applicable Rate, a resolution authority with jurisdiction over the administrator for the Applicable Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Applicable Rate, which states that the administrator of the Applicable Rate has ceased or will cease to provide the Applicable Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Applicable Rate; or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of such Applicable Rate announcing that the regulatory supervisor has determined that such Applicable Rate is no longer, or as of a specified future date will no longer be, representative of the underlying market and economic reality that such Applicable Rate is intended to measure and that representativeness will not be restored.

"**Index Cessation/Benchmark Event Effective Date**" means the earliest to occur of the following events with respect to the then-current relevant Applicable Rate:

(a) in the case of paragraph (a) or (b) of the definition of "Index Cessation/Benchmark Event", the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the Applicable Rate permanently or indefinitely ceases to provide the Applicable Rate; or

(b) in the case of paragraph (c) of the definition of "Index Cessation/Benchmark Event", the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the Applicable Rate ceases to be representative by reference to the most recent public statement or publication of information referenced therein or, if earlier, the date the Applicable Rate is no longer provided.

For the avoidance of doubt, if the event giving rise to the Index Cessation/Benchmark Event Effective Date occurs on the same day as, but earlier than, the Relevant Time in respect of any determination, the Index Cessation/Benchmark Event Effective Date will be deemed to have occurred prior to the Reference Time for such determination.

"**Index Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "Index Linked Interest".

"**Index Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**Index Linked Securities**" means any Securities in respect of which the "Index Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Instalment Amount**" means the amount specified as such in the relevant Pricing Supplement.

"**Instalment Date**" means each date specified as such in the relevant Pricing Supplement.

"**Instalment Notes**" means any Notes specified as such in the relevant Pricing Supplement.

"**Interest Amount**" for a period or an Interest Payment Date, means the amount of interest payable for such period or on the Interest Payment Date as specified in the relevant Pricing Supplement or as determined pursuant to the formula for its calculation set out in the relevant Pricing Supplement.

"**Interest Commencement Date**" means the Issue Date or such other date as may be specified in the relevant Pricing Supplement.

"**Interest Determination Date**" means, with respect to a Rate of Interest and Interest Period, the date specified as such in the relevant Pricing Supplement or, if none is so specified:

(a) subject where any of (b), (c) or (d) below applies:

(i) the first day of such Interest Period if the Specified Currency is Sterling;

(ii) the day falling two TARGET2 Settlement Days prior to the first day of such Interest Period if the Specified Currency is euro;

(iii) the day falling two Business Days in London for the Specified Currency prior to the first day of such Interest Period if the Specified Currency is neither Sterling nor euro;

(b) in case of ISDA Determination (unless otherwise provided in the relevant Pricing Supplement) the Interest Determination Date will be the date on which the applicable rate is determined in accordance with the applicable Floating Rate Option as determined by the Calculation Agent;

(c) where SONIA Floating Rate Determination is specified in the relevant Pricing Supplement and:

(i) SONIA Floating Rate Determination (Non-Index Determination) is specified to be applicable in the relevant Pricing Supplement, the fifth day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in London prior to the Interest Period End Date in respect of each Interest Period, or

(ii) SONIA Floating Rate Determination (Index Determination) is specified to be applicable in the relevant Pricing Supplement, the day falling the Relevant Number of London Banking Days prior to the Interest Period End Date in respect of the relevant Interest Period;

(d) where SOFR Floating Rate Determination is specified in the relevant Pricing Supplement and

(i) Index Determination is specified to be not applicable in the relevant Pricing Supplement, the second U.S. Government Securities Business Day prior to the Interest Period End Date in respect of each Interest Period; or

(ii) Index Determination is specified to be applicable in the relevant Pricing Supplement, the day falling the Relevant Number of U.S. Government Securities Business Days prior to the Interest Period End Date in respect of each Interest Period;

(e) where TONA Floating Rate Determination is specified in the relevant Pricing Supplement, "p" Business Days prior to the Interest Period End Date of the relevant Interest Period; or

(f) where €STR Floating Rate Determination is specified in the relevant Pricing Supplement, "p" TARGET2 Settlement Days prior to the Interest Period End Date in respect of each Interest Period.

"**Interest Payment Date**" means each date specified as such in the relevant Pricing Supplement adjusted, in the case of Floating Rate Notes, in accordance with the Business Day Convention.

"**Interest Period**" means the period beginning on and including (or in the case of Swedish Notes, excluding) the Interest Commencement Date (or in the case of Swedish Notes, the Issue Date) and ending on but excluding (or in the case of Swedish Notes, including) the first Interest Period End Date and each successive period beginning on and including (or in the case of Swedish Notes, excluding) an Interest Period End Date and ending on but excluding (or in the case of Swedish Notes, including) the next succeeding Interest Period End Date.

"**Interest Period End Date** means Interest Payment Date unless otherwise specified in the relevant Pricing Supplement (provided that, in the case of SONIA Floating Rate Determination, SOFR Floating Rate Determination, TONA Floating Rate Determination, €STR Floating Rate Determination or any other Compounded RFR or Compounded Index, in the event that the Securities are redeemed early other than on a scheduled date for redemption (and on a date that would otherwise not be an Interest Period End Date), the final Interest Period End Date shall be the final payment date under the Securities).

"**Intermediated Securities**" means Swiss Securities which are either issued as uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of SIX SIS as custodian (*Verwahrungsstelle*) or (ii) represented by a Global Security that is deposited with SIX SIS and entered into the securities accounts of one or more participants of SIX SIS, therefore, constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*).

"**Intermediated Securities (UBS-cleared)**" means Swiss Certificates (UBS-cleared) which are issued as uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*) and entered into the securities accounts held with UBS Switzerland AG, therefore, constitute intermediated securities (*Bucheffekten*) within the meaning of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*).

"**Intervening Period**" has the meaning given in General Condition 14.6 (*Settlement Disruption Event*).

"**Investment Company Act**" means the U.S. Investment Company Act of 1940, as amended.

"**Investor Letter of Representations**" means a letter in the form provided by the relevant dealer entered into with the relevant Issuer and the relevant Guarantor (if applicable), the relevant arranger and the relevant dealer in relation to the purchase of (as the case may be) Rule 144A Securities which are Warrants or Certificates, Rule 144A Notes or Rule 144A New York Law Notes if such Notes have been exchanged for Securities in definitive form or are being held as Securities in definitive form, Regulation S/Rule 144A Securities or CREST CDI Securities, in each case for the benefit of the Dealer, the relevant arranger (if any), the Issuer and (if applicable) the Guarantor (together with their respective affiliates and control persons).

"**Irish Listing Agent**" means The Bank of New York Mellon S.A./N.V., Dublin Branch, and includes any successor or additional agent or any other such agent identified as such in the relevant Pricing Supplement.

"**ISDA Definitions**" means (i) if "2006 ISDA Definitions" is specified in the applicable Pricing Supplement, the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto ("**ISDA**"), as amended or supplemented as at the Issue Date of the first Tranche of the Securities (the "**2006 Definitions**"), or (ii) if "2021 ISDA Definitions" is specified in the applicable Pricing Supplement, the latest version of the 2021 ISDA Interest Rate Derivatives Definitions, and the latest version of each Matrix (as defined therein), published by ISDA as at the Issue Date of the first Tranche of the Securities (the "**2021 Definitions**").

"**ISDA Fallback Rate**" means the rate that would apply for derivatives transactions referencing the ISDA Definitions on or after the occurrence of an Index Cessation Effective Date (as defined in the ISDA Definitions) (which definition is substantively the same as "Index Cessation/Benchmark Event Effective Date") with respect to a Discontinued Reference Rate (or, where the Discontinued Reference Rate is a Compounded RFR, with respect to the RFR referenced in such Compounded RFR) for the applicable tenor, where applicable.

"**ISDA Rate**" has the meaning given in General Condition 4.2(b)(i) (*ISDA Determination for Floating Rate Notes*).

"**Issue Date**" means the date on which the relevant Securities are issued, as specified in the relevant Pricing Supplement.

"**Issue Price**" means the price specified as such in the relevant Pricing Supplement.

"**Issuer**" means the issuer specified as such in the relevant Pricing Supplement.

"**Issuer Physical Settlement**" means the delivery of the Reference Asset by the Issuer to the Holder against payment by the Holder of the Exercise Amount to the Issuer as provided in General Condition 11.3(d) (*Issuer Physical Settlement*).

"**Italian Certificates**" means any Certificates specified as such in the relevant Pricing Supplement and for which it is intended to seek the admission to trading on the multilateral trading facility of securitised derivatives financial instruments organised and managed by Borsa Italiana S.p.A. ("**SeDex (MTF)**") or the multilateral trading facility EuroTLX ("**EuroTLX**") organised and managed by EuroTLX SIM S.p.A (each, an "**Italian MTF**"), as the case may be.

"**Joint Representative**" has the meaning given in General Condition 24.1(e)(v).

"**JPMorgan Chase Bank, N.A. Guarantee**" has the meaning given in Part A (*Introduction*).

"**JPMorgan Chase & Co. Guarantee**" has the meaning given in Part A (*Introduction*).

"**JPMCFC**" means JPMorgan Chase Financial Company LLC.

"**JPMCFC Guarantor**" has the meaning given in Part A (*Introduction*).

"**JPMSP**" means J.P. Morgan Structured Products B.V.

"**JPMSP Guarantor**" has the meaning given in Part A (*Introduction*).

"**Latest Exercise Time**" means in each case the Exercise Notice shall be delivered:

(a) in the case of "American Style" Warrants, not later than 10.00 a.m. (Local Time) on any Scheduled Trading Day during the relevant Exercise Period;

(b) in the case of "Bermudan Style" Warrants, not later than 10.00 a.m. (Local Time) on any Potential Exercise Date during the relevant Exercise Period; or

(c) in the case of "European Style" Warrants, not later than 10.00 a.m. (Local Time) on the Expiration Date.

"**Local Time**" means the local time in the city of the Relevant Clearing System(s).

"**London Banking Day**" or "**LBD**" means any calendar day (other than a Saturday and Sunday) on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London.

"**Margin**" means the margin specified as such in the relevant Pricing Supplement.

"**Market Access Participation Notes**" means any Notes in respect of which the "Market Access Participation Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**Market Access Participation Provisions**" has the meaning given in Part A (*Introduction*).

"**Masse**" has the meaning given in General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*).

"**Material Methodology Change Event**" has the meaning given in the definition of "Administrator/Benchmark Event" above.

"**Maturity Date**" means the date specified as such in the relevant Pricing Supplement.

"**Maximum Exercise Number**" means the maximum number of Securities which may be exercised on any Exercise Date as specified in the relevant Pricing Supplement.

"**Maximum Rate of Floating Rate Coupon**" means the maximum rate to which the Floating Rate Coupon is subject, as specified in the relevant Pricing Supplement.

"**Maximum Rate of Interest**" means the maximum interest rate to which any applicable rate of interest is subject, as specified in the relevant Pricing Supplement.

"**Minimum Exercise Number**" means the minimum number of Securities which may be exercised on any Exercise Date as specified in the relevant Pricing Supplement.

"**Minimum Rate of Floating Rate Coupon**" means the minimum rate to which the Floating Rate Coupon is subject, as specified in the relevant Pricing Supplement.

"**Minimum Rate of Interest**" means the minimum interest rate to which any applicable rate of interest is subject, as specified in the relevant Pricing Supplement.

"**Minimum Redemption Amount**" means the amount (if any) of any portion (or the entirety, as applicable) of the Redemption Amount or Final Redemption Amount (as applicable) payable by the Issuer on the Scheduled Product Repayment Date which is a known amount, and/or which amount may be determined with certainty, at the time of issuance of the Securities on the Issue Date, and which is payable on the Scheduled Product Repayment Date without being subject to any condition or dependent on the level, rate, price, value, net asset value or other measure of performance of one or more Reference Assets or on any other variable which is not known with certainty at the time of issuance of the Securities on the Issue Date (such amount, a "**Determinable Amount**"), provided that any amount, which prior to conversion to another currency at a foreign exchange rate, is a Determinable Amount, shall be deemed to be a Minimum Redemption Amount, after giving effect to the conversion into such other currency. The Minimum Redemption Amount is in relation to the payment of cash only (in any currency), and excludes any asset which may be physically delivered to the Holders. The Minimum

Redemption Amount (save for any subsequent foreign exchange conversion of a Determinable Amount, as described in the first sentence hereof) will be determined by the Calculation Agent at the time of issuance of the Securities on the Issue Date, and shall be unaffected by any subsequent default, adjustment, postponement or other event in relation to the Securities or the payment obligations of the Issuer under the Securities which was not in effect and not known at the time of issuance of the Securities on the Issue Date (or in the case of any subsequent Tranche of a Series, the Issue Date of the original Tranche of that Series), save that any subsequent amendment to the Conditions pertaining to the Minimum Redemption Amount portion (if any) of the Redemption Amount or Final Redemption Amount (as applicable) will amend the "Minimum Redemption Amount" accordingly.

For such purpose, "**Scheduled Product Repayment Date**" means (i) in the case of Notes, the date specified as the Maturity Date in the relevant Pricing Supplement and (ii) in the case of Certificates, the date specified as the Redemption Date in the relevant Pricing Supplement, in each case without regard to (a) any other earlier date which may become the "Maturity Date" or the "Redemption Date" on the occurrence of a certain event as set out in the relevant definition and (b) any potential adjustment to such date for any reason under the Conditions.

"**MUSIV**" means a "major U.S. institutional investor" as defined in Rule 15a-6(b)(4) under the Exchange Act.

"**National Currency Unit**" means the unit of the currency of a country, as those units are defined on the date on which the country of the Original Currency first participates in European Economic and Monetary Union.

"**New York Law Notes**" means any Notes issued by JPMorgan Chase & Co. for which the governing law is specified in the relevant Pricing Supplement to be the "State of New York".

"**Non-U.S. Certification**" means a certification (substantially in the form provided by the Relevant Programme Agent) from the relevant Holder that, in the case of its Securities, such Securities are not being exercised or redeemed (as applicable) in the United States or by or on behalf of any U.S. Person, that the payment or delivery with respect to such Securities will not be made in the United States or to, or for the account of, a U.S. Person, that none of such Securities were purchased in the United States and that the Holder was not solicited to purchase such Securities in the United States.

"**Norwegian Certificates**" means any Certificates which are specified to be Norwegian Securities in the relevant Pricing Supplement.

"**Norwegian Notes**" means any Notes which are specified to be Norwegian Securities in the relevant Pricing Supplement.

"**Norwegian Programme Agent**" means Skandinaviska Enskilda Banken AB (publ), or any successor or additional agent appointed in connection with the Norwegian Securities in accordance with the Agency Agreement.

"**Norwegian Record Date**" has the meaning given in General Condition 6.2(e) (*Payments in respect of Norwegian Notes*).

"**Norwegian Registrar**" means the VPS.

"**Norwegian Securities**" has the meaning given in General Condition 1.1(b)(v) (*Norwegian Securities*) and means Norwegian Notes, Norwegian Warrants and/or Norwegian Certificates as the context may require.

"**Norwegian Warrants**" means any Warrants which are specified to be Norwegian Securities in the relevant Pricing Supplement.

"**Notes**" has the meaning given in Part A (*Introduction*).

"**Notional Amount**" has the meaning given in General Condition 8.1 (*Coupon Payment Dates*).

"**Optional Redemption Amount**" means the amount specified as such in the relevant Pricing Supplement.

"**Optional Redemption Date**" means any date specified as such in the relevant Pricing Supplement.

"**Original Currency**" has the meaning given in FX Linked Provision 5 (*Successor Currency*).

"**Other Variable Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is specified to be anything other than "Commodity Linked Interest", "FX Linked Interest", "Fund Linked Interest", "Bond Linked Interest", "Index Linked Interest" or "Share Linked Interest".

"**Page**" means such page, section, caption, column or other part of a particular information service (including, but not limited to, Reuters Markets 3000), as may be specified in the relevant Pricing Supplement for the purpose of providing a Reference Rate, or such other page, section, caption, column or other part as may replace it on that information service or on such other information service, in each case as may be nominated by the person or organisation providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to that Reference Rate.

"**Partial Distributions**" has the meaning given in General Condition 13.2(b) (*Obligation to pay postponed*).

"**Partly Paid Notes**" means any Note in relation to which the initial subscription moneys are payable to the Issuer in one or more instalments.

"**Paying Agent**" means any agent appointed as such pursuant to the Agency Agreement.

"**Payment Day**" has the meaning given in General Condition 12.2 (*Payments on Payment Days*).

"**Payment Disruption Event**" means any of:

(a) an event in relation to a Relevant Payment Jurisdiction which has the effect of preventing, restricting or delaying the Calculation Agent or Issuer from:

(i) converting a Relevant Currency into another Relevant Currency through customary legal channels; or

(ii) converting a Relevant Currency into another Relevant Currency at a rate at least as favourable as the rate for domestic institutions located in the Relevant Payment Jurisdiction; or

(iii) delivering any Relevant Currency from accounts inside the Relevant Payment Jurisdiction to accounts outside the Relevant Payment Jurisdiction; or

(iv) delivering a Relevant Currency between accounts inside the Relevant Payment Jurisdiction or to a party that is a non-resident of the Relevant Payment Jurisdiction;

(b) the imposition by the Relevant Payment Jurisdiction (or any political or regulatory authority thereof) of any capital controls, or the publication of any notice of an intention to do so, which the Calculation Agent determines is likely to materially affect the Securities, and notice thereof is given by the Issuer to the Holders in accordance with General Condition 27 (*Notices*); and

(c) the implementation by the Relevant Payment Jurisdiction (or any political or regulatory authority thereof) or the publication of any notice of an intention to implement any changes to the laws or regulations relating to foreign investment in the Relevant Payment Jurisdiction (including, but not limited to, changes in tax laws and/or laws relating to

capital markets and corporate ownership), which the Calculation Agent determines are likely to affect materially the Issuer's ability to hedge its obligations under the Securities; and

(d) an event as a result of which the Issuer is prohibited, unable, or otherwise fails to make any payment, or any portion thereof under the Securities, or to perform any other obligation under the Securities because or arising out of an act of war, insurrection or civil strife, an action by any government or governmental authority or instrumentality thereof (whether *de jure* or *de facto*), legal constraint, terrorism, riots or catastrophe.

"**Payment Disruption Valuation Date**" means, in respect of a Payment Event Payment Date, the second Business Day immediately preceding such Payment Event Payment Date, as determined by the Calculation Agent.

"**Payment Event Cut-off Date**" means the date which is one year after the Maturity Date, Redemption Date, Settlement Date or any other date which is the last date on which amounts under the Securities would be due and payable by the Issuer if not for the occurrence of a Payment Disruption Event, as determined by the Calculation Agent.

"**Payment Event Payment Date**" means, in respect of a Payment Event Cut-off Date, the tenth Business Day immediately following such Payment Event Cut-off Date, as determined by the Calculation Agent.

"**Permanent Bearer Global Security**" has the meaning given in General Condition 1.1(c)(ii) (*Exchange of Bearer Securities other than French Bearer Securities and German Securities*) or General Condition 1.1(c)(iii) (*Exchange of German Securities*), as the case may be.

"**Permanent Global Security**" means a Permanent Bearer Global Security and/or a Permanent Registered Global Security.

"**Permanent Registered Global Security**" means a Permanent Global Security in registered form.

"**Permitted Transferee**", for the purpose of (i) General Condition 2.3(a)(i) (*Securities other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities*), has the meaning given in that General Condition, (ii) General Condition 2.3(a)(iii) (*Rule 144A Securities and Rule 144A New York Law Notes*), has the meaning given in that General Condition, and (iii) General Condition 2.3(a)(iv) (*Regulation S/Rule 144A Securities*), has the meaning given in that General Condition.

"**Physical Settlement**" means (a) for Warrants, either Holder Physical Settlement or Issuer Physical Settlement, (b) for Certificates, the delivery of Reference Assets in discharge of the obligation to pay the Redemption Amount from the Issuer to the Holders as specified in the relevant Pricing Supplement, and (c) for Notes, the delivery of Reference Assets in discharge of the obligation to pay the Final Redemption Amount from the Issuer to the Holders as specified in the relevant Pricing Supplement.

"**Physical Settlement Cut-off Date**" means the relevant date specified in the relevant Pricing Supplement (or if that day is not a Clearing System Business Day, the next following Clearing System Business Day).

"**Potential Exercise Date**" means each date specified as such in the relevant Pricing Supplement, provided that if "Potential Exercise Date subject to Valuation Date adjustment" is stated to be applicable in the relevant Pricing Supplement, then any Specific Product Provisions specified to be applicable in the relevant Pricing Supplement shall apply to the Potential Exercise Date as if such date were a Valuation Date.

"**Pricing Supplement**" has the meaning given in Part A (*Introduction*).

"**Principal Programme Agent**" means The Bank of New York Mellon, London Branch, and includes any successor or additional agent or any other such agent identified as such in the relevant Pricing Supplement.

"**Proceedings**" means any legal action or proceedings arising out of or in connection with the Securities.

"**Product Provider**" means J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

"**Programme**" has the meaning given in Part A (*Introduction*).

"**Put Option Exercise Notice**" means a notice in the form obtainable from the Relevant Programme Agent.

"**QIB**" means a "qualified institutional buyer" as defined in Rule 144A.

"**QP**" means a "qualified purchaser" as defined in Section 2(a)(51) and related rules under the Investment Company Act.

"**Qualified Offshore Client**" means (a) an entity not organised or incorporated under the laws of the United States and not engaged in a trade or business in the United States for U.S. federal income tax purposes, (b) a natural person who is not a U.S. resident or (c) any entity not organised or incorporated under the laws of the United States substantially all of the outstanding voting securities of which are beneficially owned by persons described in (a) or (b) above, which is represented by a U.S. resident professional fiduciary that is not a registered broker-dealer or a bank acting in a broker-dealer capacity within the meaning of Rule 15a-6(a)(4)(i) under the Exchange Act.

"**Quota**" means, if Maximum Exercise Number is specified in the relevant Pricing Supplement as being applicable, a number of Securities equal to such Maximum Exercise Number.

"**Rate of Exchange**" has the meaning given in the relevant Pricing Supplement.

"**Rate of Interest**" means the rate of interest payable from time to time in respect of the Note and that is either specified or calculated in accordance with the provisions in the relevant Pricing Supplement.

"**Recommended Fallback Rate**" means, in relation to:

(a) a Reference Rate that is:

(i) Compounded Daily SONIA, the Compounded Daily SONIA Recommended Fallback Rate;

(ii) Compounded Daily SOFR, the Compounded Daily SOFR Recommended Fallback Rate;

(iii) Compounded Daily TONA, the Compounded Daily TONA Recommended Fallback Rate;

(iv) Compounded Daily €STR, the Compounded Daily €STR Recommended Fallback Rate;

in each case, unless specified otherwise in the Pricing Supplement, provided that in each case, if such reference rate ceases to exist or the Calculation Agent determines that such reference rate likely will cease to exist during the term of the Securities then it shall be deemed that no Recommended Fallback Rate has been specified; and

(b) if "ISDA Fallback Rate" is specified as applicable in the Pricing Supplement, then the Recommended Fallback Rate shall be the ISDA Fallback Rate.

"**Record Date**" has the meaning given in General Condition 6.2(i) (*Record Date*) or General Condition 9.6(d) (*Record Date*) or General Condition 11.3(k) (*Record Date*), in each case as applicable.

"**Redemption Amount**" means the redemption amount specified as such in the relevant Pricing Supplement.

"**Redemption Date**" means the date specified as such in the relevant Pricing Supplement.

"**Redenomination Date**" means (in the case of interest bearing Notes) any date for payment of interest under the Notes or (in the case of Zero Coupon Notes) any date, in each case specified by the Issuer in the notice given to the Holders pursuant to General Condition 22.1 (*Redenomination of Notes*) above and which falls on or after the date on which the country of the Specified Currency first participates in the third stage of European economic and monetary union.

"**Reference Asset**" or "**Reference Assets**" has the meaning specified in the relevant Pricing Supplement.

"**Reference Asset Amount**" or "**Reference Asset Amounts**" means the amount of Reference Assets, as specified in the relevant Pricing Supplement, which is to be delivered by the Delivery Agent on behalf of the Issuer on the date specified in the relevant Pricing Supplement.

"**Reference Asset Transfer Notice**" means a notice, substantially in the form set out in the Agency Agreement (and which may be obtained during normal business hours from the specified office of the Relevant Programme Agent), which shall:

(a) specify the name and address of the relevant Holder, any account details required for delivery and the person from whom the Issuer may obtain details for the delivery of the Reference Asset Amount if such delivery is to be made otherwise than in the manner specified in the General Conditions;

(b) contain a Non-U.S. Certification or, in the case of Rule 144A Securities or Regulation S/Rule 144A Securities, contain an Eligible Investor Certification;

(c) in the case of Securities represented by a Global Security, specify the nominal amount of Securities which are the subject of such notice and the number of the Holder's account at the Relevant Clearing System (if applicable), to be debited with such Securities and irrevocably instruct and authorise any Relevant Clearing System (if applicable), to debit the relevant Holder's account with such Securities on the relevant Interest Payment Date(s), Coupon Payment Date(s) and/or the Settlement Date, the Redemption Date or the Maturity Date, as the case may be;

(d) include an undertaking to pay all Delivery Expenses and, in the case of Securities represented by a Global Security, an authority to debit a specified account of the Holder at the Relevant Clearing System (if applicable), in respect thereof and to pay such Delivery Expenses;

(e) authorise the production of such notice in any applicable administrative or legal proceedings; and

(f) in the case of Securities that may be settled by way of Physical Settlement of underlying shares of a company, contain an Equity Certification which includes certain representations with respect to such shares.

"**Reference Banks**" means each institution specified as such in the relevant Pricing Supplement or, if none, each major bank selected by the Calculation Agent in the interbank market (or, if appropriate, money, swap or over-the-counter index options market) that is most closely connected with the Benchmark (which, if EURIBOR is the relevant Benchmark, shall be the Euro-zone).

"**Reference Currency**" has the meaning given to it in FX Linked Provision 10 (*Definitions*).

"**Reference Dealers**" means four leading dealers in the relevant foreign exchange market, as determined by the Calculation Agent (or any other number of dealers as specified in the relevant Pricing Supplement).

"**Reference Rate**" means any relevant Floating Rate Option, Benchmark, Original Rate, Swap Rate, Compounded RFR, Compounded Index, Underlying RFR or any other rate hereunder as the context may require (howsoever described in the Conditions and as amended from time to time pursuant to the Conditions).

"**Register**" has the meaning given in General Condition 1.2(a) (*Title to Registered Securities (other than Danish Notes, Finnish Securities, Norwegian Securities, Swedish Securities, French Registered Securities, Swiss Securities and Swiss Certificates (UBS-cleared))*).

"**Registered Certificates**" means Certificates in registered form.

"**Registered Global Note**" means a global note in registered form.

"**Registered Global Security**" means a Permanent Registered Global Security or a Temporary Registered Global Security.

"**Registered Notes**" means Notes in registered form.

"**Registered Securities**" means any Securities specified as such in the relevant Pricing Supplement and includes Securities regarded as Registered Securities for the purposes of these General Conditions pursuant to General Condition 1.1(b) (*Registered Securities*) and any Securities in registered definitive form following exchange from a Global Security in accordance with the Conditions (and each shall be a "**Registered Security**").

"**Registered Warrants**" means Warrants in registered form.

"**Registrar**" means, in respect of (i) Danish Notes, the Danish Registrar, (ii) Finnish Securities, the Finnish Registrar, (iii) Norwegian Securities, the Norwegian Registrar, (iv) Swedish Securities, the Swedish Registrar, (v) French Registered Securities, the French Registration Agent, (vi) Swiss Securities, the Swiss Registrar, (vii) Rule 144A New York Law Notes, The Bank of New York Mellon and (viii) all other Registered Securities, The Bank of New York Mellon S.A./N.V., Luxembourg Branch, or any successor to any of the above entities appointed in accordance with the Agency Agreement or other such registrar identified as such in the relevant Pricing Supplement.

"**Regular Period**" means:

(a) in the case of Securities where interest on the Notes or the coupon on the Certificates is scheduled to be paid only by means of regular payments, each period from and including (or in the case of Swedish Securities, excluding) the Issue Date to but excluding (or in the case of Swedish Securities, including) the first Interest Payment Date, or Coupon Payment Date (as applicable) and each successive period from and including (or in the case of Swedish Securities, excluding) one Interest Payment Date or Coupon Payment Date (as applicable) to but excluding (or in the case of Swedish Securities, including) the next Interest Payment Date or Coupon Payment Date (as applicable);

(b) in the case of Securities where, apart from the first Interest Payment Date or Coupon Payment Date (as applicable), interest is scheduled to be paid only by means of regular payments, each period from and including (or in the case of Swedish Securities, excluding) a Regular Date falling in any year to but excluding (or in the case of Swedish Securities, including) the next Regular Date, where "Regular Date" means the day and month (but not the year) on which any Interest Payment Date or Coupon Payment Date (as applicable), falls; and

(c) in the case of Securities where, apart from one Interest Period or Coupon Period (as applicable), other than the first Interest Period or Coupon Period (as applicable), interest is scheduled to be paid only by means of regular payments, each period from and including (or in the case of Swedish Securities, excluding) a Regular Date falling in any year to but excluding (or in the case of Swedish Securities, including) the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date or Coupon Payment Date (as applicable) falls other than the

Interest Period or Coupon Period falling at the end of the irregular Interest Period, or Coupon Period (as applicable).

"**Regulation S**" means Regulation S under the Securities Act, as amended.

"**Regulation S/Rule 144A Certificates**" has the meaning given in General Condition 1.1(b)(x) (*Regulation S/Rule 144A Securities*).

"**Regulation S/Rule 144A Notes**" has the meaning given in General Condition 1.1(b)(x) (*Regulation S/Rule 144A Securities*).

"**Regulation S/Rule 144A Securities**" has the meaning given in General Condition 1.1(b)(x) (*Regulation S/Rule 144A Securities*).

"**Regulation S/Rule 144A Warrants**" has the meaning given in General Condition 1.1(b)(x) (*Regulation S/Rule 144A Securities*).

"**Relevant Benchmark**" means, in respect of any Securities, a Reference Rate or any rate, level, value or other figure in respect of one or more Reference Assets utilised in order to determine the Rate of Interest, Floating Rate Coupon, Redemption Amount, Optional Redemption Amount, Instalment Amount, Reference Asset Amount or any other amount payable or asset deliverable under the Securities.

"**Relevant Change of Law**" means as a result of

(I) any action taken by a Relevant Source Jurisdiction or any political subdivision or any authority thereof or therein having power to tax or brought in a court of competent jurisdiction on or after the Issue Date; or

(II) the proposal, adoption, finalisation or expiration of any laws, regulations, or administrative guidance (including, due to the mere passage of time) of a Relevant Source Jurisdiction or any political subdivision or any authority thereof or therein having power to tax, or any change in, or amendment to (or proposed change or amendment to), proposed or final laws, regulations, or administrative guidance, or any change in the application or official interpretation of proposed or final laws, regulations or administrative guidance (including by inaction, such as the failure to finalise proposed regulations or administrative guidance, or due to the mere passage of time), which proposal, adoption, finalisation, expiration, change or amendment becomes effective on or after the Issue Date or with respect to payments made on or after the Issue Date,

a payment becomes subject to Relevant Source Jurisdiction withholding.

"**Relevant Clearing System(s)**" means the clearing system(s) in which a Global Security for a Series or Tranche of Securities has been deposited as specified in the relevant Pricing Supplement, which may be Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, DTC, SIX SIS, or any clearing system through which Securities in dematerialised or uncertificated form are cleared, including Euroclear France, Euroclear Sweden, VP, VPS, Euroclear Finland and SIX SIS, and, as the case may be, the clearing system or other appropriate method selected by the Issuer to effect the settlement and delivery of a Reference Asset in the case of an issue of Securities to which Physical Settlement applies.

"**Relevant Currency**" means the currency specified as such in the relevant Pricing Supplement.

"**Relevant Financial Centre**" means, with respect to any Rate of Interest or Floating Rate Coupon (as applicable) to be determined in accordance with a Screen Rate Determination on an Interest Determination Date or Floating Rate Coupon Determination Date (as applicable), the financial centre as may be specified as such in the relevant Pricing Supplement or, if none is so specified, the financial centre with which the relevant Benchmark is most closely connected (which, in the case of EURIBOR, shall be the Euro-zone) or, if none is so connected, London.

"**Relevant Incorporation Jurisdiction**" means the country (or any political subdivision or taxing authority thereof or therein) in which the Issuer or the Guarantor (as applicable) is organised or incorporated.

"**Relevant Jurisdiction**" means a Relevant Incorporation Jurisdiction or Relevant Source Jurisdiction, as applicable.

"**Relevant Payment Date**" in respect of any Security means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding is made or (if earlier) the date seven days after that on which notice is duly given to the Holder that, upon further presentation of the Security being made in accordance with these General Conditions, such payment will be made, provided that payment is in fact made upon such presentation.

"**Relevant Payment Jurisdiction**" means such jurisdiction(s) as determined by the Calculation Agent.

"**Relevant Programme Agent**" means, in respect of (i) Danish Notes, the Danish Programme Agent, (ii) Swedish Securities, the Swedish Programme Agent, (iii) Norwegian Securities, the Norwegian Programme Agent, (iv) Finnish Securities, the Finnish Programme Agent, (v) Swiss Securities, the Swiss Programme Agent, (vi) Swiss Certificates (UBS-cleared), the Swiss Certificates (UBS-cleared) Agent, (vii) French Securities, the French Programme Agent, (viii) German Securities clearing through Clearstream Frankfurt, the German Programme Agent, (ix) German Securities clearing through Euroclear and/or Clearstream, Luxembourg, the Principal Programme Agent, (x) Rule 144A Securities, the Principal Programme Agent, or (xi) all other Securities, the Principal Programme Agent, and includes any successor or additional agent or any other agent identified as such in the relevant Pricing Supplement.

"**Relevant Record Date**" means, in respect of (i) Danish Notes, the Danish Record Date, (ii) Finnish Securities, the Finnish Record Date, (iii) Norwegian Securities, the Norwegian Record Date, (iv) Swedish Securities, the Swedish Record Date and (v) all other Registered Securities, the Record Date.

"**Relevant Rules**" means the terms and conditions, rules, regulations or other procedures governing the use of Clearstream, Luxembourg, Euroclear and/or such other Relevant Clearing System, as may be amended, updated or replaced from time to time.

"**Relevant Source Jurisdiction**" means the country (or any political subdivision or taxing authority thereof or therein) in which payments of any present or future tax, assessment or other governmental charge of whatever nature are regarded as being sourced otherwise than by virtue of being a Relevant Incorporation Jurisdiction.

"**Relevant Time**" means, with respect to any Interest Determination Date or Floating Rate Coupon Determination Date (as applicable), the local time in the Relevant Financial Centre specified in the relevant Pricing Supplement or, if no time is specified, the local time in the Relevant Financial Centre at which it is customary to determine bid and offered rates in respect of deposits in the Specified Currency in the interbank market in the Relevant Financial Centre and for this purpose "local time" means, with respect to Europe and the Euro-zone as a Relevant Financial Centre, 11.00 hours, Brussels Time.

"**Representative**" has the meaning given in General Condition 24.3(a) (*Legal Personality*).

"**Residual Cash Amount**" or "**Residual Cash Amounts**" means the amount or amounts specified or determined as such in the relevant Pricing Supplement.

"**RFR**" means each of SONIA, SOFR, TONA, €STR and any other risk free refence rate as determined by the Calculation Agent (as applicable).

"**Rule 144A**" means Rule 144A under the Securities Act.

"**Rule 144A Certificates**" means any Certificates which are specified to be Rule 144A Securities in the relevant Pricing Supplement.

"**Rule 144A New York Law Notes**" means New York Law Notes that are offered and sold inside the United States to persons that are both QIBs and Eligible Investors.

"**Rule 144A Notes**" means any Notes which are specified to be Rule 144A Securities in the relevant Pricing Supplement. For the avoidance of doubt, Rule 144A New York Law Notes are not Rule 144A Notes.

"**Rule 144A Securities**" has the meaning given in General Condition 1.1(b)(ix) (*Rule 144A Securities and Rule 144A New York Law Notes*). For the avoidance of doubt, Regulation S/Rule 144A Securities shall not be considered to be Rule 144A Securities.

"**Rule 144A Warrants**" means any Warrants which are specified to be Rule 144A Securities in the relevant Pricing Supplement.

"**Scheduled Trading Day**" has the meaning given in the Share Linked Provisions, the Index Linked Provisions and the Fund Linked Provisions, as applicable.

"**Securities**" has the meaning given in Part A (*Introduction*).

"**Securities Act**" means the U.S. Securities Act of 1933, as amended.

"**Series**" has the meaning given in Part A (*Introduction*).

"**Settlement Amount**" means the settlement amount specified as such in the relevant Pricing Supplement.

"**Settlement Cycle**" has the meaning given in the Share Linked Provisions or the Index Linked Provisions, as applicable.

"**Settlement Date**" means, subject to General Condition 12.2 (*Payments on Payment Days*) and General Condition 14 (*Physical Settlement*) unless otherwise specified in the relevant Pricing Supplement, and subject to there not having occurred a Settlement Disruption Event:

(a) in relation to Reference Assets to be delivered in respect of an Exercise Date or Redemption Date, the date that falls one Settlement Cycle following that Exercise Date or Redemption Date (or, if such date is not a Clearing System Business Day, the next following Clearing System Business Day), unless a Settlement Disruption Event prevents delivery of such Reference Assets on that date. If a Settlement Disruption Event prevents delivery of a Reference Asset on that date, General Condition 14.6 (*Settlement Disruption Event*) shall apply; and

(b) in relation to payment of the Settlement Amount or Redemption Amount, the date specified or otherwise determined as provided in the relevant Pricing Supplement.

"**Settlement Disruption Event**" means an event beyond the control of the Issuer, the Guarantor or any Hedging Entity (including illiquidity in the market for the relevant Reference Assets or any legal prohibition, or material restriction imposed by any law, order or regulation on the ability of the Issuer, the Guarantor or any Hedging Entity, to deliver the Reference Asset) as a result of which, in the determination of the Calculation Agent, delivery of the Reference Asset Amount by or on behalf of the Issuer or the Guarantor, in accordance with these General Conditions and/or the relevant Pricing Supplement is illegal or is not practicable, or as a result of which the Relevant Clearing System cannot clear the transfer of the relevant Reference Assets.

"**Share**" has the meaning given in the Share Linked Provisions.

"**Share Linked Interest Notes**" means any Notes in respect of which the "Variable Linked Interest Provisions" are specified to be applicable in the relevant Pricing Supplement and the "Type of Interest" is designated as "Share Linked Interest".

"**Share Linked Provisions**" has the meaning given in Part A (*Introduction*).

"**Share Linked Securities**" means any Securities in respect of which the "Share Linked Provisions" are specified to be applicable in the relevant Pricing Supplement.

"**SIX SIS**" means SIX SIS AG, or any successor or replacement clearing system accepted by the SIX Swiss Exchange.

"**Specific Product Provisions**" has the meaning given in Part A (*Introduction*).

"**Specified Coupon Period**" means the period specified as such in the relevant Pricing Supplement.

"**Specified Currency**" means the currency specified as such in the relevant Pricing Supplement or, if none is specified, the currency in which the Securities are denominated.

"**Specified Denomination**" means the denomination specified as such in the relevant Pricing Supplement.

"**Swap Rate**" means any swap rate that reflects the fixed rate under an interest rate swap for a relevant transaction as determined by the Calculation Agent.

"**Swedish Certificates**" means any Certificates which are specified to be Swedish Securities in the relevant Pricing Supplement.

"**Swedish CSD**" means the Swedish central securities depository (*värdepapperscentral*) (which is expected to be Euroclear Sweden).

"**Swedish CSD Rules**" means Swedish laws, regulations and operating procedures applicable to and/or issued by the Swedish CSD (which is expected to be Euroclear Sweden).

"**Swedish Notes**" means any Notes which are specified to be Swedish Securities in the relevant Pricing Supplement.

"**Swedish Programme Agent**" means Skandinaviska Enskilda Banken AB (publ), or any successor or additional agent appointed in connection with the relevant Swedish Securities in accordance with the Agency Agreement.

"**Swedish Record Date**" has the meaning given in General Condition 6.2(f) (*Payments in respect of Swedish Notes*) in respect of Swedish Notes, the meaning given in General Condition 9.6(d)(iii) (*Record Date*) in respect of Swedish Certificates and the meaning given in General Condition 11.3(k)(iii) (*Record Date*) in respect of Swedish Warrants.

"**Swedish Register**" has the meaning given in General Condition 1.2(f) (*Title to Swedish Securities*).

"**Swedish Registrar**" means the Swedish CSD.

"**Swedish Securities**" has the meaning given in General Condition 1.1(b)(vi) (*Swedish Securities*) and means Swedish Notes, Swedish Warrants and/or Swedish Certificates as the context may require.

"**Swedish Warrants**" means any Warrants which are specified to be Swedish Securities in the relevant Pricing Supplement.

"**Swiss Certificates**" means any Certificates which are specified to be Swiss Securities in the relevant Pricing Supplement.

"**Swiss Certificates (UBS-cleared)**" has the meaning given in General Condition 1.1(b)(viii) (*Swiss Certificates (UBS-cleared)*) (and shall apply to any Certificates which are specified to be Swiss Certificates (UBS-cleared) in the relevant Pricing Supplement.

"**Swiss Certificates (UBS-cleared) Agent**" means UBS Switzerland AG.

"**Swiss Global Security**" has the meaning given in General Condition 1.1(b)(vii) (*Swiss Securities*).

"**Swiss Notes**" means any Notes which are specified to be Swiss Securities in the relevant Pricing Supplement.

"**Swiss Programme Agent**" means Credit Suisse AG, or any successor or additional agent appointed in connection with the Swiss Securities in accordance with the Agency Agreement.

"**Swiss Register**" means the register of Swiss Securities kept by the Swiss Registrar.

"**Swiss Registrar**" means Credit Suisse AG, or any successor appointed in accordance with the Agency Agreement.

"**Swiss Securities**" has the meaning given in General Condition 1.1(b)(vii) (*Swiss Securities*) and means Swiss Notes, Swiss Warrants and/or Swiss Certificates as the context may require but excludes Swiss Certificates (UBS-cleared).

"**TARGET2**" means the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET2) system or any successor thereto.

"**TARGET2 Settlement Day**" means any day on which TARGET2 is open for the settlement of payments in euro.

"**Tax Termination Event**" has the meaning given in General Condition 18.3 (*Early Redemption or Termination for Taxation – FATCA*).

"**Temporary Bearer Global Security**" has the meaning given in General Condition 1.1(a) (*Bearer Securities*).

"**Temporary Global Security**" means a Temporary Bearer Global Security and/or a Temporary Registered Global Security.

"**Temporary Registered Global Security**" has the meaning given in General Condition 1.1(b) (*Registered Securities*).

"**Termination Event**" has the meaning given in General Condition 16 (*Early Redemption or Termination for Illegality*).

"**Tranche**" has the meaning given in Part A (*Introduction*).

"**Transfer Agent**" means, in respect of Registered Securities (other than Swiss Securities) in definitive form, The Bank of New York Mellon, London Branch or The Bank of New York Mellon S.A./N.V., Luxembourg Branch (as applicable).

"**Treaty**" means the Treaty establishing the European Community, as amended.

"**UBS Switzerland AG**" includes any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable.

"**UK Prospectus Regulation**" means Regulation (EU) 2017/1129 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (as amended).

"**Underlying Hedge Entity**" means the Issuer or any affiliate(s) of the Issuer or any entity (or entities) acting on behalf of the Issuer.

"**Underlying Hedge Tax Jurisdiction**" means (i) the country (or any political subdivision or taxing authority thereof or therein) in which the Underlying Hedge Entity or its applicable counterparty is organised or incorporated or in which payments of any present or future tax, assessment or other governmental charge of whatever nature are regarded as being sourced, (ii) the United States and (iii) any other jurisdiction that enters into an intergovernmental agreement with the United States in furtherance of FATCA.

"**Underlying Hedge Transactions**" means, in relation to the Securities, any purchase, sale, entry into or maintenance of one or more (a) positions or contracts in securities, options, futures, derivatives or foreign exchange or (b) other instruments or arrangements (howsoever described) in order to hedge individually or on a portfolio basis the Issuer's obligations under such Securities.

"**Underlying RFR**" means the RFR referenced in the applicable Compounded Index.

"**United States**" means the United States of America (including the States thereof and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction.

"**Unscheduled Holiday**" means, in respect of any relevant day, that such day is not a Business Day and the market was not aware of such fact by means of a public announcement until after 9:00 a.m. in the principal financial centre for each currency in which an amount is to be determined or paid on such day under the relevant Securties, on the day that is two Business Days (not including days that would have been Business Days but for that announcement) prior to that day.

"**USD/Affected Currency Exchange Rate**" means, in respect of any relevant day, the spot USD/Affected Currency exchange rate, expressed as an amount of the Affected Currency per unit of USD, as reported or published by the fixing price sponsor at the relevant time on such day, provided that if no such rate is available on such day, then the Calculation Agent may request each of the Reference Dealers (as defined in General Condition 32.1 (*Definitions*)) to provide a firm quotation of the rate at which it will buy one unit of USD in an amount of Affected Currency at the applicable time on such day, based upon each Reference Dealer's experience in the foreign exchange market for Affected Currency and general activity in such market on such day. If at least two quotations are provided, the relevant rate will be the arithmetic mean of such quotations. If fewer than two quotations are provided, the Calculation Agent may request each of the major banks (as selected by the Calculation Agent) in the relevant market to provide a quotation of the rate at which it will buy one unit of USD in an amount of the Affected Currency at the applicable time on such day. If fewer than two quotations are provided, then the Calculation Agent shall determine the USD/Affected Currency Exchange Rate as of the applicable time on such day in its discretion.

"**USD Equivalent Amount**" means, in respect of an Affected Amount and the Payment Event Payment Date, an amount in USD determined by the Calculation Agent by converting the Affected Amount from the currency in which such Affected Amount is denominated in (such currency, the "**Affected Currency**") into USD using the USD/Affected Currency Exchange Rate on the Payment Disruption Valuation Date in respect of such Payment Event Payment Date, as determined by the Calculation Agent.

"**USD LIBOR Benchmark Rate**" means Benchmark Rate as such term is defined in the USD LIBOR Benchmark Transition Event Appendix.

"**U.S. Person**" means (i) in respect of any Regulation S/Rule 144A Securities, any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S (as may be amended from time to time) or (ii) in respect of any Securities other than Regulation S/Rule 144A Securities, any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S (as may be amended from time to time) or any person which is a "United States person" as defined in section 7701(a)(30) of the Code and Treasury regulations thereunder (as may be amended from time to time), as the context requires.

"**Valuation Date**" means any date specified as such in the relevant Pricing Supplement.

"**VP**" means the depository and clearing centre operated by Euronext Securities Copenhagen (VP Securities A/S) or any successor or replacement thereto.

"**VP Rules**" means Danish laws, regulations and operating procedures applicable to and/or issued by the VP.

"**VPS**" means Euronext Securities Oslo – The Norwegian Central Securities Depository (Verdipapirsentralen ASA) or any successor or replacement thereto.

"**VPS Register**" has the meaning given in General Condition 1.2(e) (*Title to Norwegian Securities*).

"**VPS Rules**" means Norwegian laws, regulations and operating procedures applicable to and/or issued by the VPS.

"**Warrant Account Notice**" means a notice (substantially in the form which can be obtained from the Relevant Programme Agent) stating the Relevant Clearing System account number and name of the person to whom the Reference Asset(s) is to be delivered (if any) and all other amounts payable by the Issuer in respect of the applicable Securities are to be paid.

"**Warrants**" has the meaning given in Part A (*Introduction*).

"**Zero Coupon Notes**" means any Notes in respect of which the "Zero Coupon Note Provisions" are specified to be applicable in the relevant Pricing Supplement.

32.2 **Interpretation**

(a) Capitalised terms used but not defined in these General Conditions will have the meanings given to them in the relevant Pricing Supplement, the absence of any such meaning indicating that such term is not applicable to the Securities of the relevant Series.

(b) A reference to a "person" in these General Conditions includes any person, firm, company, corporation, government, state or agency of a state or any association, trust or partnership (whether or not having separate legal personality) of two or more of the foregoing.

(c) A reference in these General Conditions to a provision of law is a reference to that provision as amended or re-enacted.

(d) Part, General Condition and Specific Product Provision headings are for ease of reference only.

(e) References in these General Conditions to a company or entity shall be deemed to include a reference to any successor or replacement thereto.

32.3 **ISDA Determination Additional Provisions**

For the purposes of General Condition 4.2(b)(i) or 8.3(b)(i) (as applicable), references in the ISDA Definitions to:

- numbers, financial centres, elections or other items to be specified in the relevant Confirmation shall be deemed to be references to the corresponding numbers, financial centres, elections or other items specified for such purpose in the applicable Pricing Supplement (as determined by the Calculation Agent);

- the "Effective Date" shall be to the date specified as such in the applicable Pricing Supplement;

- a "Period End Date" shall be deemed to be references to an Interest Period End Date or a Floating Rate Coupon Period End Date (as applicable), provided that where the 2021 Definitions are specified in the applicable Pricing Supplement and where the Business Day Convention applicable to the relevant Interest Period End Date or Floating Rate Coupon Period End Date (as applicable) is "Modified Following Business Day Convention" or "Preceding Business Day Convention" and "Period End Date/Termination Date adjustment for Unscheduled Holiday" is specified to be applicable in the applicable Pricing Supplement and that Interest Period End Date or Floating Rate Coupon Period End Date (as applicable) would otherwise fall on a day that is not a Business Day as a result of an Unscheduled Holiday, that date will instead fall on the first following day that is a Business Day;

- a "Payment Date" shall be deemed to be references to an Interest Payment Date or Floating Rate Coupon Payment Date (as applicable), provided that where the 2021 Definitions are specified in the applicable Pricing Supplement and where the Business Day Convention applicable to the relevant Interest Period End Date or Floating Rate Coupon Period End Date (as applicable) is "Modified Following Business Day Convention" or "Preceding Business Day Convention" and that Interest Payment Date or Floating Rate Coupon Payment Date (as applicable) would otherwise fall on a day that is not a Business Day as a result of an Unscheduled Holiday, that date will instead fall on the first following day that is a Business Day and, unless otherwise specified in the applicable Pricing Supplement, where any other payment date (a "**Related Payment Date**") is scheduled to fall on the same day, that Related Payment Date shall also be adjusted accordingly, all subject as provided in General Condition 6 (*Payments*);

- the "Termination Date" shall be to the Maturity Date, Settlement Date, Redemption Date, Optional Redemption Date or such other date specified as such in the applicable Pricing Supplement; and

- a "Floating Rate Day Count Fraction" shall be deemed to be references to the relevant Day Count Fraction.

Notwithstanding anything to the contrary in the ISDA Definitions:

(a) the provisions of General Condition 21 (*Calculation Agent, Determination, Disclaimer of Liability and other terms*) shall apply in relation to calculations and determinations made by the Calculation Agent pursuant to General Condition 4.2(b)(i) or 8.3(b)(i) (as applicable) and any inconsistent provision in the relevant ISDA Definitions shall be disregarded;

(b) any requirement under the ISDA Definitions for the ISDA Calculation Agent: (i) to give notice of a determination made by it to any other party will be deemed to be a requirement for the Calculation Agent to provide an equivalent notice to the Issuer and/or (ii) to consult with the other party or the parties, will be disregarded;

(c) the right of any party under the ISDA Definitions to require the ISDA Calculation Agent to take any action or fulfil any responsibility will be deemed to be solely the right of the Issuer to require this of the Calculation Agent in its discretion and no Holder will have any right to require the Issuer to do this or to direct the Calculation Agent in this regard;

(d) where the ISDA Definitions require agreement between the parties to the relevant transaction, the parties will be deemed to have been unable to reach agreement and the fallback applicable in such circumstances will be deemed to apply;

(e) in the event that the Calculation Agent determines that any Fixing Day or other day on which an ISDA Rate is determined under the ISDA Definitions is fewer than two Business Days prior to the relevant date originally scheduled for payment, the Calculation Agent may determine that such date for payment and/or any Related Payment Date be delayed to a date falling not more than two Business Days after the relevant Fixing Day or relevant other day and Holders shall not be entitled to interest, coupon or any other payment in respect of such delay; and

(f) where the 2021 Definitions are specified in the applicable Pricing Supplement, in the event that the Correction Time Period applicable to an ISDA Rate ends later than two Business Days prior to the relevant date for payment or delivery (as applicable), any corrections published after the second Business Day prior to the relevant date for payment or delivery (as applicable) shall be disregarded for the purposes of determining the relevant ISDA Rate.

SPECIFIC PRODUCT PROVISIONS

ANNEX 1 - SHARE LINKED PROVISIONS

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The terms and conditions set out in this Annex 1 apply to Securities for which the relevant Pricing Supplement specifies that the Share Linked Provisions shall apply.

1. **Consequences of Disrupted Days**

1.1 **Single Share and Reference Dates**

Where the Securities relate to a single Share, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then the Reference Date shall be the first succeeding Scheduled Trading Day that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day. In that case:

(a) the last consecutive Scheduled Trading Day shall be deemed to be the Reference Date, notwithstanding the fact that such day is a Disrupted Day; and

(b) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (b) shall be deemed to be the Closing Share Price in respect of the Reference Date.

1.2 **Single Share and Averaging Reference Dates**

Where the Securities relate to a single Share, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then the Averaging Reference Date will be deemed not to be a relevant Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Dates then the sole Averaging Reference Date for such Share shall be the first succeeding Scheduled Trading Day following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following such final Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the sole Averaging Reference Date, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Share Price in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then the Averaging Reference Date shall be the first succeeding Scheduled Trading Day following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day (irrespective of whether that deferred Averaging Reference Date is already or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Share Price in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then the Averaging Reference Date shall be the first succeeding Valid Date. If the first succeeding Valid Date has not occurred as of the Valuation Time on the last consecutive Scheduled Trading Day equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date, then:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Share Price in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then, it shall be deemed that the consequence specified in "Modified Postponement" will apply.

1.3 **Share Basket and Reference Dates**

Where the Securities relate to a basket of Shares, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then:

(a) the Reference Date for each Share which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Reference Date; and

(b) the Reference Date for each Share which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day that the Calculation Agent determines is not a Disrupted Day relating to that Share, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day relating to that Share. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Reference Date for the relevant Share, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Share Price in respect of the Reference Date.

1.4 **Share Basket and Averaging Reference Dates**

Where the Securities relate to a basket of Shares, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then the Averaging Reference Date will be deemed not to be an Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Dates, then:

(i) the sole Averaging Reference Date for each Share which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the final Scheduled Averaging Reference Date; and

(ii) the sole Averaging Reference Date for each Share which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to that Share, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the final

Scheduled Averaging Reference Date is a Disrupted Day relating to that Share. In that case:

(A) that last consecutive Scheduled Trading Day shall be deemed to be the sole Averaging Reference Date for the relevant Share, notwithstanding the fact that such day is a Disrupted Day; and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the Closing Share Price in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then:

(i) the Averaging Reference Date for each Share which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Share which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to that Share (irrespective of whether that deferred Averaging Reference Date is or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day relating to the Share. In that case:

(A) the last consecutive Scheduled Trading Day shall be deemed to be such Averaging Reference Date for the relevant Share (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the relevant Closing Share Price in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then:

(i) the Averaging Reference Date for each Share which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Share which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Valid Date relating to that Share. If the first succeeding Valid Date has not occurred as of the relevant Valuation Time on the last consecutive Scheduled Trading Day equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date:

(A) that last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date for the relevant Share (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Share as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B)

shall be deemed to be the Closing Share Price in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then, it shall be deemed that the consequence specified in "Modified Postponement" will apply.

2. **Fallback Valuation Date**

Notwithstanding any other terms of the Share Linked Provisions, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to any Reference Date or Averaging Reference Date (any such date being, a "**Relevant Date**"), and if:

(a) following adjustment of the original date on which such Relevant Date is scheduled to fall pursuant to either or both of Share Linked Provision 1 (*Consequences of Disrupted Days*) or Share Linked Provision 10 (*Definitions*), the Relevant Date in respect of a Share would otherwise fall after the Fallback Valuation Date in respect of the Share; or

(b) the Maximum Days of Disruption for the Relevant Date is specified to be "Zero" or "None",

then the Fallback Valuation Date shall be deemed to be the Relevant Date for the Share. If the Fallback Valuation Date is not a Scheduled Trading Day or is a Disrupted Day relating to that Share, as the case may be, then the Calculation Agent shall determine its good faith estimate of the value for the Share as of the relevant Valuation Time on such Fallback Valuation Date and such determination by the Calculation Agent pursuant to this Share Linked Provision 2 shall be deemed to be the relevant Closing Share Price in respect of the Relevant Date.

3. **Correction of prices**

In the event that any price published on the Exchange on any date which is utilised for any calculation or determination in connection with the Securities is subsequently corrected and the correction is published by the Exchange by the earlier of:

(a) one Settlement Cycle after the original publication; and

(b) the second Business Day prior to the next date on which any relevant payment or delivery may have to be made by the Issuer or in respect of which any relevant determination in respect of the Securities may have to be made,

the Calculation Agent may determine the amount that is payable or deliverable or make any determination in connection with the Securities after taking into account such correction, and, to the extent necessary, may adjust any relevant terms of the Securities to account for such correction.

Upon making any such determination or adjustment, as applicable, to take into account any such correction, the Calculation Agent shall give notice as soon as practicable to the Holders stating the determination or adjustment, as applicable, to any amount payable or deliverable under the Securities and/or any of the other relevant terms and giving brief details of the determination or adjustment, as applicable, provided that any failure to give such notice shall not affect the validity of such determination or adjustment, as applicable, or any action taken.

4. **Consequences of Potential Adjustment Events**

If the Calculation Agent determines that a Potential Adjustment Event has occurred in respect of a Share, the Calculation Agent will determine whether such Potential Adjustment Event has a diluting or concentrative effect on the theoretical value of the relevant Shares and, if so, the Calculation Agent will (i) make the corresponding adjustment(s), if any, to one or more of any variable relevant to the exercise, settlement, payment or other terms of the Securities as the Calculation Agent determines appropriate to account for that diluting or concentrative effect (provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Share) and (ii) determine the effective date(s) of the adjustment(s). The Calculation Agent may (but need not) determine the appropriate adjustment(s) by reference to the adjustment(s) in respect of such Potential

Adjustment Event made by an options exchange to options on the relevant Shares traded on such options exchange.

Upon making any such adjustment, the Calculation Agent shall give notice as soon as practicable to the Holders stating the adjustment to any amount payable under the Securities and/or any of the other relevant terms and giving brief details of the Potential Adjustment Event, provided that any failure to give such notice shall not affect the validity of the Potential Adjustment Event or any action taken.

5. **Consequences of Extraordinary Events for a Share other than a Share that is a share of an Exchange Traded Fund**

If the Calculation Agent determines that a Merger Event, a Tender Offer, a Nationalisation, an Insolvency or a Delisting has occurred in respect of a Share other than a Share that is a share of an Exchange Traded Fund then, on or after the relevant Merger Date, Tender Offer Date or Announcement Date, as the case may be, the Calculation Agent may in its discretion either:

(a) (i) make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting, as the case may be (including adjustments to account for changes in volatility, expected dividends, stock loan rate or liquidity relevant to the Shares or to the Securities), which may, but need not, be determined by reference to the adjustment(s) made in respect of such Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting, as the case may be, by an options exchange to options on the relevant Shares traded on such options exchange; and

(ii) determine the effective date of that adjustment (but, in the case of a Tender Offer, the Share Issuer and the Share will not change); or

(b) if "Share Substitution" is specified as being applicable in the relevant Pricing Supplement, then the Calculation Agent may, in its discretion, select a new underlying share (in respect of the relevant Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting, as the case may be, the "**Replacement Share**"), which Replacement Share will be deemed to be a Share in place of the Share which has been replaced by the Calculation Agent following such Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting, as the case may be (and the Share Issuer of the Replacement Share will replace the Share Issuer of the replaced Share), and the Calculation Agent may make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of the Merger Event, Tender Offer, Nationalisation, Insolvency or Delisting, as the case may be, and/or the replacement of the replaced Share by the Replacement Share (including adjustments to account for changes in volatility, expected dividends, stock loan rate or liquidity relevant to the Shares or to the Securities). Any Replacement Share will, to the extent practicable, be selected from the same industry, have shares denominated in the same currency and have a similar market capitalisation to the relevant replaced Share; or

(c) if the Calculation Agent determines that no adjustment that it could make under (a) or (if applicable) (b) will produce a commercially reasonable result, notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities, in which case on such date falling on or after the relevant Merger Date, Tender Offer Date or Announcement Date, as the case may be, as determined by the Calculation Agent, the Issuer shall redeem the Securities for an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

6. **Consequences of Additional Disruption Events**

If the Calculation Agent determines that an Additional Disruption Event has occurred, then the Calculation Agent shall, in its discretion,

(a) make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Additional Disruption Events (including adjustments to account for changes in volatility, expected dividends, stock loan rate or liquidity relevant to the Shares or to the Securities); or

(b) determine and give notice to Holders that the Securities shall be redeemed on a date determined by the Calculation Agent, in which event the Issuer shall redeem the Securities and cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

7. Depositary Receipt Provisions

7.1 Partial Lookthrough Depositary Receipt Provisions

Where the relevant Pricing Supplement specifies that the "Partial Lookthrough Depositary Receipt Provisions" shall apply to a Share, then the provisions set out below shall apply, and, in relation to such Share, the other provisions of the Share Linked Provisions shall be deemed to be amended and modified as set out in this Share Linked Provision 7.

(a) The definition of "Potential Adjustment Event" shall be amended so that it reads as follows:

""**Potential Adjustment Event**" means any of the following:

(i) a subdivision, consolidation or reclassification of relevant Shares and/or Underlying Shares (unless resulting in a Merger Event), or a free distribution or dividend of any such Shares and/or Underlying Shares to existing holders by way of bonus, capitalisation or similar issue;

(ii) a distribution, issue or dividend to existing holders of the relevant Shares and/or Underlying Shares of (i) such Shares and/or Underlying Shares, or (ii) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of the Share Issuer or Underlying Shares Issuer, as appropriate, equally or proportionately with such payments to holders of such Shares and/or Underlying Shares, or (iii) share capital or other securities of another issuer acquired or owned (directly or indirectly) by the Share Issuer or Underlying Shares Issuer, as appropriate, as a result of a spin-off or other similar transaction, or (iv) any other type of securities, rights or warrants or other assets, in any case for payment (cash or other consideration) at less than the prevailing market price as determined by the Calculation Agent;

(iii) in respect of a Share and/or Underlying Share, an amount per Share and/or Underlying Share is determined by the Calculation Agent to be an extraordinary dividend;

(iv) a call by the Share Issuer or Underlying Shares Issuer, as appropriate, in respect of relevant Shares and/or Underlying Shares that are not fully paid;

(v) a repurchase by the Share Issuer or Underlying Shares Issuer, as appropriate, or any of its subsidiaries of relevant Shares and/or Underlying Shares whether out of profits or capital and whether the consideration for such repurchase is cash, securities or otherwise;

(vi) in respect of the Share Issuer or Underlying Shares Issuer, as appropriate, an event that results in any shareholder rights being distributed or becoming separated from shares of common stock or other shares of the capital stock of the Share Issuer or Underlying Shares Issuer, as appropriate, pursuant to a shareholder rights plan or arrangement directed against hostile takeovers that provides upon the occurrence of certain events for a distribution of preferred stock, warrants, debt instruments or stock rights at a price below their market value, as determined by the Calculation Agent, provided that any adjustment effected as a result of such an event shall be readjusted upon any redemption of such rights;

(vii) any other event that may have a diluting or concentrative effect on the theoretical value of the relevant Shares and/or Underlying Shares; or

(viii) the making of any amendment or supplement to the terms of the Deposit Agreement,

provided that an event under (i) to (vii) (inclusive) above in respect of the Underlying Shares shall not constitute a Potential Adjustment Event unless, in the determination of the Calculation Agent, such event has a diluting or concentrative effect on the theoretical value of the Shares."

(b) If the Calculation Agent determines that:

(i) an event under (i) to (vii) (inclusive) of the definition of "Potential Adjustment Event" has occurred in respect of any Underlying Share, the Calculation Agent will determine whether such Potential Adjustment Event has a diluting or concentrative effect on the theoretical value of the relevant Shares; or

(ii) an event under (viii) of the definition of "Potential Adjustment Event" has occurred, the Calculation Agent will determine whether such Potential Adjustment Event has an economic effect on the Securities;

and, in each case, the Calculation Agent will make the corresponding adjustment(s), if any, to one or more of any variable relevant to the exercise, settlement, payment or other terms of the Securities as the Calculation Agent determines appropriate to account for (x) in respect of an event under (i) to (vii) (inclusive) of the definition of "Potential Adjustment Event", that diluting or concentrative effect, and (y) in respect of an event under (viii) of the definition of "Potential Adjustment Event", such economic effect on the Securities, as the case may be (provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Share) following the Potential Adjustment Event. The Calculation Agent may (amongst other factors) have reference to any adjustment made by the Depository under the Deposit Agreement.

If the Calculation Agent determines that no adjustment that it could make will produce a commercially reasonable result, it shall notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities, in which case, on such date as selected by the Calculation Agent in its discretion, the Issuer shall redeem the Securities upon prior notice made to the Holders, and the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

(c) The definitions of "Merger Event" and "Tender Offer" shall be amended in accordance with the DR Amendment.

(d) If the Calculation Agent determines that a Merger Event or Tender Offer has occurred in respect of an Underlying Share, then where the Calculation Agent makes an adjustment to the Securities in connection with a Merger Event or Tender Offer, the Calculation Agent may (amongst other factors) have reference to any adjustment made by the Depository under the Deposit Agreement.

(e) The definitions of Nationalisation, Insolvency and Delisting shall be amended in accordance with the DR Amendment.

(f) Notwithstanding anything to the contrary in the definition of "Delisting", a Delisting shall not occur in respect of the Underlying Shares if the Underlying Shares are immediately re-listed, re-traded or re-quoted on an exchange or quotation system regardless of the location of such exchange or quotation system.

(g) The definition of "Announcement Date" shall be amended so that it reads as follows:

""**Announcement Date**" means, in respect of (a) a Merger Event, the date of the first public announcement of a firm intention to engage in a transaction (whether or not subsequently

amended) that leads to the Merger Event, (b) a Tender Offer, the date of the first public announcement of a firm intention to purchase or otherwise obtain the requisite number of voting shares (whether or not subsequently amended) that leads to the Tender Offer, (c) in the case of a Nationalisation, the date of the first public announcement to nationalise (whether or not subsequently amended) that leads to the Nationalisation, (d) in the case of an Insolvency, the date of the first public announcement of the institution of a proceeding or presentation of a petition or passing of a resolution (or other analogous procedure in any jurisdiction) that leads to the Insolvency, (e) in the case of a Delisting, the date of the first public announcement by the Exchange that the Shares will cease to be listed, traded or publicly quoted in the manner described in the definition of Delisting, and (f) in the case of a termination of the Deposit Agreement, the date of the first public announcement by the Depository that the Deposit Agreement is (or will be) terminated. In respect of any event, if the announcement of such event is made after the actual closing time for the regular trading session on the relevant Exchange, without regard to any after hours or any other trading outside of such regular trading session hours, the Announcement Date shall be deemed to be the next following Scheduled Trading Day."

The definition of "Insolvency Filing" shall be amended in accordance with the DR Amendment.

For the avoidance of doubt, where a provision is amended pursuant to this Share Linked Provision 7.1 in accordance with the DR Amendment, if the event described in such provision occurs in respect of the Underlying Shares or the Underlying Shares Issuer, then the consequence of such event shall be interpreted consistently with the DR Amendment and such event.

7.2 **Full Lookthrough Depositary Receipt Provisions**

Where the relevant Pricing Supplement specifies that the "Full Lookthrough Depositary Receipt Provisions" shall apply to a Share, then the provisions set out below shall apply, and, in relation to such Share, the other provisions of these Share Linked Provisions shall be deemed to be amended and modified as set out in this Share Linked Provision 7.2:

(a) The definition of "Potential Adjustment Event" shall be amended so that it reads as follows:

""**Potential Adjustment Event**" means any of the following:

(i) a subdivision, consolidation or reclassification of relevant Shares and/or Underlying Shares (unless resulting in a Merger Event), or a free distribution or dividend of any such Shares and/or Underlying Shares to existing holders by way of bonus, capitalisation or similar issue;

(ii) a distribution, issue or dividend to existing holders of the relevant Shares and/or Underlying Shares of (i) such Shares and/or Underlying Shares, or (ii) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of the Share Issuer or Underlying Shares Issuer, as appropriate, equally or proportionately with such payments to holders of such Shares and/or Underlying Shares, or (iii) share capital or other securities of another issuer acquired or owned (directly or indirectly) by the Share Issuer or Underlying Shares Issuer, as appropriate, as a result of a spin-off or other similar transaction, or (iv) any other type of securities, rights or warrants or other assets, in any case for payment (cash or other consideration) at less than the prevailing market price as determined by the Calculation Agent;

(iii) in respect of a Share and/or Underlying Share, an amount per Share and/or Underlying Share is determined by the Calculation Agent to be an extraordinary dividend;

(iv) a call by the Share Issuer or Underlying Shares Issuer, as appropriate, in respect of relevant Shares and/or Underlying Shares that are not fully paid;

(v) a repurchase by the Share Issuer or Underlying Shares Issuer, as appropriate, or any of its subsidiaries of relevant Shares and/or Underlying Shares whether out of profits or capital and whether the consideration for such repurchase is cash, securities or otherwise;

(vi) in respect of the Share Issuer or Underlying Shares Issuer, as appropriate, an event that results in any shareholder rights being distributed or becoming separated from shares of common stock or other shares of the capital stock of the Share Issuer or Underlying Shares Issuer, as appropriate, pursuant to a shareholder rights plan or arrangement directed against hostile takeovers that provides upon the occurrence of certain events for a distribution of preferred stock, warrants, debt instruments or stock rights at a price below their market value, as determined by the Calculation Agent, provided that any adjustment effected as a result of such an event shall be readjusted upon any redemption of such rights;

(vii) any other event that may have a diluting or concentrative effect on the theoretical value of the relevant Shares and/or Underlying Shares; or

(viii) the making of any amendment or supplement to the terms of the Deposit Agreement,

provided that an event under (i) to (vii) of the definition of "Potential Adjustment Event" in respect of the Underlying Shares shall not constitute a Potential Adjustment Event unless, in the determination of the Calculation Agent, such event has a diluting or concentrative effect on the theoretical value of the Shares."

(b) If the Calculation Agent determines that:

(i) an event under (i) to (vii) (inclusive) of the definition of "Potential Adjustment Event" has occurred in respect of any Underlying Share, the Calculation Agent will determine whether such Potential Adjustment Event has a diluting or concentrative effect on the theoretical value of the relevant Shares; or

(ii) an event under (viii) of the definition of "Potential Adjustment Event" has occurred, the Calculation Agent will determine whether such Potential Adjustment Event has an economic effect on the Securities,

and, in each case, the Calculation Agent will make the corresponding adjustment(s), if any, to one or more of any variable relevant to the exercise, settlement, payment or other terms of the Securities as the Calculation Agent determines appropriate to account for (x) in respect of an event under (i) to (vii) (inclusive) of the definition of "Potential Adjustment Event", that diluting or concentrative effect, and (y) in respect of an event under (viii) of the definition of "Potential Adjustment Event", such economic effect on the Securities, as the case may be (provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Share) following the Potential Adjustment Event. The Calculation Agent may (amongst other factors) have reference to any adjustment made by the Depository under the Deposit Agreement.

If the Calculation Agent determines that no adjustment that it could make will produce a commercially reasonable result, it shall notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities, in which case, on such date as selected by the Calculation Agent in its discretion, the Issuer shall redeem the Securities upon prior notice made to the Holders, and the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

(c) The definitions of "Merger Event" and "Tender Offer" shall be amended in accordance with the DR Amendment.

(d) If the Calculation Agent determines that a Merger Event or Tender Offer has occurred in respect of an Underlying Share, then where the Calculation Agent makes an adjustment to the Securities in connection with a Merger Event or Tender Offer, the Calculation Agent may (amongst other factors) have reference to any adjustment made by the Depository under the Deposit Agreement.

(e) The definitions of Nationalisation, Insolvency and Delisting shall be amended in accordance with the DR Amendment.

(f) The definition of "Announcement Date" shall be amended so that it reads as follows:

"**Announcement Date**" means, in respect of (a) a Merger Event, the date of the first public announcement of a firm intention to engage in a transaction (whether or not subsequently amended) that leads to the Merger Event, (b) a Tender Offer, the date of the first public announcement of a firm intention to purchase or otherwise obtain the requisite number of voting shares (whether or not subsequently amended) that leads to the Tender Offer, (c) in the case of a Nationalisation, the date of the first public announcement to nationalise (whether or not subsequently amended) that leads to the Nationalisation, (d) in the case of an Insolvency, the date of the first public announcement of the institution of a proceeding or presentation of a petition or passing of a resolution (or other analogous procedure in any jurisdiction) that leads to the Insolvency, (e) in the case of a Delisting, the date of the first public announcement by the Exchange that the Shares will cease to be listed, traded or publicly quoted in the manner described in the definition of Delisting, and (f) in the case of a termination of the Deposit Agreement, the date of the first public announcement by the Depository that the Deposit Agreement is (or will be) terminated. In respect of any event, if the announcement of such event is made after the actual closing time for the regular trading session on the relevant Exchange, without regard to any after hours or any other trading outside of such regular trading session hours, the Announcement Date shall be deemed to be the next following Scheduled Trading Day.

(g) The definition of "Insolvency Filing" shall be amended in accordance with the DR Amendment.

(h) For the purpose of determining whether a Market Disruption Event has occurred in respect of the Share, the following amendments shall be deemed to be made to the Share Linked Provisions:

(i) each reference in the definition of "Exchange Business Day", "Scheduled Closing Time", "Scheduled Trading Day", "Trading Disruption", "Exchange Disruption", "Early Closure" and "Disrupted Day", to the "Exchange" shall be deemed to include a reference to the primary exchange or quotation system on which the Underlying Shares are traded, as determined by the Calculation Agent; and

(ii) the definition of "Market Disruption Event", "Trading Disruption" and "Exchange Disruption" shall be amended in accordance with the DR Amendment.

For the avoidance of doubt, where a provision is amended pursuant to this Share Linked Provision 7.2 in accordance with the DR Amendment, if the event described in such provision occurs in respect of the Underlying Shares or the Underlying Shares Issuer, then the consequence of such event shall be interpreted consistently with the DR Amendment and such event.

8. **Consequences of Extraordinary Events in respect of a Share that is a share of an Exchange Traded Fund and a Successor Index Event (ETF)**

8.1 If the Calculation Agent determines that an Extraordinary Event has occurred in respect of a Share that is a share of an Exchange Traded Fund (the "**Affected Exchange Traded Fund**") then, on or after the Extraordinary Event Date, the following consequences shall apply in the following order:

(a) firstly, the Calculation Agent may in its discretion make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Extraordinary Event (including adjustments to account for changes in volatility, expected dividends, stock loan rate or liquidity relevant to the Shares or to the Securities), which may, but need not, be determined by reference to the adjustment(s) made in respect of such Extraordinary Event by an options exchange to options on the relevant Shares traded on such options exchange; and determine the effective date of that adjustment (but, in the case of a Tender Offer, the Share Issuer and the Share will not change);

(b) secondly, if the Calculation Agent determines that no adjustment that it could make under paragraph (a) above will produce a commercially reasonable result, the Calculation Agent shall notify the Issuer and shall select an alternative exchange traded fund which is denominated in the same currency and, in the reasonable opinion of the Calculation Agent, has a similar investment objective as the Affected Exchange Traded Fund to replace the Affected Exchange Traded Fund (such replacement exchange traded fund being the "**Replacement Exchange Traded Fund**" in respect of such Affected Exchange Traded Fund). If a Replacement Exchange Traded Fund is selected, that Replacement Exchange Traded Fund will be substituted for the Shares for all purposes of the Share Linked Provision and the Calculation Agent may determine in its sole discretion the appropriate date for the substitution of the Shares;

(c) thirdly, if the Calculation Agent is unable to, or does not, for any reason, select a Replacement Exchange Traded Fund in respect of an Affected Exchange Traded Fund in accordance with paragraph (b) above, the Calculation Agent shall select (i) an index or a basket of indices (and the respective weighting of each index in such basket) which is denominated in the same currency as the Affected Exchange Traded Fund and has, in the reasonable opinion of the Calculation Agent, similar economic characteristics as the Affected Exchange Traded Fund (such index shall be, in relation to such Affected Exchange Traded Fund, the "**Replacement Index**", and if a basket of indices is selected, such basket shall be referred to as the "**Replacement Index Basket**" and each index comprising the basket shall be referred to as a "component index"), and (ii) the date from which such Replacement Index or Replacement Index Basket, as the case may be, shall replace the Affected Exchange Traded Fund (in relation to such Affected Exchange Traded Fund, the "**Index Substitution Date**") (and, for the avoidance of doubt, any Index Substitution Date may be set by the Calculation Agent such that it falls prior to the event which resulted in the substitution, including, without limitation, on or prior to the Issue Date), and the Calculation Agent shall notify the Issuer. Following any such selection, the Replacement Index or Replacement Index Basket, as the case may be, shall replace the Affected Exchange Traded Fund on the Index Substitution Date and the Calculation Agent shall, in its sole and absolute discretion, make such adjustment(s), modification(s), substitution(s), calculation(s), determination(s) and/or cancellation(s) that it determines in its discretion to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms, redemption amount, disruption mechanism or any other terms in respect of the Securities to account for such replacement (including, for the avoidance of doubt, the manner in which the Securities shall be redeemed, any amount payable on redemption and/or whether any asset is to be delivered (and, if so, the amount thereof) on redemption); or

(d) fourthly, if the Calculation Agent is unable to, or does not, for any reason, select a Replacement Index or Replacement Index Basket, as the case may be, in respect of an Affected Exchange Traded Fund in accordance with paragraph (c) above, the Calculation Agent will notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities, in which case on such date falling on or after the relevant Extraordinary Event Date, the Issuer shall redeem the Securities for an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

8.2 If the relevant Pricing Supplement specifies "**ETF – Successor Index Event Provision**" to be applicable, then if the Calculation Agent determines that a Successor Index Event (ETF) has occurred in respect of the Underlying Index for a Share that is a share of an Exchange Traded Fund then, on or after the date on which the Successor Index Event (ETF) occurs, the Calculation Agent may determine that the Underlying Index will be deemed to be Successor Underlying Index and the Calculation Agent may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such successor, provided that, if the Calculation Agent does not make such determination, the relevant consequence shall be the early redemption of the Securities in which case the Calculation Agent may determine that the Securities shall be redeemed on such date falling on or after the date on which Successor Index Event (ETF) occurs and the Issuer shall redeem the Securities for an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1

or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

9. **Adjustments to Securities linked to Shares in European Currencies**

In respect of any Securities linked to or relating to Shares originally quoted, listed and/or dealt as of the Issue Date in a currency of a member state of the European Union that has not adopted the single currency in accordance with the EC Treaty, if such Shares are at any time after the Issue Date quoted, listed and/or dealt exclusively in euro on the relevant Exchange or, where no Exchange is specified, the principal market on which those Shares are traded, then the Calculation Agent may make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to preserve the economic terms of the Securities. The Calculation Agent will make any conversion necessary for purposes of any such adjustment based on the relevant official conversion rate or at an appropriate mid-market spot rate of exchange determined by the Calculation Agent to be prevailing as of the Valuation Time, as determined to be appropriate in the discretion of the Calculation Agent. No adjustments under this Share Linked Provision 9 will affect the currency denomination of any payment obligation arising out of the Securities.

10. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which the Share Linked Provisions apply:

"**Additional Disruption Events**" means (a) a Change in Law, and (b) if Hedging Disruption and/or Insolvency Filing is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption and/or Insolvency Filing (as the case may be) (each, an "**Additional Disruption Event**").

"**Announcement Date**" means, in respect of (a) a Merger Event, the date of the first public announcement of a firm intention to engage in a transaction (whether or not subsequently amended) that leads to the Merger Event, (b) a Tender Offer, the date of the first public announcement of a firm intention to purchase or otherwise obtain the requisite number of voting shares (whether or not subsequently amended) that leads to the Tender Offer, (c) in the case of a Nationalisation, the date of the first public announcement to nationalise (whether or not subsequently amended) that leads to the Nationalisation, (d) in the case of an Insolvency, the date of the first public announcement of the institution of a proceeding or presentation of a petition or passing of a resolution (or other analogous procedure in any jurisdiction) that leads to the Insolvency, (e) in the case of a Delisting, the date of the first public announcement by the Exchange that the Shares will cease to be listed, traded or publicly quoted in the manner described in the definition of Delisting, (f) in respect of a Share that is a share of an Exchange Traded Fund and a NAV Publication Suspension (ETF), the date of the first public announcement of such NAV Publication Suspension (ETF), or, if there is no such announcement, the date of the first occurrence of such NAV Publication Suspension (ETF), (g) in respect of a Share that is a share of an Exchange Traded Fund and an Underlying Index Cancellation (ETF), the date of the first public announcement of such Underlying Index Cancellation (ETF), or, if there is no such announcement, the date of the first occurrence of such Underlying Index Cancellation (ETF), and (h) in respect of a Share that is a share of an Exchange Traded Fund and an Underlying Index Modification (ETF), the date of the first public announcement of such Underlying Index Modification (ETF), or, if there is no such announcement, the date of the first occurrence of such Underlying Index Modification (ETF). In respect of any event, if the announcement of such event is made after the actual closing time for the regular trading session on the relevant Exchange, without regard to any after hours or any other trading outside of such regular trading session hours, the Announcement Date shall be deemed to be the next following Scheduled Trading Day.

"**Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Averaging Reference Date**" means each Initial Averaging Date or Averaging Date, in each case, subject to adjustment in accordance with the Share Linked Provisions.

"**Change in Law**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with

competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Redemption Date or Settlement Date, as is applicable to the Securities, become illegal for any of the Issuer and/or the Guarantor and/or any of their respective affiliates to hold, acquire or dispose of Shares, or (y) (if "Change in Law – Increased Cost" is specified to be applicable in the relevant Pricing Supplement) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Clearance System**" means, in respect of a Share, the principal domestic clearance system customarily used for settling trades in the relevant Share. If the Clearance System ceases to settle trades in such Share, the Clearance System will be determined by the Calculation Agent.

"**Clearance System Business Day**" means, in respect of a Clearance System and a Share, any day on which such Clearance System is (or, but for the occurrence of a Share Settlement Disruption Event, would have been) open for the acceptance and execution of settlement instructions.

"**Closing Share Price**" means, on any day in respect of a Share, the official closing price of such Share on the Exchange as of the Valuation Time on the relevant day, or if there is no official closing price, the mid-market price per such Share on the Exchange at the Valuation Time on such day, all as determined by the Calculation Agent subject as provided in the Share Linked Provisions.

"**Coupon Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day in respect of a Share, the next following Scheduled Trading Day.

"**Delisting**" means that the Exchange announces that pursuant to the rules of such Exchange, the Shares cease (or will cease) to be listed, traded or publicly quoted on the Exchange for any reason (other than a Merger Event or Tender Offer) and are not immediately re-listed, re-traded or re-quoted on an exchange or quotation system located in the same country as the Exchange (or, where the Exchange is within the European Union, in any member state of the European Union).

"**Deposit Agreement**" means, in relation to the Shares, the agreements or other instruments constituting the Shares, as from time to time amended or supplemented in accordance with their terms.

"**Depository**" means, where the relevant Pricing Supplement specifies that the "Partial Lookthrough Depositary Receipt Provisions" or the "Full Lookthrough Depositary Receipt Provisions" shall apply to a Share, the Share Issuer of the Shares.

"**Disrupted Day**" means any Scheduled Trading Day on which a relevant Exchange or any Related Exchange fails to open for trading during its regular trading session or on which a Market Disruption Event has occurred.

"**DR Amendment**" means, if the relevant Pricing Supplement specifies that:

(i) the "Partial Lookthrough Depositary Receipt Provisions" shall apply to a Share, in respect of the definitions of "Merger Event", "Tender Offer", "Nationalisation", "Insolvency", "Delisting" and "Insolvency Filing", that the following changes shall be made to such definition or provision: (a) all references to "Shares" shall be deleted and replaced with the words "Shares and/or the Underlying Shares"; and (b) all references to "Share Issuer" shall be deleted and replaced with the words "Share Issuer or Underlying Shares Issuer, as appropriate".

(ii) the "Full Lookthrough Depositary Receipt Provisions" shall apply to a Share, in respect of the definitions of "Merger Event", "Tender Offer", "Nationalisation", "Insolvency", "Delisting", "Insolvency Filing", "Market Disruption Event", "Trading Disruption" and "Exchange Disruption" that the following changes shall be made to such definition or provision: (a) all references to "Shares" shall be deleted and replaced with the words "Shares and/or the Underlying Shares"; and (b) all references to "Share Issuer" shall be deleted and replaced with the words "Share Issuer or Underlying Shares Issuer, as appropriate".

"**Early Closure**" means, in respect of a Share, the closure on any Exchange Business Day of the relevant Exchange relating to such Share or any Related Exchange prior to its Scheduled Closing Time unless

such earlier closing time is announced by such Exchange or Related Exchange, as the case may be, at least one hour prior to the earlier of (a) the actual closing time for the regular trading session on such Exchange or Related Exchange (as the case may be) on such Exchange Business Day and (b) the submission deadline for orders to be entered into such Exchange or Related Exchange system for execution as at the relevant Valuation Time on such Exchange Business Day.

"**Exchange**" means, in respect of a Share, each exchange or quotation system specified as such in the relevant Pricing Supplement for such Share, any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in such Share has temporarily relocated (provided that the Calculation Agent has determined that there is comparable liquidity relative to such Share on such temporary substitute exchange or quotation system as on the original Exchange).

"**Exchange Business Day**" means, in respect of a Share, any Scheduled Trading Day for such Share on which each Exchange and each Related Exchange for such Share are open for trading during their respective regular trading sessions, notwithstanding any such Exchange or Related Exchange closing prior to its Scheduled Closing Time.

"**Exchange Disruption**" means, in respect of a Share, any event (other than an Early Closure) that disrupts or impairs (as determined by the Calculation Agent) the ability of market participants in general (a) to effect transactions in, or obtain market values for, the Shares on the Exchange, or (b) to effect transactions in, or obtain market values for, futures or options contracts relating to such Share on any relevant Related Exchange.

"**Exchange Traded Fund**" means an exchange traded fund specified as such in the relevant Pricing Supplement, and related expressions shall be construed accordingly.

"**Extraordinary Events**" means a Merger Event, a Tender Offer, a Nationalisation, an Insolvency or a Delisting and:

(a) if the relevant Pricing Supplement specifies that the "Partial Lookthrough Depositary Receipt Provisions" or the "Full Lookthrough Depositary Receipt Provisions" shall apply to a Share, then "Extraordinary Events" also means the announcement by the Depository that the Deposit Agreement is (or will be) terminated;

(b) in respect of a Share that is a share of an Exchange Traded Fund only, if the relevant Pricing Supplement specifies:

(i) "**Extraordinary Events** – **NAV Publication Suspension (ETF)**" to be applicable, then "Extraordinary Events" also means a NAV Publication Suspension (ETF);

(ii) "**Extraordinary Events** – **Underlying Index Cancellation (ETF)**" to be applicable, then "Extraordinary Events" also means an Underlying Index Cancellation (ETF);

(iii) "**Extraordinary Events** – **Underlying Index Modification (ETF)**" to be applicable, then "Extraordinary Events" also means an Underlying Index Modification (ETF),

each, an "**Extraordinary Event**".

"**Extraordinary Event Date**" means, in respect of a Share that is a share of an Exchange Traded Fund and an Extraordinary Event, the earliest to occur of the relevant Merger Date, Tender Offer Date or Announcement Date, as is applicable to such Extraordinary Event, as determined by the Calculation Agent.

"**Fallback Valuation Date**" means, in respect of any Share, the date(s) specified as such in the relevant Pricing Supplement, or, if no date is specified for the Fallback Valuation Date in the relevant Pricing Supplement, then the Fallback Valuation Date for any date on which the price of such Share is required to be determined shall be the second Business Day prior to the next following date upon which any payment or delivery of assets may have to be made by the Issuer by reference to the price of such Share on such day.

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s)

or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Initial Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Initial Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Insolvency**" means that by reason of the voluntary or involuntary liquidation, bankruptcy, insolvency, dissolution or winding-up of or any analogous proceeding affecting a Share Issuer (a) all the Shares of that Share Issuer are required to be transferred to a trustee, liquidator or other similar official or (b) holders of the Shares of that Share Issuer become legally prohibited from transferring them.

"**Insolvency Filing**" means that the Share Issuer institutes or has instituted against it by a regulator, supervisor or any similar official with primary insolvency, rehabilitative or regulatory jurisdiction over it in the jurisdiction of its incorporation or organisation or the jurisdiction of its head or home office, or it consents to a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation by it or such regulator, supervisor or similar official or it consents to such a petition, provided that proceedings instituted or petitions presented by creditors and not consented to by the Share Issuer shall not be deemed an Insolvency Filing.

"**Interest Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day in respect of a Share, the next following Scheduled Trading Day.

"**Market Disruption Event**" means, in respect of a Share, the occurrence or existence of (a) a Trading Disruption, (b) an Exchange Disruption, which in either case the Calculation Agent determines is material, at any time during the one-hour period that ends at the relevant Valuation Time, (c) an Early Closure, or (d) in respect of a Share that is a share of an Exchange Traded Fund only and, if the relevant Pricing Supplement specifies "Market Disruption Event - NAV Temporary Publication Suspension (ETF)" to be applicable, then "Market Disruption Event" also means a NAV Temporary Publication Suspension (ETF).

"**Maximum Days of Disruption**" means eight Scheduled Trading Days or such other number of Scheduled Trading Days specified in the relevant Pricing Supplement.

"**Merger Date**" means the closing date of a Merger Event or, where a closing date cannot be determined under the local law applicable to such Merger Event, such other date as determined by the Calculation Agent.

"**Merger Event**" means, in respect of any relevant Shares, any (a) reclassification or change of such Shares that results in a transfer of or an irrevocable commitment to transfer all of such Shares outstanding to another entity or person, (b) consolidation, amalgamation, merger or binding share exchange of the Share Issuer with or into another entity or person (other than a consolidation, amalgamation, merger or binding share exchange in which such Share Issuer is the continuing entity and which does not result in a reclassification or change of all of such Shares outstanding), (c) takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person to purchase or otherwise obtain 100 per cent. of the outstanding Shares of the Share Issuer that results in a transfer of or an irrevocable commitment to transfer all such Shares (other than such Shares owned or controlled by such other entity or person), or (d) consolidation, amalgamation, merger or binding share exchange of the Share Issuer or its subsidiaries with or into another entity in which the Share Issuer is the continuing entity and which does not result in a reclassification or change of all such Shares outstanding but results in the outstanding Shares (other than Shares owned or controlled by such other entity) immediately prior to such event collectively representing less than 50 per cent. of the outstanding Shares immediately following such event (a "**Reverse Merger**"), in each case if the Merger Date is on or before the final Reference Date or Averaging Reference Date, as is applicable.

"**Nationalisation**" means that all the Shares or all or substantially all the assets of a Share Issuer are nationalised, expropriated or are otherwise required to be transferred to any governmental agency, authority, entity or instrumentality thereof.

"**NAV Publication Suspension (ETF)**" means that, in the determination of the Calculation Agent, the management company of the Exchange Traded Fund, or any other entity who has been delegated the responsibility to publish the net asset value of each Share, has failed to or will fail to, or has not published or will not publish, the net asset value of each Share, and such failure to publish or non-publication will, in the determination of the Calculation Agent, in its sole and absolute discretion, have a material effect on the Securities and will be for more than a short period of time and/or will not be of a temporary nature.

"**NAV Temporary Publication Suspension (ETF)**" means that, in the determination of the Calculation Agent, the management company of the Exchange Traded Fund, or any other entity who has been delegated the responsibility to publish the net asset value of each Share, fails to or does not publish, the net asset value of each Share, and such failure to publish or non-publication will, in the determination of the Calculation Agent, in its sole and absolute discretion, have a material effect on the Securities.

"**Observation Date (Closing Valuation)**" means, if specified to be applicable in the relevant Pricing Supplement, in respect of a Share and an Observation Period, and unless otherwise provided in the relevant Pricing Supplement, each Scheduled Trading Day which is not a Disrupted Day for such Share falling in the Observation Period.

"**Observation Date (Intra-Day Valuation)**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of a Share and an Observation Period, and unless otherwise provided in the relevant Pricing Supplement, each day falling in the Observation Period on which such Share is traded on the relevant Exchange, regardless of whether such day is a Scheduled Trading Day or is a Disrupted Day for such Share.

"**Observation Period**" means, if specified to be applicable in the relevant Pricing Supplement, in respect of a Share, the period commencing on the relevant Observation Period Start Date and ending on the relevant Observation Period End Date.

"**Observation Period End Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of a Share, the date specified as such in the relevant Pricing Supplement, which shall be the last day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Observation Period Start Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of a Share, the date specified as such in the relevant Pricing Supplement, which shall be the first day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Periodic Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Potential Adjustment Event**" means any of the following:

(a) a subdivision, consolidation or reclassification of relevant Shares (unless resulting in a Merger Event), or a free distribution or dividend of any such Shares to existing holders by way of bonus, capitalisation or similar issue;

(b) a distribution, issue or dividend to existing holders of the relevant Shares of (i) such Shares, or (ii) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of the Share Issuer equally or proportionately with such payments to holders of such Shares, or (iii) share capital or other securities of another issuer acquired or owned (directly or indirectly) by the Share Issuer as a result of a spin-off or other similar transaction, or (iv) any other type of securities, rights or warrants or other assets, in any case for payment (cash or other consideration) at less than the prevailing market price as determined by the Calculation Agent;

(c) in respect of a Share, an amount per Share is determined by the Calculation Agent to be an extraordinary dividend;

(d) a call by the Share Issuer in respect of relevant Shares that are not fully paid;

(e) a repurchase by the Share Issuer or any of its subsidiaries of relevant Shares whether out of profits or capital and whether the consideration for such repurchase is cash, securities or otherwise;

(f) in respect of the Share Issuer, an event that results in any shareholder rights being distributed or becoming separated from shares of common stock or other shares of the capital stock of the Share Issuer pursuant to a shareholder rights plan or arrangement directed against hostile takeovers that provides upon the occurrence of certain events for a distribution of preferred stock, warrants, debt instruments or stock rights at a price below their market value, as determined by the Calculation Agent, provided that any adjustment effected as a result of such an event shall be readjusted upon any redemption of such rights; or

(g) any other event that may have a diluting or concentrative effect on the theoretical value of the relevant Shares.

"**Reference Date**" means each Initial Valuation Date, Coupon Valuation Date, Interest Valuation Date, Periodic Valuation Date or Valuation Date, in each case, subject to adjustment in accordance with the Share Linked Provisions.

"**Related Exchange**" means, in respect of any Share, each exchange or quotation system, if any, specified as such in the relevant Pricing Supplement, any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in futures or options contracts relating to the Share has temporarily relocated (provided that the Calculation Agent has determined that there is comparable liquidity relative to the futures or options contracts relating to the Share on such temporary substitute exchange or quotation system as on the original Related Exchange), provided, however, that where "**All Exchanges**" is specified as the Related Exchange, "**Related Exchange**" shall mean each exchange or quotation system (as determined by the Calculation Agent) where trading has a material effect (as determined by the Calculation Agent) on the overall market for futures or options contracts relating to the Share.

"**Relevant Date**" has the meaning given in Share Linked Provision 2 (*Fallback Valuation Date*).

"**Scheduled Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Averaging Date.

"**Scheduled Averaging Reference Date**" means each Scheduled Averaging Date or Scheduled Initial Averaging Date.

"**Scheduled Closing Time**" means, in respect of a Share and in respect of an Exchange or Related Exchange and a Scheduled Trading Day, the scheduled weekday closing time of such Exchange or Related Exchange on such Scheduled Trading Day, without regard to after hours or any other trading outside of the regular trading session hours.

"**Scheduled Coupon Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Coupon Valuation Date.

"**Scheduled Initial Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Averaging Date.

"**Scheduled Initial Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Valuation Date.

"**Scheduled Interest Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Interest Valuation Date.

"**Scheduled Periodic Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Periodic Valuation Date.

"**Scheduled Reference Date**" means each Scheduled Initial Valuation Date, Scheduled Interest Valuation Date, Scheduled Coupon Valuation Date, Scheduled Periodic Valuation Date or Scheduled Valuation Date.

"**Scheduled Trading Day**" means, in respect of a Share, any day on which each Exchange and each Related Exchange for the Share are scheduled to be open for trading for their respective regular trading sessions.

"**Scheduled Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Valuation Date.

"**Settlement Cycle**" means the period of Clearance System Business Days following a trade in the Share on the Exchange in which settlement will customarily occur according to the rules of such Exchange.

"**Share**" means, subject to adjustment in accordance with the Share Linked Provisions, the share or shares specified as such in the relevant Pricing Supplement and related expressions shall be construed accordingly, and, if the relevant Pricing Supplement specifies that a Share is a "**Share of Exchange Traded Fund**", the Share specified as such in the relevant Pricing Supplement shall be a share of an Exchange Traded Fund.

"**Share Issuer**" means, in respect of a Share, the issuer of such Share.

"**Share Price**" means, if specified to be applicable in the relevant Pricing Supplement (and subject as such term may otherwise be defined in the relevant Pricing Supplement), in respect of a Share and any relevant time on any relevant day, the price at which such Share trades on the relevant Exchange at such time on such day, as determined by the Calculation Agent.

"**Share Settlement Disruption Event**" means, in respect of a Share, an event that the Calculation Agent determines is beyond the control of the Issuer and/or its affiliates as a result of which the relevant Clearance System cannot clear the transfer of such Share.

"**Successor Index Event (ETF)**" means, in respect of a Share that is a share of an Exchange Traded Fund, the Underlying Index for such Exchange Traded Fund is (i) not calculated and announced by the Index Sponsor but is calculated and announced by a successor sponsor acceptable to the Calculation Agent, or (ii) replaced by a successor index (a "**Successor Underlying Index**") using, in the determination of the Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of such Underlying Index.

"**Tender Offer**" means a takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person that results in such entity or person purchasing, or otherwise obtaining or having the right to obtain, by conversion or other means, greater than ten per cent. and less than 100 per cent. of the outstanding voting shares of the Share Issuer, as determined by the Calculation Agent, based upon the making of filings with governmental or self-regulatory agencies or such other information as the Calculation Agent deems relevant.

"**Tender Offer Date**" means, in respect of a Tender Offer, the date on which voting shares in the amount of the applicable percentage threshold are actually purchased or otherwise obtained (as determined by the Calculation Agent).

"**Trading Disruption**" means, in respect of a Share, any suspension of, or limitation imposed on, trading by the relevant Exchange or Related Exchange or otherwise, and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or Related Exchange or otherwise, (a) relating to the Share on the relevant Exchange or (b) in futures or options contracts relating to the Share on any relevant Related Exchange.

"**Underlying Index**" means, in respect of a Share that is a share of an Exchange Traded Fund, the index underlying such Exchange Traded Fund, as determined by the Calculation Agent.

"**Underlying Index Cancellation (ETF)**" means, in respect of a Share that is a share of an Exchange Traded Fund, the Underlying Index for such Exchange Traded Fund is permanently cancelled and no Successor Underlying Index (as defined in the definition of "Successor Index Event (ETF)" above) exists as at the date of such cancellation, as determined by the Calculation Agent.

"**Underlying Index Modification (ETF)**" means, in respect of a Share that is a share of an Exchange Traded Fund, and the Underlying Index for such Exchange Traded Fund, the relevant Underlying Index sponsor making or announcing that it will make a material change in the formula for, or the method of, calculating the relevant Underlying Index, or in any other way materially modifies such Underlying Index, as determined by the Calculation Agent.

"**Underlying Shares**" means the shares or other securities which are the subject of the Deposit Agreement.

"**Underlying Shares Issuer**" means the issuer of the Underlying Shares.

"**Valid Date**" means a Scheduled Trading Day that is not a Disrupted Day and on which another Averaging Reference Date does not or is not deemed to occur.

"**Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of a Share, the next following Scheduled Trading Day.

"**Valuation Time**" means the time specified in the relevant Pricing Supplement or, if no such time is specified, the Scheduled Closing Time on the relevant Exchange on the relevant day in relation to each Share to be valued. If the relevant Exchange closes prior to its Scheduled Closing Time and the specified Valuation Time is after the actual closing time for its regular trading session, then the Valuation Time shall be such actual closing time.

ANNEX 2 – INDEX LINKED PROVISIONS

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The terms and conditions set out in this Annex 2 apply to Securities for which the relevant Pricing Supplement specifies that the Index Linked Provisions shall apply.

1. **Consequences of Disrupted Days**

1.1 **Single Index and Reference Dates**

Where the Securities relate to a single Index, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then the Reference Date shall be the first succeeding Scheduled Trading Day in respect of the Index that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of the Index equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day. In that case:

(a) the last consecutive Scheduled Trading Day in respect of the Index shall be deemed to be the Reference Date, notwithstanding the fact that such day is a Disrupted Day; and

(b) the Calculation Agent shall determine the level of the Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of the Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (b) shall be deemed to be the Closing Index Level in respect of the Reference Date.

1.2 **Single Index and Averaging Reference Dates**

Where the Securities relate to a single Index, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then the Averaging Reference Date will be deemed not to be a relevant Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Dates then the sole Averaging Reference Date for the Index shall be the first succeeding Scheduled Trading Day in respect of the Index following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of the Index equal in number to the Maximum Days of Disruption immediately following such final Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day in respect of the Index shall be deemed to be the sole Averaging Reference Date for the Index, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine the level of the Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of the Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Index Level in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then the Averaging Reference Date shall be the first succeeding Scheduled Trading Day in respect of the Index following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day (irrespective of whether that deferred Averaging Reference Date is already or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of the Index equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day in respect of the Index shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day in respect of the Index is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine the level of the Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of the Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Index Level in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then the Averaging Reference Date shall be the first succeeding Valid Date. If the first succeeding Valid Date has not occurred as of the Valuation Time on the last consecutive Scheduled Trading Day in respect of the Index equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date, then:

(i) that last consecutive Scheduled Trading Day in respect of the Index shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day in respect of the Index is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine the level of the Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of the Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Index Level in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then it shall be deemed that the consequence specified in "Modified Postponement" will apply.

1.3 **Index Basket and Reference Dates**

Where the Securities relate to a basket of Indices, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then:

(a) the Reference Date for each Index which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Reference Date; and

(b) the Reference Date for each Index which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day in respect of such Index that the Calculation Agent determines is not a Disrupted Day relating to that Index, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of such Index equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day relating to that Index. In that case:

(i) the last consecutive Scheduled Trading Day in respect of such Index shall be deemed to be the Reference Date for the Index, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine the level of such Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of such Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the relevant Closing Index Level in respect of the Reference Date.

1.4 **Index Basket and Averaging Reference Dates**

Where the Securities relate to a basket of Indices, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then the Averaging Reference Date will be deemed not to be an Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Dates, then:

(i) the sole Averaging Reference Date for each Index which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the final Scheduled Averaging Reference Date; and

(ii) the sole Averaging Reference Date for each Index which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day in respect of such Index following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to such Index, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of such Index equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date is a Disrupted Day relating to that Index. In that case:

(A) that last consecutive Scheduled Trading Day in respect of such Index shall be deemed to be the sole Averaging Reference Date for such Index, notwithstanding the fact that such day is a Disrupted Day; and

(B) the Calculation Agent shall determine the level of such Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of such Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the relevant Closing Index Level in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then:

(i) the Averaging Reference Date for each Index which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Index which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day in respect of such Index following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to that Index (irrespective of whether that deferred Averaging Reference Date is or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days in respect of such Index equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day relating to such Index. In that case:

(A) the last consecutive Scheduled Trading Day in respect of such Index shall be deemed to be such Averaging Reference Date for the Index (irrespective of whether that last consecutive Scheduled Trading Day in respect of such Index is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine the level of such Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of such Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the relevant Closing Index Level in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then:

(i) the Averaging Reference Date for each Index which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Index which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Valid Date relating to such Index. If the first succeeding Valid Date has not occurred as of the relevant Valuation Time on the last consecutive Scheduled Trading Day in respect of such Index equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date:

(A) that last consecutive Scheduled Trading Day in respect of such Index shall be deemed to be the Averaging Reference Date for such Index (irrespective of whether that last consecutive Scheduled Trading Day in respect of such Index is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine the relevant level of such Index as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day in respect of such Index in accordance with Index Linked Provision 1.5 (*Formula for and method of calculating an Index level after the Maximum Days of Disruption*), and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the relevant Closing Index Level in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then it shall be deemed that the consequence specified in "Modified Postponement" will apply.

1.5 **Formula for and method of calculating an Index level after the Maximum Days of Disruption**

The Calculation Agent shall determine the level of the Index as of the relevant Valuation Time on or in respect of the relevant last consecutive Scheduled Trading Day, pursuant to Index Linked Provisions 1.1(b), 1.2(a)(ii), 1.2(b)(ii), 1.2(c)(ii), 1.3(b)(ii), 1.4(a)(ii)(B), 1.4(b)(ii)(B) and 1.4(c)(ii)(B), in accordance with the formula for and method of calculating the Index last in effect prior to the occurrence of the relevant first Disrupted Day, using:

(a) in respect of a Unitary Index or Multi-Exchange Index, the Exchange traded or quoted price as of the Valuation Time on the last consecutive Scheduled Trading Day of each Component comprised in the Index (or, if an event giving rise to a Share Disrupted Day has occurred in respect of any relevant Component that is a Share (or an analogous event has occurred in respect of any relevant Component that is not a Share) on such last consecutive Scheduled Trading Day for any relevant Component, or such last consecutive Scheduled Trading Day is not a Scheduled Trading Day for any relevant Component, as determined by the Calculation Agent, its good faith estimate of the value for the relevant Component as of the Valuation Time on the last consecutive Scheduled Trading Day); and

(b) in respect of a Proprietary Index, such levels or values as the Calculation Agent determines to be appropriate as of the Valuation Time on or in respect of that last consecutive Scheduled Trading Day of each Component comprised in the Index.

2. **Fallback Valuation Date**

Notwithstanding any other terms of the Index Linked Provisions, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to any Reference Date or Averaging Reference Date (any such date being, a "**Relevant Date**"), and if:

(a) following adjustment of the original date on which such Relevant Date is scheduled to fall pursuant to adjustment of the Relevant Date pursuant to either or both of (i) Index Linked Provision 1 (*Consequences of Disrupted Days*) or (ii) Index Linked Provision 9 (*Definitions*),

the Relevant Date in respect of an Index would otherwise fall after the Fallback Valuation Date in respect of the Index; or

(b) the Maximum Days of Disruption for the Relevant Date is specified to be "Zero" or "None",

then the Fallback Valuation Date shall be deemed to be the Relevant Date for the Index. If the Fallback Valuation Date is not a Scheduled Trading Day or is a Disrupted Day relating to that Index, as the case may be, then the Calculation Agent shall determine the Closing Index Level as of the Valuation Time in respect of the Fallback Valuation Date in accordance with the formula for and method of calculating the Index last in effect prior to the occurrence of the first day that is not a Scheduled Trading Day or is a Disrupted Day, using:

(y) in respect of any Unitary Index or Multi-Exchange Index, the Exchange traded or quoted price as of the Valuation Time on the Fallback Valuation Date of each Component comprised in the Index (or, if an event giving rise to a Share Disrupted Day has occurred in respect of any relevant Component that is a Share (or an analogous event has occurred in respect of any relevant Component that is not a Share) on such Fallback Valuation Date or such Fallback Valuation Date is not a Scheduled Trading Day for any relevant Component, as determined by the Calculation Agent, its good faith estimate of the value for the relevant Component as of the relevant Valuation Time on the Fallback Valuation Date); and

(z) in respect of any Proprietary Index, such levels or values as the Calculation Agent determines to be appropriate as of the Valuation Time on the Fallback Valuation Date of each Component comprised in the Index,

and such determination by the Calculation Agent pursuant to this Index Linked Provision 2 shall be deemed to be the relevant Closing Index Level in respect of the Relevant Date.

If the level of a Proprietary Index in respect of a Relevant Date is scheduled to be published on a day other than such Relevant Date, and such level of the Proprietary Index is not published as of the Valuation Time on the Fallback Valuation Date, then the Calculation Agent shall determine the level of the Proprietary Index as of the Valuation Time on or in respect of the Fallback Valuation Date in accordance with the formula for and method of calculating the Proprietary Index last in effect prior to the occurrence of the first day that is not a Scheduled Trading Day or is a Disrupted Day, using such levels or values as the Calculation Agent determines to be appropriate as of the Valuation Time on the Fallback Valuation Date of each Component comprised in such Proprietary Index. Such determination by the Calculation Agent pursuant to this Index Linked Provision 2 shall be deemed to be the relevant level of the Proprietary Index in respect of the Relevant Date.

3. **Correction of Index levels**

In the event that any relevant level of an Index published by the Index Sponsor on any date which is utilised for any calculation or determination in connection with the Securities is subsequently corrected and the correction is published by the Index Sponsor:

(a) by the second Business Day prior to the next date on which any relevant payment may have to be made by the Issuer or in respect of which any relevant determination in respect of the Securities may have to be made; or

(b) if earlier and if the Index is a Unitary Index or Multi-Exchange Index, one Settlement Cycle after the original publication,

then the Calculation Agent may determine the amount that is payable or make any determination in connection with the Securities, after taking into account such correction, and, to the extent necessary, may adjust any relevant terms of the Securities to account for such correction.

Upon making any such determination or adjustment, as applicable, to account for such correction, the Calculation Agent shall give notice as soon as practicable to the Holders stating the determination or adjustment, as applicable, to any amount payable under the Securities and/or any of the other relevant terms and giving brief details of the determination or adjustment, as applicable, provided that any failure to give such notice shall not affect the validity of the determination or adjustment, as applicable, such correction or any action taken.

4. Consequences of Successors and Index Adjustment Events

4.1 Consequences of a Successor Index Sponsor or a Successor Index

If an Index is (i) not calculated and announced by the Index Sponsor but is calculated and announced by a successor sponsor acceptable to the Calculation Agent (a "**Successor Index Sponsor**") or (ii) replaced by a successor index using, in the determination of the Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of such Index, then in each case such index (the "**Successor Index**") will be deemed to be the Index.

The Calculation Agent may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such successor.

Upon making any such adjustment, the Calculation Agent shall give notice as soon as practicable to the Holders stating the adjustment to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities and/or any of the other relevant terms and giving brief details of the adjustment provided that any failure to give such notice shall not affect the validity of the adjustment or any action taken.

4.2 Consequences of an Index Adjustment Event

If an Index Adjustment Event has occurred in respect of the Securities, as determined by the Calculation Agent, the Calculation Agent will determine if such Index Adjustment Event has a material effect on the Securities and, if so, shall calculate the relevant level of the Index using, in lieu of a published level for such Index, the level for such Index as at or in respect of the relevant Reference Date or Averaging Reference Date, or any other relevant date as determined by the Calculation Agent, as the case may be, as determined by the Calculation Agent in accordance with the formula for and method of calculating such Index last in effect prior to the relevant Index Adjustment Event, but using only those Components that comprised such Index immediately prior to such Index Adjustment Event.

If the Calculation Agent determines, in its discretion, that it is not reasonably practicable (taking into account the costs involved) to calculate or continue to calculate the Index pursuant to the preceding paragraph, the Calculation Agent may rebase the Securities against another index or basket of indices, as applicable, determined by the Calculation Agent to be comparable to the relevant Index, and, following such rebasing, the Calculation Agent will make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such rebasing.

If the Calculation Agent determines, in its discretion, that there is not such an index or basket of indices comparable to the relevant Index, and/or that application of the preceding paragraphs would not achieve a commercially reasonable result, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

On making any such adjustment(s) or determination(s), the Calculation Agent shall give notice as soon as practicable to the Holders stating the adjustment to any amount payable under the Securities, the determination and/or any of the other relevant terms and giving brief details of the Index Adjustment Event, provided that any failure to give such notice shall not affect the validity of the Index Adjustment Event or any action taken.

5. Consequences of Additional Disruption Events

If the Calculation Agent determines that an Additional Disruption Event has occurred, the Calculation Agent may, in its discretion:

(a) determine to make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for such Additional Disruption Event; or

(b) determine and give notice to Holders that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

6. **Index Disclaimer**

The Securities are not sponsored, endorsed, sold, or promoted by the Index or the Index Sponsor and no Index Sponsor makes any representation whatsoever, whether express or implied, either as to the results to be obtained from the use of the Index and/or the levels at which the Index stands at any particular time on any particular date or otherwise. No Index or Index Sponsor shall be liable (whether in negligence or otherwise) to any person for any error in the Index and the Index Sponsor is under no obligation to advise any person of any error therein. No Index Sponsor is making any representation whatsoever, whether express or implied, as to the advisability of purchasing or assuming any risk in connection with the Securities. The Issuer and the Guarantor (if applicable) shall have no liability to the Holders for any act or failure to act by the Index Sponsor in connection with the calculation, adjustment, or maintenance of the Index. Except as may be disclosed prior to the Issue Date and specified in the relevant Pricing Supplement, none of the Issuer, the Guarantor (if applicable), the Calculation Agent or any of their respective affiliates has any affiliation with or control over the Index or Index Sponsor or any control over the computation, composition, or dissemination of the Index. Although the Calculation Agent will obtain information concerning the Index from publicly available sources it believes reliable, it will not independently verify this information. Accordingly, no representation, warranty, or undertaking (express or implied) is made and no responsibility is accepted by the Issuer, the Guarantor (if applicable), their affiliates, or the Calculation Agent as to the accuracy, completeness, and timeliness of information concerning the Index. In addition, no representation or warranty of any type, as to condition, satisfactory quality, performance or fitness for purpose are given, or duty or liability is assumed, by the Issuer, the Guarantor (if applicable), their affiliates, or the Calculation Agent in respect of the Index or any data included in or omissions from the Index, or the use of the Index in connection with the Securities and all those representations and warranties are excluded, save to the extent that such exclusion is prohibited by law.

7. **Consequences of the occurrence of a Market Disruption Event (VWC)**

Where this Index Linked Condition 7 is specified to be applicable in the relevant Pricing Supplement, if the Calculation Agent determines that a Market Disruption Event (VWC) has occurred or is continuing on a Reference Date (a "**Relevant Reference Date**") then the following provisions shall apply in order to determine the Index Level in respect of the Relevant Reference Date (and Index Linked Provisions 1.1, 1.3, and 2 shall not apply):

(a) where such Market Disruption Event (VWC) for such Relevant Reference Date is a Market Disruption Event (VWC) – Non-Publication, then the Calculation Agent shall determine the Index Level for the Index in respect of the Relevant Reference Date in accordance with the formula for and method of calculating the Index Level last in effect prior to the occurrence of the Market Disruption Event (VWC) – Non-Publication, using the Closing Level of each Constituent in respect of the Relevant Reference Date; or

(b) where such Market Disruption Event (VWC) for such Relevant Reference Date is a Market Disruption Event (VWC) – Constituent Disruption, then the Calculation Agent shall determine the Index Level for the Index in respect of the Relevant Reference Date in accordance with the formula for and method of calculating the Index Level last in effect prior to the occurrence of the Market Disruption Event (VWC) – Constituent Disruption, using such levels or values as the Calculation Agent determines to be appropriate, being, in respect of each Constituent which is:

(i) a Non-Disrupted Constituent in respect of the Relevant Reference Date, the Closing Level of such Non-Disrupted Constituent in respect of the Relevant Reference Date;

(ii) a Disrupted Constituent in respect of the Relevant Reference Date which is neither a Basket Constituent nor a Commodity Constituent, the Closing Level of such Disrupted

Constituent in respect of the immediately following Constituent Scheduled Trading Day that is not a Constituent Disrupted Day for such Disrupted Constituent, unless the Calculation Agent determines that each of the eight consecutive Constituent Scheduled Trading Days in respect of such Disrupted Constituent immediately following the Relevant Reference Date is a Constituent Disrupted Day in respect of such Disrupted Constituent. In that case the Calculation Agent shall determine the level of such Disrupted Constituent in accordance with the formula for and method of calculating such Disrupted Constituent last in effect prior to the occurrence of the first Constituent Disrupted Day in respect of such Disrupted Constituent, using such levels or values as the Calculation Agent determines to be appropriate as of such eighth consecutive Constituent Scheduled Trading Day in respect of such Disrupted Constituent, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Level in respect of such Disrupted Constituent. However, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to such Reference Date, and if the preceding sentence would require such Closing Level in respect of such Disrupted Constituent to be determined after such Fallback Valuation Date, then such Closing Level in respect of such Disrupted Constituent shall be determined on such Fallback Valuation Date using such levels or values as the Calculation Agent determines to be appropriate as of such Fallback Valuation Date; or

(iii) a Disrupted Constituent in respect of the Relevant Reference Date which is a Basket Constituent or a Commodity Constituent, the Closing Level of such Disrupted Constituent determined by the Calculation Agent using the formula for and method of calculating such Constituent last in effect prior to the occurrence of the Market Disruption Event (VWC) – Constituent Disruption, (and such determination by the Calculation Agent pursuant to this paragraph (iii) shall be deemed to be the Closing Level in respect of such Disrupted Constituent), and using:

(A) in respect of any Relevant Component that (in the determination of the Calculation Agent) is unaffected by the occurrence of such Market Disruption Event (VWC) – Constituent Disruption, the closing level of such Relevant Component (howsoever described in the relevant Index Rules) in respect of the Relevant Reference Date; and

(B) in respect of any Relevant Component that (in the determination of the Calculation Agent) is affected by the occurrence of such Market Disruption Event (VWC) – Constituent Disruption, the closing level of such Relevant Component (howsoever described in the relevant Index Rules) in respect of the immediately following Constituent Scheduled Trading Day that is not a Constituent Disrupted Day in respect of the Disrupted Constituent, unless the Calculation Agent determines that the Relevant Component is affected by the occurrence of such Market Disruption Event (VWC) – Constituent Disruption on each of the eight consecutive Constituent Scheduled Trading Days in respect of such Disrupted Constituent immediately following the Relevant Reference Date. In that case the Calculation Agent shall determine the closing level of such Relevant Component in accordance with the formula for and method of calculating such Relevant Component last in effect prior to the occurrence of the first Constituent Disrupted Day in respect of such Disrupted Constituent, using such levels or values as the Calculation Agent determines to be appropriate as of such eighth consecutive Constituent Scheduled Trading Day in respect of such Relevant Component, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the closing level of such Relevant Component. However, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to such Reference Date, and if the preceding sentences of this sub-paragraph would require such closing level of such Relevant Component to be determined after such Fallback Valuation Date, then such closing level of such Relevant Component shall be determined on such Fallback Valuation Date using such levels or values as the Calculation Agent determines to be appropriate as of such Fallback Valuation Date.

For the purposes of this Index Linked Provision 7, the following terms and expression shall have the following meanings:

"**Basket Constituent**" has the meaning given to it in the Index Rules.

"**Closing Level**" has, in respect of each Constituent, the "Closing Level" thereof as defined in the Index Rules, as determined by the Calculation Agent or, if not so defined, the relevant level, price or value of such Constituent as set out in the Index Rules.

"**Commodity Constituent**" has the meaning given to it in the Index Rules.

"**Constituent**" has the meaning given to it in the Index Rules.

"**Constituent Disrupted Day**" means "Disrupted Day" for such Constituent as defined in the Index Rules.

"**Constituent Scheduled Trading Day**" means the "Scheduled Trading Day" for such Constituent as defined in the Index Rules.

"**Disrupted Constituent**" means, for any relevant day, a Constituent for which a Constituent Market Disruption Event has occurred in respect of such day.

"**Index Calculation Agent**" has the meaning given to it in the Index Rules.

"**Index Level**" meaning the official level of the Index in respect of a relevant day, as defined in the Index Rules.

"**Index Rules**" means the index rules of the Index, as amended and supplemented from time to time, a copy of which may be provided to a Holder by the Calculation Agent upon request by such Holder.

"**Market Disruption Event (VWC)**" means, either:

(a) the occurrence of a "Market Disruption Event" (howsoever described in the relevant Index Rules) as defined in the Index Rules in respect of a Constituent of the Index (such event, a "**Constituent Market Disruption Event**"), regardless of whether or not the Index Calculation Agent of the Index calculates and publishes the Index Level in respect of the day on which such Constituent Market Disruption Event occurs (such event being a "**Market Disruption Event (VWC) – Constituent Disruption**"); or

(b) the failure of the Index Calculation Agent of the Index to calculate and publish the Index Level in respect of a day when the Index Sponsor was obliged to have calculated and published the Index Level under the Index Rules, but no Constituent Market Disruption Event occurs on such day (such event being a "**Market Disruption Event (VWC) – Non-Publication**"),

in each case, as determined by the Calculation Agent.

"**Non-Disrupted Constituent**" means, for any relevant day, a Constituent which is not a Disrupted Constituent.

"**Relevant Component**" means, in respect of a Basket Constituent or a Commodity Constituent, a component of such Constituent under the Index Rules, as determined by the Calculation Agent.

Each of the above terms that is expressed to be defined in the Index Rules shall, if such term is not defined by such name in the Index Rules, be deemed to be a reference to any similar term in the Index Rules, as determined by the Calculation Agent.

8. **Non-compliant Fallbacks**

Notwithstanding anything else in these Index Linked Provisions, if, in respect of the Securities, it (a) is or would be unlawful at any time under any applicable law or regulation or (b) would contravene any applicable licensing requirements, in each case, for the Calculation Agent to determine the level of the Index or make any other determination in respect of the Securities which it would otherwise be obliged to do so under these Index Linked Provisions (or it would be unlawful or would contravene those

licensing requirements were a determination to be made at such time), then (where no other applicable provision in these Index Linked Provisions results in such determination being made) the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

9. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which the Index Linked Provisions apply:

"**Additional Disruption Event**" means (a) a Change in Law, and, (b) if Hedging Disruption is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption.

"**Administrator/Benchmark Event**" has the meaning given in General Condition 32.1 (*Definitions*).

"**Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Averaging Reference Date**" means each Initial Averaging Date or Averaging Date.

"**Change in Law**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Redemption Date or Settlement Date, as is applicable to the Securities, become illegal for any of the Issuer and/or the Guarantor and/or any of their respective affiliates to hold, acquire or dispose of Components, or (y) (if "Change in Law – Increased Cost" is specified to be applicable in the relevant Pricing Supplement) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Closing Index Level**" means, on any day in respect of an Index, the official closing level of such Index as of the Valuation Time on or in respect of the relevant day as calculated and published by the relevant Index Sponsor or as otherwise determined by the Calculation Agent subject as provided in the Index Linked Provisions.

"**Component**" means, in respect of an Index, any share, security, commodity, rate, index or other component included in such Index, as determined by the Calculation Agent.

"**Component Clearance System**" means, in respect of a Component of an Index, the principal domestic clearance system customarily used for settling trades in the relevant Component. If the Clearance System ceases to settle trades in such Component, the Clearance System will be determined by the Calculation Agent.

"**Component Clearance System Business Day**" means, in respect of a Component Clearance System, any day on which such Component Clearance System is (or, but for the occurrence of an Index Settlement Disruption Event, would have been) open for the acceptance and execution of settlement instructions.

"**Coupon Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Disrupted Day**" means, either:

(a) for any Unitary Index, any Scheduled Trading Day on which (i) a relevant Exchange or any Related Exchange fails to open for trading during its regular trading session or (ii) a Market Disruption Event has occurred;

(b) for any Multi-Exchange Index, any Scheduled Trading Day on which (i) the Index Sponsor fails to publish the level of the Index (provided that the Calculation Agent may, in its discretion, determine that such event instead results in the occurrence of an Index Disruption), (ii) any Related Exchange fails to open for trading during its regular trading session or (iii) a Market Disruption Event has occurred; and

(c) for any Proprietary Index, any Scheduled Trading Day on which a Market Disruption Event has occurred (provided that the Calculation Agent may, in its discretion, determine that such event instead results in the occurrence of an Index Disruption).

"**Early Closure**" means:

(a) for any Unitary Index, the closure on any Exchange Business Day of any relevant Exchange relating to Components that comprise 20 per cent. or more of the level of the relevant Index or any Related Exchange prior to its Scheduled Closing Time, unless such earlier closing time is announced by such Exchange or Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Exchange or Related Exchange on such Exchange Business Day and (ii) the submission deadline for orders to be entered into the Exchange or Related Exchange system for execution at the Valuation Time on such Exchange Business Day; and

(b) for any Multi-Exchange Index, the closure on any Exchange Business Day of any relevant Exchange relating to any Component or any Related Exchange prior to its Scheduled Closing Time, unless such earlier closing time is announced by such Exchange or Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Exchange or Related Exchange on such Exchange Business Day and (ii) the submission deadline for orders to be entered into the Exchange or Related Exchange system for execution at the relevant Valuation Time on such Exchange Business Day.

"**Exchange**" means:

(a) for any Unitary Index, each exchange or quotation system specified as such in the relevant Pricing Supplement for the Index, any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in the Components underlying the Index has temporarily relocated (provided that the Calculation Agent has determined that there is comparable liquidity relative to the Components underlying the Index on such temporary substitute exchange or quotation system as on the original Exchange);

(b) for any Multi-Exchange Index and any Component underlying the Index, the principal stock exchange on which such Component of the Index is, in the determination of the Calculation Agent, principally traded; and

(c) for any Component which is a Share, the principal stock exchange on which such Component share is, in the determination of the Calculation Agent, principally traded.

"**Exchange Business Day**" means:

(a) for any Unitary Index, any Scheduled Trading Day on which each Exchange and each Related Exchange for the Index are open for trading during their respective regular trading sessions, notwithstanding any such Exchange or Related Exchange for the Index closing prior to its Scheduled Closing Time; and

(b) for any Multi-Exchange Index, any Scheduled Trading Day on which (i) the Index Sponsor calculates and publishes the level of the Index and (ii) the Related Exchange for the Index is open for trading during its regular trading session, notwithstanding the Related Exchange for the Index closing prior to its Scheduled Closing Time.

"**Exchange Disruption**" means:

(a) for any Unitary Index, any event (other than an Early Closure) that disrupts or impairs, as determined by the Calculation Agent, the ability of market participants in general to effect transactions in, or obtain market values for, (i) the Components on any relevant Exchange(s)

that comprise 20 per cent. or more of the level of the Index or (ii) futures or options contracts relating to the Index on any relevant Related Exchange; and

(b) for any Multi-Exchange Index, any event (other than an Early Closure) that disrupts or impairs, as determined by the Calculation Agent, the ability of market participants in general to effect transactions in, or obtain market values for, (i) any Component on the relevant Exchange in respect of such Component or (ii) futures or options contracts relating to the Index on the relevant Related Exchange.

"**Fallback Valuation Date**" means, in respect of any Index, the date(s) specified as such in the relevant Pricing Supplement, or, if no date is specified for the Fallback Valuation Date in the relevant Pricing Supplement, then the Fallback Valuation Date for any date on which the level of the Index is required to be determined shall be the second Business Day prior to the next following date upon which any payment or delivery of assets may have to be made by the Issuer by reference to the level of the Index on such day.

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Index**" and "**Indices**" mean, subject to adjustment in accordance with the Index Linked Provisions, the index or indices specified as such in the relevant Pricing Supplement, and related expressions shall be construed accordingly.

"**Index Adjustment Event**" means an Index Cancellation, an Index Disruption, an Index Modification or an Administrator/Benchmark Event.

"**Index Cancellation**" means the occurrence of the relevant Index Sponsor or Successor Index Sponsor, as applicable, on or prior to any Reference Date, Averaging Reference Date or any other relevant date, permanently cancelling a relevant Index and no Successor Index existing as at the date of such cancellation, as determined by the Calculation Agent.

"**Index Disruption**" means the occurrence of the relevant Index Sponsor or Successor Index Sponsor, as applicable, on any Reference Date, Averaging Reference Date or any other relevant date, failing to calculate and announce a relevant Index level, as determined by the Calculation Agent, provided that, in respect of a Multi-Exchange Index or a Proprietary Index, the Calculation Agent may, in its discretion, determine that such event instead results in the occurrence of a Disrupted Day.

"**Index Level**" means, if specified to be applicable in the relevant Pricing Supplement (and subject as such term may otherwise be defined in the relevant Pricing Supplement), in respect of an Index and any relevant time on any relevant day, the official level of such Index as of such time on or in respect of such day, as published by the Index Sponsor, as determined by the Calculation Agent.

"**Index Modification**" means the occurrence of the relevant Index Sponsor or Successor Index Sponsor, as applicable, on or prior to any Reference Date, Averaging Reference Date or any other relevant date, making or announcing that it will make a material change in the formula for, or the method of, calculating a relevant Index, or in any other way materially modifying such Index (other than a modification prescribed in that formula or method to maintain such Index in the event of changes in the Components, capitalisation and/or other routine events), as determined by the Calculation Agent.

"**Index Settlement Disruption Event**" means, in respect of a Component of an Index, an event that the Calculation Agent determines is beyond the control of the Issuer and/or its affiliates as a result of which the relevant Component Clearance System cannot clear the transfer of such Component.

"**Index Sponsor**" means, for any Index:

(a) the entity specified as such in the relevant Pricing Supplement; or

(b) if no entity is specified in the relevant Pricing Supplement, the corporation or other entity that, as determined by the Calculation Agent is responsible for setting and reviewing the rules and procedures and the methods of calculation and adjustments, if any, related to such Index,

and includes any corporation or other entity appointed by such entity, as determined by the Calculation Agent, that is responsible for announcing (directly or through an agent) the level of such Index on a regular basis in respect of each Scheduled Trading Day.

"**Initial Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Initial Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Interest Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Market Disruption Event**" means:

(a) for any Unitary Index, the occurrence or existence of (i) a Trading Disruption, (ii) an Exchange Disruption, which in either case the Calculation Agent determines is material, at any time during the one-hour period that ends at the relevant Valuation Time, or (iii) an Early Closure.

For the purposes of determining whether a Market Disruption Event in respect of a Unitary Index exists at any time, if a Market Disruption Event occurs in respect of a Component included in the Index at any time, then the relevant percentage contribution of such Component to the level of the Index shall be based on a comparison of (x) the portion of the level of the Index attributable to such Component and (y) the overall level of the Index, in each case immediately before the occurrence of such Market Disruption Event;

(b) for any Multi-Exchange Index, either:

(i) (I) the occurrence or existence, in respect of any Component, of:

(A) a Trading Disruption in respect of such Component, which the Calculation Agent determines is material, at any time during the one-hour period that ends at the relevant Valuation Time in respect of the Exchange on which such Component is principally traded;

(B) an Exchange Disruption in respect of such Component, which the Calculation Agent determines is material at any time during the one-hour period that ends at the relevant Valuation Time in respect of the Exchange on which such Component is principally traded; or

(C) an Early Closure in respect of such Component; and

(II) the aggregate of all Components in respect of which a Trading Disruption, an Exchange Disruption or an Early Closure occurs or exists comprises 20 per cent. or more of the level of such Multi-Exchange Index; or

(ii) the occurrence or existence, in each case in respect of futures or options contracts relating to the Index, of (A) a Trading Disruption or (B) an Exchange Disruption, which in either case the Calculation Agent determines is material, at any time during the one-hour period that ends at the Valuation Time in respect of the Related Exchange, or (C) an Early Closure.

For the purposes of determining whether a Market Disruption Event in respect of a Multi-Exchange Index exists at any time, if an Early Closure, an Exchange Disruption, or a Trading Disruption occurs in respect of a Component at that time, then the relevant percentage

contribution of such Component to the level of the Index shall be based on a comparison of (x) the portion of the level of the Index attributable to that Component and (y) the overall level of the Index, in each case immediately before the occurrence of such Market Disruption Event; and

(c) for any Proprietary Index, the failure by the Index Sponsor to calculate and publish the level of the Index on any Scheduled Trading Day or in respect of such Scheduled Trading Day within the scheduled or usual timeframe for publication.

"**Maximum Days of Disruption**" means eight Scheduled Trading Days or such other number of Scheduled Trading Days specified in the relevant Pricing Supplement.

"**Multi-Exchange Index**" means any Index which is specified as such in the relevant Pricing Supplement, or, if not specified, any Index the Calculation Agent determines as such.

"**Observation Date (Closing Valuation)**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of an Index and an Observation Period, and unless otherwise provided in the relevant Pricing Supplement, each Scheduled Trading Day which is not a Disrupted Day for such Index falling in the Observation Period.

"**Observation Date (Intra-Day Valuation)**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of an Index and an Observation Period, and unless otherwise provided in the relevant Pricing Supplement, each day falling in the Observation Period on which the Index Sponsor publishes one or more official levels for such Index, as determined by the Calculation Agent, regardless of whether such day is a Scheduled Trading Day or is a Disrupted Day for such Index.

"**Observation Period**" means, if specified to be applicable in the relevant Pricing Supplement, in respect of an Index, the period commencing on the relevant Observation Period Start Date and ending on the relevant Observation Period End Date.

"**Observation Period End Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of an Index and an Observation Period, the date specified as such in the relevant Pricing Supplement, which shall be the last day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Observation Period Start Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of an Index and an Observation Period, the date specified as such in the relevant Pricing Supplement, which shall be the first day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Periodic Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Proprietary Index**" means any Index which is specified as such in the relevant Pricing Supplement, or, if not specified, any Index the Calculation Agent determines as such.

"**Reference Date**" means each Initial Valuation Date, Interest Valuation Date, Coupon Valuation Date, Periodic Valuation Date or Valuation Date, in each case, subject to adjustment in accordance with the Index Linked Provisions.

"**Related Exchange**" means:

(a) for any Unitary Index or Multi-Exchange Index, each exchange or quotation system, if any, specified as such in the relevant Pricing Supplement, any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in futures or options contracts relating to the Index has temporarily relocated (provided that the Calculation Agent has determined that there is comparable liquidity relative to the futures or options contracts relating to the Index on such temporary substitute exchange or quotation system as on

the original Related Exchange), provided, however, that where "All Exchanges" is specified as the Related Exchange, "Related Exchange" shall mean each exchange or quotation system (as determined by the Calculation Agent) where trading has a material effect (as determined by the Calculation Agent) on the overall market for futures or options contracts relating to the Index; and

(b) for any Component which is a Share, each exchange or quotation system where trading has a material effect on the overall market for futures or options contracts relating to the Component share (as determined by the Calculation Agent).

"**Relevant Date**" has the meaning given in Index Linked Provision 2 (*Fallback Valuation Date*).

"**Scheduled Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Averaging Date.

"**Scheduled Averaging Reference Date**" means each Scheduled Averaging Date or Scheduled Initial Averaging Date.

"**Scheduled Closing Time**" means, in respect of an Index and in respect of an Exchange or Related Exchange and a Scheduled Trading Day, the scheduled weekday closing time of such Exchange or Related Exchange on such Scheduled Trading Day, without regard to after hours or any other trading outside of the regular trading session hours.

"**Scheduled Coupon Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Coupon Valuation Date.

"**Scheduled Initial Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Averaging Date.

"**Scheduled Initial Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Valuation Date.

"**Scheduled Interest Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Interest Valuation Date.

"**Scheduled Periodic Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Periodic Valuation Date.

"**Scheduled Reference Date**" means each Scheduled Initial Valuation Date, Scheduled Interest Valuation Date, Scheduled Coupon Valuation Date, Scheduled Periodic Valuation Date or Scheduled Valuation Date.

"**Scheduled Trading Day**" means, in respect of:

(a) any Unitary Index, any day on which each Exchange and each Related Exchange for the Index are scheduled to be open for trading for their respective regular trading sessions;

(b) any Multi-Exchange Index, any day on which (i) the Index Sponsor is scheduled to publish the level of the Index and (ii) the Related Exchange for the Index is scheduled to be open for trading for its regular trading session;

(c) any Proprietary Index, any day on, or, as the case may be, in respect of, which the Index Sponsor is scheduled to publish the level of such Index;

(d) any Component which is a Share, any day on which the relevant Exchange referenced by the Index and the relevant Related Exchange for such Component are scheduled to be open for trading for their respective regular trading sessions; and

(e) any Component which is not a Share, any day on which the value, level or price, as is applicable, is scheduled to be published or disseminated, or is otherwise scheduled to be available.

"**Scheduled Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Valuation Date.

"**Settlement Cycle**" means the period of Component Clearance System Business Days following a trade in the Components underlying the relevant Index on the Exchange in which settlement will customarily occur according to the rules of such Exchange (or, if there are multiple Exchanges in respect of an Index, the longest such period).

"**Share**" means, in respect of an Index, any share included in such Index, as determined by the Calculation Agent.

"**Share Disrupted Day**" means, in respect of a Component which is a Share, any Scheduled Trading Day on which a relevant Exchange or any Related Exchange fails to open for trading during its regular trading session or on which (a) a Trading Disruption, (b) an Exchange Disruption which in either case the Calculation Agent determines is material, at any time during the one-hour period which ends at the relevant Valuation Time or (c) an Early Closure has occurred in respect of such Component.

"**Successor Index**" has the meaning given in Index Linked Provision 4.1 (*Consequences of a Successor Index Sponsor or a Successor Index*).

"**Successor Index Sponsor**" has the meaning given in Index Linked Provision 4.1 (*Consequences of a Successor Index Sponsor or a Successor Index*).

"**Trading Disruption**" means:

(a) in respect of any Unitary Index, any suspension of, or limitation imposed on, trading by any relevant Exchange or Related Exchange or otherwise, and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or Related Exchange or otherwise, (i) relating to Components that comprise 20 per cent. or more of the level of the Index on any relevant Exchange or (ii) in futures or options contracts relating to the Index on any relevant Related Exchange; and

(b) in respect of any Multi-Exchange Index, any suspension or limitation imposed on trading by any relevant Exchange or Related Exchange or otherwise, and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or Related Exchange or otherwise, (i) relating to any Component on the Exchange in respect of such Component or (ii) in futures or options contracts relating to the Index on the Related Exchange.

"**Unitary Index**" means any Index which is specified as such in the relevant Pricing Supplement, or, if not specified, any Index the Calculation Agent determines as such.

"**Valid Date**" means a Scheduled Trading Day in respect of the Index that is not a Disrupted Day and on which another Averaging Reference Date does not or is not deemed to occur.

"**Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day in respect of the Index, the next following Scheduled Trading Day in respect of the Index.

"**Valuation Time**" means:

(a) in respect of any Unitary Index, (i) for the purposes of determining whether an Early Closure, an Exchange Disruption or a Trading Disruption has occurred in respect of (I) any Exchange, the Scheduled Closing Time of the Exchange (provided that, if the relevant Exchange closes prior to its Scheduled Closing Time, then the Valuation Time shall be such actual closing time), and (II) any options contracts or futures contracts on such Index, the close of trading on the Related Exchange, and (ii) in all other circumstances, the time at which the official closing level of the Index is calculated and published by the Index Sponsor;

(b) in respect of any Multi-Exchange Index, (i) for the purposes of determining whether an Early Closure, an Exchange Disruption or a Trading Disruption has occurred in respect of (I) any Component, the Scheduled Closing Time on the Exchange in respect of such Component (provided that, if the relevant Exchange closes prior to its Scheduled Closing Time, then the Valuation Time shall be such actual closing time), and (II) any options contracts or futures contracts on the Index, the close of trading on the Related Exchange, and (ii) in all other

circumstances, the time at which the official closing level of the Index is calculated and published by the Index Sponsor; and

(c) in respect of any Proprietary Index, the time at which or in respect of which the Index Sponsor calculates and publishes the official closing level of the Index.

ANNEX 3 - COMMODITY LINKED PROVISIONS

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The terms and conditions set out in this Annex 3 apply to Securities for which the relevant Pricing Supplement specifies that the Commodity Linked Provisions shall apply.

1. Market Disruption Events and Disruption Fallbacks (other than in respect of a Commodity Index)

1.1 Consequence of a Market Disruption Event

If the Calculation Agent determines that a Market Disruption Event has occurred or exists on any Pricing Date (or, if different, the day on which the price for such Pricing Date would, in the ordinary course, be published or announced by the Price Source), the Commodity Reference Price for such Pricing Date will be determined by the Calculation Agent in accordance with the first applicable Disruption Fallback (applied in accordance with Commodity Linked Provision 1.3 (*Applicability of Disruption Fallbacks*)) that provides a Commodity Reference Price.

1.2 Applicability of Market Disruption Events

(a) Subject to (b) and (c) below, a Market Disruption Event is applicable in respect of a Commodity if it is specified in the relevant Pricing Supplement and, if one or more Market Disruption Events are specified in the relevant Pricing Supplement, then only those Market Disruption Events will apply.

(b) In respect of all Commodities (other than Bullion), if no Market Disruption Event is specified in the relevant Pricing Supplement, the following Market Disruption Events will be deemed to have been specified and be applicable:

(i) Disappearance of Commodity Reference Price;

(ii) Material Change in Content;

(iii) Material Change in Formula;

(iv) Price Source Disruption;

(v) Trading Disruption; and

(vi) Administrator/Benchmark Event.

(c) In respect of Bullion, if no Market Disruption Event is specified in the relevant Pricing Supplement, the following Market Disruption Events will be deemed to have been specified and be applicable:

(i) Disappearance of Commodity Reference Price;

(ii) Price Source Disruption;

(iii) Trading Disruption; and

(iv) Administrator/Benchmark Event.

1.3 Applicability of Disruption Fallbacks

A Disruption Fallback is applicable if it is specified in the relevant Pricing Supplement or, if no Disruption Fallback is specified in the relevant Pricing Supplement, the following Disruption Fallbacks will be deemed to have been specified and be applicable (in the following order):

(a) Fallback Reference Price (if an alternate Commodity Reference Price has been specified in the relevant Pricing Supplement);

(b) Delayed Publication or Announcement and Postponement (each to operate concurrently with the other and each subject to a period of two consecutive Commodity Business Days (or Bullion Business Days in respect of Bullion) as the applicable Maximum Days of Disruption) provided, however, that the price determined by Postponement shall be the Commodity Reference Price

only if Delayed Publication or Announcement does not yield a Commodity Reference Price within the Maximum Days of Disruption;

(c) Fallback Reference Dealers; and

(d) Calculation Agent Determination.

If any Disruption Fallbacks are specified in the relevant Pricing Supplement, unless otherwise provided in the relevant Pricing Supplement, then only that or those (as the case may be) Disruption Fallbacks shall apply and if two or more Disruption Fallbacks are specified, those Disruption Fallbacks shall apply in the order as specified in the relevant Pricing Supplement, such that if the Calculation Agent determines that the Commodity Reference Price cannot be determined by applying a Disruption Fallback, then the next Disruption Fallback specified shall apply, provided that if the Calculation Agent determines that the Commodity Reference Price cannot be determined by applying any of the applicable Disruption Fallbacks, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1(*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

2. **Consequences of Market Disruption Events (in respect of a Commodity Index)**

If a Market Disruption Event has occurred on any Pricing Date in respect of a Commodity Index, the Closing Commodity Index Level of the Commodity Index for such Pricing Date shall be determined by the Calculation Agent using the then-current method for calculating the Commodity Index, but based on and by reference to the relevant closing prices of each futures contract included in such Commodity Index as follows:

(a) in respect of each futures contract included in the Commodity Index which is not affected by the Market Disruption Event on such Pricing Date, the closing price of such futures contract will be that announced or published by the applicable exchange on such Pricing Date; and

(b) in respect of each futures contract included in the Commodity Index which is affected by the Market Disruption Event on such Pricing Date, the closing price of such futures contract will be based on the closing price of such contract on the first Futures Trading Day following such Pricing Date on which such futures contract is not affected by a Market Disruption Event,

provided that if the Calculation Agent in its discretion determines that the application of the above paragraphs would not achieve a commercially reasonable result and/or if such Market Disruption Event is an Administrator/Benchmark Event, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

If a Fallback Pricing Date is specified in the relevant Pricing Supplement to be applicable to any Pricing Date for a Commodity Index, and if:

(i) following adjustment of such Pricing Date on account of the Scheduled Pricing Date not being a Trading Day, the Pricing Date would otherwise fall after the specified Fallback Pricing Date, then such Fallback Pricing Date shall be deemed to be such Pricing Date for such Commodity Index. If such Fallback Pricing Date is not a Trading Day for the Commodity Index, then the Calculation Agent will determine the Closing Commodity Index Level, taking into consideration the latest available level of the Commodity Index and any other information that it deems relevant of such Commodity Index on such Fallback Pricing Date, and such determination by the Calculation Agent pursuant to this Commodity Linked Provision 2 shall be deemed to be the Closing Commodity Index Level for such Commodity Index in respect of the relevant Pricing Date; and/or

(ii) the closing price of a futures contract comprised in the Commodity Index would otherwise be used for the purposes of determining the Closing Commodity Index Level above after the specified Fallback Pricing Date following the adjustment set out in

paragraph (b) above, then the closing price of such futures contract will instead be taken on such Fallback Pricing Date, and such closing price for the Fallback Pricing Date will be determined by the Calculation Agent, taking into consideration the latest available closing price for the such futures contract, and any other information that it deems relevant.

3. **Administrator/Benchmark Event on non-Pricing Dates**

If the Calculation Agent determines that an Administrator/Benchmark Event has occurred or is in existence in respect of the Securities on any day that is not a Pricing Date during the term of the Securities, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

4. **Common Pricing**

Where the Securities relate to a basket of Commodities and, if "Common Pricing" is specified in the relevant Pricing Supplement to be applicable then no date will be a Pricing Date unless such date is a day on which all referenced Commodity Reference Prices (for which such date would otherwise be a Pricing Date) are scheduled to be published or announced, as determined by the Calculation Agent.

5. **Correction to Published Prices**

In the event that any price or value published or announced on any date which is utilised for any calculation or determination in connection with the Securities is subsequently corrected and the correction is published or announced by the person responsible for that publication or announcement by the earlier of:

(a) 30 calendar days after the original publication or announcement; and

(b) the second Business Day prior to the next date upon which any relevant payment or delivery may have to be made by the Issuer or in respect of which any relevant determination in respect of the Securities may have to be made,

then the Calculation Agent may determine the amount that is payable or make any determination in connection with Securities, after taking into account such correction, and, to the extent necessary, may adjust any relevant terms of the Securities to account for such correction.

Upon making any such determination or adjustment, as applicable, to take into account any such correction, the Calculation Agent shall give notice as soon as practicable to the Holders stating the determination or adjustment, as applicable, to any amount payable under the Securities and/or any of the other relevant terms and giving brief details of the determination or adjustment, as applicable, provided that any failure to give such notice shall not affect the validity of the determination or adjustment, as applicable, or any action taken.

6. **Fallback Pricing Dates**

In respect of a Commodity, and notwithstanding any other terms of the Commodity Linked Provisions applicable to a Commodity, if a Fallback Pricing Date is specified in the relevant Pricing Supplement to be applicable to any Pricing Date and if, following adjustment of the original date on which the Pricing Date was scheduled to fall pursuant to the applicable Commodity Business Day Convention (or Bullion Business Day Convention) or, following the application of a Disruption Fallback pursuant to Commodity Linked Provision 1 (*Market Disruption Events and Disruption Fallbacks (other than in respect of a Commodity Index*)) or adjustment of the Pricing Date pursuant to Commodity Linked Provision 4 (*Common Pricing*), the determination of a Commodity Reference Price, or the Pricing Date in respect of a Commodity, as applicable, would otherwise fall after the specified Fallback Pricing Date in respect of the Commodity, then the Fallback Pricing Date shall be deemed to be the Pricing Date for the Commodity.

If the Fallback Pricing Date is not a Commodity Business Day (or a Bullion Business Day), the Commodity Reference Price of such Commodity shall be subject to Calculation Agent Determination on such Fallback Pricing Date, and such determination by the Calculation Agent pursuant to this Commodity Linked Provision 6 shall be deemed to be the Commodity Reference Price in respect of the relevant Pricing Date.

7. **Adjustments to a Commodity Index**

(a) In respect of a Commodity Index, if the Commodity Index is permanently cancelled or is not calculated and announced by the Commodity Index Sponsor but is (i) calculated and announced by a successor sponsor (the "**Successor Sponsor**") acceptable to the Calculation Agent, and/or (ii) replaced by a successor index (the "**Successor Index**") using, in the determination of the Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of the Commodity Index, then the Commodity Index will be deemed to be the index so calculated and announced by that Successor Sponsor and/or that Successor Index, as the case may be.

(b) In respect of a Commodity Index, if, on or prior to a Pricing Date or any other relevant date, as determined by the Calculation Agent, (i) the Commodity Index Sponsor makes a material change in the formula for or the method of calculating the Commodity Index or in any other way materially modifies that Commodity Index (other than a modification prescribed in that formula or method to maintain the Commodity Index in the event of changes in constituent commodities and weightings and other routine events), or (ii) the Commodity Index Sponsor permanently cancels the Commodity Index, or (iii) the Commodity Index Sponsor fails to calculate and announce the Commodity Index and the Calculation Agent determines that there is no Successor Sponsor and/or Successor Index, then the Calculation Agent may at its option (in the case of (i)) and shall (in the case of such (ii) and (iii)) (such events (i) (ii) and (iii) to be collectively referred to as "**Commodity Index Adjustment Events**") calculate the Closing Commodity Index Level for the applicable Pricing Date or such other relevant date in accordance with the formula for and method of calculating that Commodity Index last in effect prior to the relevant Commodity Index Adjustment Event, but using only those futures contracts that comprised that Commodity Index immediately prior to the relevant Commodity Index Adjustment Event (other than those futures contracts that have ceased to be listed on any relevant exchange).

(c) If the Calculation Agent, in its discretion, determines that it is not reasonably practicable (taking into account the costs involved) to calculate or continue to calculate the Commodity Index pursuant to the preceding paragraph, the Calculation Agent may rebase the Securities against another index or basket of indices, as applicable, determined by the Calculation Agent to be comparable to the relevant Commodity Index, and, following such rebasing, the Calculation Agent will make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such rebasing.

(d) If the Calculation Agent determines, in its discretion, that there is not such an index or basket of indices comparable to the relevant Commodity Index, and/or that application of the preceding paragraphs would not achieve a commercially reasonable result, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

(e) On making any such adjustment or determination, the Calculation Agent shall give notice as soon as practicable to the Holders stating the adjustment to any amount payable under the Securities, the determination and/or any of the other relevant terms and giving brief details of the Commodity Index Adjustment Event, provided that any failure to give such notice shall not affect the validity of the Commodity Index Adjustment Event or any action taken.

8. **Early redemption following Commodity Hedging Disruption**

Unless the relevant Pricing Supplement specifies that Commodity Hedging Disruption is not applicable, upon the occurrence of a Commodity Hedging Disruption, the Issuer may, in its sole and absolute discretion: (a) on giving not less than five nor more than 30 days' irrevocable notice, redeem the Securities on the date set for redemption in such notice, or (b) (if the relevant Pricing Supplement specifies "Early redemption following Commodity Hedging Disruption – Redemption Period" to be applicable) on giving irrevocable notice, redeem the Securities on a date falling not less than five days nor more than 30 days from the date the notice is given, in each case, by payment of the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) in respect of each Security.

9. **Adjustments to Securities linked to Commodities in European Currencies**

In respect of any Securities linked to or relating to Commodities originally quoted, traded listed and/or dealt as of the Issue Date in a currency of a member state of the European Union that has not adopted the single currency in accordance with the EC Treaty, or if the relevant Commodity Reference Price is in such currency, if such Commodities are at any time after the Issue Date quoted, listed, traded and/or dealt exclusively in euro on the relevant Exchange or, where no Exchange is specified, the principal market on which those Commodities are traded, or if the relevant Commodity Reference Price is changed to the euro, then the Calculation Agent may make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to preserve the economic terms of the Securities. The Calculation Agent will make any conversion necessary for purposes of any such adjustment based on the relevant official conversion rate or such mid-market spot rate of exchange, as determined to be appropriate in the discretion of the Calculation Agent. No adjustments under this Commodity Linked Provision 9 will affect the currency denomination of any payment obligation arising out of the Securities.

10. **Commodity Index Disclaimer**

The Securities are not sponsored, endorsed, sold, or promoted by the Commodity Index or the Commodity Index Sponsor and no Commodity Index Sponsor makes any representation whatsoever, whether express or implied, either as to the results to be obtained from the use of the Commodity Index and/or the levels at which the Commodity Index stands at any particular time on any particular date or otherwise. No Commodity Index or Commodity Index Sponsor shall be liable (whether in negligence or otherwise) to any person for any error in the Commodity Index and the Commodity Index Sponsor is under no obligation to advise any person of any error therein. No Commodity Index Sponsor is making any representation whatsoever, whether express or implied, as to the advisability of purchasing or assuming any risk in connection with the Securities. The Issuer and the Guarantor (if applicable) shall have no liability to the Holders for any act or failure to act by the Commodity Index Sponsor in connection with the calculation, adjustment, or maintenance of the Commodity Index. Except as may be disclosed prior to the Issue Date and specified in the relevant Pricing Supplement, none of the Issuer, the Guarantor (if applicable), the Calculation Agent or any of their respective affiliates has any affiliation with or control over the Commodity Index or Commodity Index Sponsor or any control over the computation, composition, or dissemination of the Commodity Index. Although the Calculation Agent will obtain information concerning the Commodity Index from publicly available sources it believes reliable, it will not independently verify this information. Accordingly, no representation, warranty, or undertaking (express or implied) is made and no responsibility is accepted by the Issuer, the Guarantor (if applicable), their affiliates, or the Calculation Agent as to the accuracy, completeness, and timeliness of information concerning the Commodity Index. In addition, no representation or warranty of any type, as to condition, satisfactory quality, performance or fitness for purpose are given, or duty or liability is assumed, by the Issuer, the Guarantor (if applicable), their affiliates, or the Calculation Agent in respect of the Commodity Index or any data included in or omissions from the Commodity Index, or the use of the Commodity Index in connection with the Securities and all those representations and warranties are excluded, save to the extent that such exclusion is prohibited by law.

11. **Consequences of Additional Disruption Events**

Following the determination by the Calculation Agent that an Additional Disruption Event has occurred, the Calculation Agent may, in its discretion:

(a) determine to make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for such Additional Disruption Event; and/or

(b) determine and give notice to Holders that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

12. **Successor to a Commodity Reference Price**

If in respect of any relevant Pricing Date or any other relevant date which is utilised for any calculation or determination in relation to Securities, the Calculation Agent determines in its discretion that (a) a Commodity Reference Price is not announced or published by the Price Source but is calculated and announced or published by a successor entity acceptable to the Calculation Agent, such price as so calculated and announced or published by such successor entity will be deemed to be the Commodity Reference Price, (b) a Commodity Reference Price is replaced by a successor price in respect of such Commodity calculated using, as determined by the Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of such Commodity Reference Price, such price as so calculated will be deemed to be the Commodity Reference Price, or (c) a Commodity Reference Price ceases to be announced or published by a Price Source and/or the formula for and/or the method of calculation of such Commodity Reference Price is being materially changed, but a price or two or more prices in respect of the same Commodity as such Commodity Reference Price exists, or will exist from a future date, and such price is, or two or more of such prices are, as is applicable, in the determination of the Calculation Agent, accepted or recognised by the dealers in the relevant market for such Commodity as being the successor, or a successor, as is applicable, to such Commodity Reference Price, then such successor price, or one of such successor prices as is selected by the Calculation Agent in its discretion, as is applicable, will be deemed to be the Commodity Reference Price from the date determined by the Calculation Agent. Following such determination, the Calculation Agent will make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such successor Commodity Reference Price.

On making any such adjustment(s) or determination(s), the Calculation Agent shall give notice in accordance with General Condition 27 (*Notices*) as soon as practicable to the Holders stating the adjustment to any amount payable under the Securities, the determination and/or any of the other relevant terms and giving brief details of the event which resulted in the successor Commodity Reference Price, provided that any failure to give such notice shall not affect the validity of the successor Commodity Reference Price or any action taken.

13. **Non-compliant Fallbacks**

Notwithstanding anything else in these Commodity Linked Provisions, if, in respect of the Securities, it (a) is or would be unlawful at any time under any applicable law or regulation or (b) would contravene any applicable licensing requirements, in each case, for the Calculation Agent to determine the Commodity Reference Price or the level of the Commodity Index or make any other determination in respect of the Securities which it would otherwise be obliged to do so under these Commodity Linked Provisions (or it would be unlawful or would contravene those licensing requirements were a determination to be made at such time), then (where no other applicable provision in these Commodity Linked Provisions results in such determination being made) the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

14. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which these Commodity Linked Provisions apply:

"**Additional Disruption Event**" means (a) a Change in Law, and, (b) if Hedging Disruption is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption.

"**Adjusted Scheduled Pricing Date**" means (a) where a Pricing Date is adjusted in accordance with the applicable Commodity Business Day Convention (or Bullion Business Day Convention), the date on which the Pricing Date would fall following such adjustment, or (b) if the Pricing Date is not subject to adjustment in accordance with a Commodity Business Day Convention (or Bullion Business Day Convention), or the application of the applicable Commodity Business Day Convention (or Bullion Business Day Convention) does not result in an adjustment to the Pricing Date, the Scheduled Pricing Date corresponding to the Pricing Date.

"**Administrator/Benchmark Event**" has the meaning given in General Condition 32.1 (*Definitions*).

"**Bloomberg Screen**" means, in respect of a Commodity Reference Price, when used in connection with any designated page, the display page so designated on the Bloomberg® service (or such other page as may replace that page on that service for the purpose of displaying prices comparable to such Commodity Reference Price, as determined by the Calculation Agent).

"**Bullion**" means each of gold, palladium, platinum and silver, and related expressions shall be construed accordingly.

"**Bullion Business Day**" means any day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in London and New York.

"**Bullion Business Day Convention**" means the convention for adjusting any Pricing Date or other relevant date if it would otherwise fall on a day that is not a Bullion Business Day. If the relevant Pricing Supplement specifies, in respect of such Pricing Date or other date, that:

(a) "**Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Bullion Business Day, the Pricing Date or other date will be the first following day that is a Bullion Business Day;

(b) "**Modified Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Bullion Business Day, the Pricing Date or other date will be the first following day that is a Bullion Business Day, unless that day falls in the next calendar month, in which case that date will be the first preceding day that is a Bullion Business Day;

(c) "**Nearest**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Bullion Business Day, the Pricing Date or other date will be (i) the first preceding day that is a Bullion Business Day if such date falls on a day other than a Sunday or Monday and (ii) the first following day that is a Bullion Business Day if such date falls on a Sunday or Monday;

(d) "**Preceding**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Bullion Business Day, the Pricing Date or other date will be the first preceding day that is a Bullion Business Day; or

(e) "**No Adjustment**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Bullion Business Day, the Pricing Date or other date will nonetheless be such Scheduled Pricing Date or other scheduled date.

If the relevant Pricing Supplement does not specify an applicable Bullion Business Day Convention, then it shall be deemed that "**Modified Following**" shall apply.

"**Bullion Reference Dealers**" means, in respect of Bullion for which the Commodity Reference Price is "Commodity – Reference Dealers", the four major dealers that are members of The London Bullion Market Association or its successors specified in the relevant Pricing Supplement, or if no such Bullion Reference Dealers are specified, as selected by the Calculation Agent, in each case, acting through their principal London offices.

"**Calculation Agent Determination**" means that the Calculation Agent will determine the Commodity Reference Price (or method for determining the Commodity Reference Price), taking into consideration the latest available quotation for the relevant Commodity Reference Price and any other information that it deems relevant.

"**CFTC**" means the U.S. Commodity Futures Trading Commission.

"**Change in Law**" means that, on or after the earlier of the Initial Pricing Date or the Issue Date (or, if there is no Initial Pricing Date, the Issue Date), of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Redemption Date or Settlement Date, as is applicable to the Securities, become illegal to hold, acquire or dispose of any relevant commodity, futures contract, options contract or other asset, or (y) (if "Change in Law – Increased Cost" is specified to be applicable in the relevant Pricing Supplement) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Closing Commodity Index Level**" means, in respect of a Commodity Index and any day, the official published closing level of such Commodity Index in respect of the relevant day as calculated and published by the relevant Commodity Index Sponsor or as otherwise determined by the Calculation Agent, subject as provided in the Commodity Linked Provisions.

"**Commodity**" and "**Commodities**" means the commodity or commodities (which may include Bullion and which may be a specified futures contract relating to an underlying commodity) specified as such in the relevant Pricing Supplement, and related expressions shall be construed accordingly.

"**Commodity Business Day**" means, in respect of a single Commodity (other than Bullion) or a basket of Commodities (excluding any Bullion) and:

(a) where the Commodity Reference Price for a Commodity is a price announced or published by an Exchange, a day that is (or, but for the occurrence of a Market Disruption Event, would have been) a day on which such Exchange is open for trading during its regular trading session, notwithstanding any such Exchange closing prior to its scheduled closing time; and

(b) where the Commodity Reference Price for a Commodity is not a price announced or published by an Exchange, a day in respect of which the relevant Price Source published (or, but for the occurrence of a Market Disruption Event, would have published) a price.

"**Commodity Business Day Convention**" means the convention for adjusting any Pricing Date or other relevant date if it would otherwise fall on a day that is not a Commodity Business Day. If the relevant Pricing Supplement specifies, in respect of such Pricing Date or other date, that:

(a) "**Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Commodity Business Day, the Pricing Date or other date will be the first following day that is a Commodity Business Day;

(b) "**Modified Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Commodity Business Day, the Pricing Date or other date will be the first following day that is a Commodity Business Day, unless that day falls in the next calendar month, in which case that date will be the first preceding day that is a Commodity Business Day;

(c) "**Nearest**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Commodity Business Day, the Pricing Date or other date will be (i) the first preceding day that is a Commodity Business Day if such date falls on a day other than a Sunday or Monday and (ii) the first following day that is a Commodity Business Day if such date falls on a Sunday or Monday;

(d) "**Preceding**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Commodity Business Day, the Pricing Date or other date will be the first preceding day that is a Commodity Business Day; or

(e) "**No Adjustment**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Commodity Business Day, the Pricing Date or other date will nonetheless be such Scheduled Pricing Date or other scheduled date.

If the relevant Pricing Supplement does not specify an applicable Commodity Business Day Convention, then it shall be deemed that "**Modified Following**" shall apply.

"**Commodity Hedging Disruption**" means that:

(a) due to (i) the adoption of, or any change in, any applicable law, regulation, rule or order (including, without limitation, any tax law); or (ii) the promulgation of, or any change in, the interpretation, application, exercise or operation by any court, tribunal, regulatory authority, exchange or trading facility or any other relevant entity with competent jurisdiction of any applicable law, rule, regulation, order, decision or determination (including, without limitation, as implemented by the CFTC or exchange or trading facility), in each case occurring on or after the Trade Date the Calculation Agent determines that it is contrary (or, upon adoption, it will be contrary) to such law, rule, regulation, order, decision or determination for the Hedging Entity to purchase, sell, enter into, maintain, hold, acquire or dispose of Underlying Hedge Transactions (in whole or in part) (in the aggregate on a portfolio basis or incrementally on a trade by trade basis) including (without limitation) if such Underlying Hedge Transactions (in whole or in part) (in the aggregate on a portfolio basis or incrementally on a trade by trade basis) are (or, but for the consequent disposal thereof, would otherwise be) in excess of any allowable position limit(s) in relation to any commodity traded on any exchange(s) or other trading facility (it being within the sole and absolute discretion of the Hedging Entity to determine which of the relevant assets or transactions are counted towards such limit); and/or

(b) (if the relevant Pricing Supplement specifies "Commodity Hedging Disruption – Hedging Entity" to be applicable) for any reason, the Hedging Entity is unable, after using commercially reasonable efforts, to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) the Issuer deems necessary to hedge the risk of entering into and performing its commodity-related obligations with respect to the Securities, or (ii) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Commodity Index**" and "**Commodity Indices**" mean, subject to adjustment in accordance with the Commodity Linked Provisions, the index or indices linked directly or indirectly to commodity futures contracts and specified as such in the relevant Pricing Supplement, and related expressions shall be construed accordingly.

"**Commodity Index Adjustment Event**" has the meaning in Commodity Linked Provision 7 (*Adjustments to a Commodity Index*).

"**Commodity Index Sponsor**" means, for any Commodity Index, the entity specified as such in the relevant Pricing Supplement, and, if not specified, the corporation or other entity that, as determined by the Calculation Agent (a) is responsible for setting and reviewing the rules and procedures and the methods of calculation and adjustments, if any, related to such Commodity Index, and (b) announces (directly or through an agent) the level of such Commodity Index on a regular basis in respect of each Trading Day.

"**Commodity Index Sponsor Business Centre**" means, for any Commodity Index, the location specified as such in the relevant Pricing Supplement.

"**Commodity - Reference Dealers**" means that the price for a Pricing Date, as determined by the Calculation Agent, will be determined on the basis of quotations provided by Reference Dealers (or Bullion Reference Dealers) on such Pricing Date of that day's Specified Price for the relevant Commodity Reference Price (or, if there is no Specified Price for a Commodity Reference Price, such Commodity Reference Price) for a Unit of the relevant Commodity for delivery on the Delivery Date (or, if there is no Delivery Date for a Commodity Reference Price, for delivery on such date that forms the basis on which such Commodity Reference Price is quoted). If four quotations are provided as requested, the price for such Pricing Date will be the arithmetic mean of the Specified Prices for the relevant Commodity Reference Price (or, if there is no Specified Price for a Commodity Reference Price, of such Commodity Reference Prices for the relevant date and time) for such Commodity provided by each Reference Dealer (or Bullion Reference Dealer), without regard to the Specified Prices for the relevant Commodity Reference Price (or, as the case may be, Commodity Reference Prices for the relevant date and time) having the highest and lowest values. If exactly three quotations are provided as requested, the price for such Pricing Date will be the Specified Price for the relevant Commodity Reference Price (or, as the case may be, Commodity Reference Price for the relevant date and time) provided by the relevant Reference Dealer (or Bullion Reference Dealer) that remains after disregarding the Specified Prices for the relevant Commodity Reference Price (or, as the case may be, Commodity Reference Prices for the relevant date and time) having the highest and lowest values. For this purpose, if more than one quotation has the same highest or lowest value, then the Specified Price for the relevant Commodity Reference Price (or, as the case may be, Commodity Reference Price for the relevant date and time) of one of such quotations shall be disregarded.

"**Commodity Reference Price**" means, in respect of any Commodity and a Pricing Date or any other relevant date, as determined by the Calculation Agent, the commodity reference price specified as such in the relevant Pricing Supplement for that Commodity.

"**Delayed Publication or Announcement**" means that the price for a Pricing Date, as determined by the Calculation Agent, will be determined based on the Specified Price for the relevant Commodity Reference Price (or, if there is no Specified Price for a Commodity Reference Price, such Commodity Reference Price) in respect of the Scheduled Pricing Date corresponding to such Pricing Date that is published or announced by the relevant Price Source retrospectively on the first succeeding Commodity Business Day (or Bullion Business Day) on which the Market Disruption Event ceases to exist, unless that Market Disruption Event continues to exist (measured from and including the Adjusted Scheduled Pricing Date corresponding to the Pricing Date) or the Commodity Reference Price continues to be unavailable for consecutive Commodity Business Days (or consecutive Bullion Business Days) equal in number to the Maximum Days of Disruption.

"**Delivery Date**" means, in respect of a Commodity Reference Price and a Pricing Date or any other relevant date, as determined by the Calculation Agent, the relevant date or month for delivery of the underlying Commodity (which must be a date or month reported or capable of being determined from information reported in or by the relevant Price Source) as is specified in the relevant Pricing Supplement, provided that:

(a) if the relevant Pricing Supplement specifies that "**Futures Contract – Expiry Date Roll**" shall be applicable in respect of a Commodity Reference Price, then "**Delivery Date**" shall mean, in respect of a Commodity Reference Price and the relevant Pricing Date or other relevant date, as determined by the Calculation Agent, the month of expiry of the first contract traded on the Exchange for the future delivery of such Commodity to expire after the relevant Pricing Date or other relevant date, PROVIDED THAT, for the avoidance of doubt, in the event that such Pricing Date or other relevant date for such Commodity Reference Price falls on the Last Trading Day for a contract traded on the Exchange for the future delivery of the relevant Commodity, then the "Delivery Date" for such Commodity Reference Price in relation to such Pricing Date or other relevant date shall be the month of expiry of the next contract for the future delivery of such Commodity to expire after (but not on) such Pricing Date or other relevant date.

(b) if the relevant Pricing Supplement specifies that "**Futures Contract – Delivery Date Roll**" shall be applicable in respect of a Commodity Reference Price, then "**Delivery Date**" shall mean, in respect of a Commodity Reference Price and the relevant Pricing Date or any other relevant date, as determined by the Calculation Agent, the month of expiry of the first contract for the future delivery of such Commodity trading on the Exchange to expire after the relevant Pricing Date or other relevant date, PROVIDED THAT, in the event that such Pricing Date or other

relevant date for such Commodity Reference Price falls (i) in the period commencing on, and including, the First Notice Day of the Notice Period for Delivery of such contract to, but excluding, the Last Trading Day of such contract, then the "Delivery Date" for such Commodity Reference Price in relation to such Pricing Date or other relevant date shall instead be the month of expiry of the second contract for the future delivery of such Commodity to expire after such Pricing Date or other relevant date, or (ii) on the Last Trading Day for a contract traded on the Exchange for the future delivery of such Commodity, then the "Delivery Date" for such Commodity Reference Price in relation to such Pricing Date or other relevant date shall be the month of expiry of the next contract for the future delivery of such Commodity to expire after (but not on) such Pricing Date or other relevant date.

"**Disappearance of Commodity Reference Price**" means:

(a) the permanent discontinuation of trading, in the relevant Futures Contract on the relevant Exchange;

(b) the disappearance of, or of trading in, the relevant Commodity; or

(c) the disappearance or permanent discontinuance or unavailability of a Commodity Reference Price,

notwithstanding the availability of the related Price Source or the status of trading in the relevant Futures Contract or the relevant Commodity.

"**Disruption Fallback**" means, in respect of a Commodity and a Commodity Reference Price, Calculation Agent Determination, Delayed Publication or Announcement, Fallback Reference Dealers, Fallback Reference Price, Postponement and/or such other sources or methods specified as such or otherwise determined in the relevant Pricing Supplement as an alternative basis for determining the Commodity Reference Price when a Market Disruption Event occurs or exists on a day that is a Pricing Date (or, if different, the day on which prices for such Pricing Date would in the ordinary course, be published or announced by the Price Source).

"**Exchange**" means, in relation to a Commodity, the exchange or principal trading market specified as such in the relevant Pricing Supplement or the Commodity Reference Price.

"**Fallback Pricing Date**" means, in respect of a Commodity or Commodity Index, the date(s) specified as such in the relevant Pricing Supplement, or, if no date is specified for the Fallback Pricing Date in the relevant Pricing Supplement, then the Fallback Pricing Date for any date on which the price of such Commodity or the level of such Commodity Index, as the case may be, is required to be determined shall be the second Business Day prior to the next following date upon which any payment or delivery of assets may have to be made by the Issuer by reference to the price of such Commodity or the level of such Commodity Index, as the case may be, on such day.

"**Fallback Reference Dealers**" means that the Commodity Reference Price will be determined in accordance with the Commodity Reference Price, "**Commodity - Reference Dealers**".

"**Fallback Reference Price**" means that the Calculation Agent will determine the Commodity Reference Price based on the price for such Pricing Date of the first alternate Commodity Reference Price specified in the relevant Pricing Supplement and not subject to a Market Disruption Event.

"**First Notice Day of the Notice Period for Delivery**" means, in respect of the relevant Futures Contract, the "first notice day" for delivery of the relevant Commodity under such Futures Contract pursuant to the rules and regulations of the relevant Exchange, as at the relevant Pricing Date or any other relevant date, as determined by the Calculation Agent.

"**Futures Contract**" means, in respect of a Commodity Reference Price, the contract specified as such in the relevant Pricing Supplement.

"**Futures Trading Day**" means, in respect of a Commodity Index and a futures contract comprised therein, each day on which the exchange on which such futures contract trades is open for trading.

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the risks of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Initial Pricing Date**" means, in relation to a Commodity, the date specified as such in the relevant Pricing Supplement.

"**Last Trading Day**" means, in respect of the relevant Futures Contract, the final day during which trading may take place in such Futures Contract pursuant to the rules and regulations of the relevant Exchange, as at the relevant Pricing Date or any other relevant date, as determined by the Calculation Agent.

"**Market Disruption Event**" means:

(a) other than in respect of a Commodity Index, the occurrence of any of the following events:

(i) Disappearance of Commodity Reference Price;

(ii) Material Change in Content;

(iii) Material Change in Formula;

(iv) Price Source Disruption;

(v) Trading Disruption;

(vi) Tax Disruption;

(vii) An Administrator/Benchmark Event; or

(viii) any additional Market Disruption Events as specified in the relevant Pricing Supplement; and

(b) in respect of a Commodity Index, the occurrence of any one or more of the following circumstances:

(i) a material limitation, suspension, or disruption of trading in one or more of the futures contracts included in the Commodity Index which results in a failure by the exchange on which such futures contract is traded to report a closing price for such futures contract on the day on which such event occurs or any succeeding day on which it continues;

(ii) the closing price for any futures contract included in the Commodity Index is a "limit price", which means that the closing price for such futures contract for a day has increased or decreased from the previous day's closing price by the maximum amount permitted under applicable exchange rules;

(iii) a failure by the applicable exchange or other price source to announce or publish the closing price for any futures contract included in the Commodity Index; or

(iv) an Administrator/Benchmark Event.

"**Material Change in Content**" means the occurrence since the earlier of the Initial Pricing Date or the Issue Date (or, if there is no Initial Pricing Date, the Issue Date) of a material change in the content, composition or constitution of the Commodity or relevant Futures Contract.

"**Material Change in Formula**" means the occurrence since the earlier of the Initial Pricing Date or the Issue Date (or, if there is no Initial Pricing Date, the Issue Date) of a material change in the formula for or the method of calculating the relevant Commodity Reference Price.

"**Maximum Days of Disruption**" means the number of Commodity Business Days (or Bullion Business Days) specified as such in the relevant Pricing Supplement and, if no such number is specified, five Commodity Business Days (or Bullion Business Days).

"**Postponement**" means that the Pricing Date for the Commodity Reference Price will be deemed to be the first succeeding Commodity Business Day (or Bullion Business Day) on which the Market Disruption Event ceases to exist, unless such Market Disruption Event continues to exists (measured from and including the Adjusted Scheduled Pricing Date corresponding to the Pricing Date) for consecutive Commodity Business Days (or consecutive Bullion Business Days) equal in number to the Maximum Days of Disruption in respect of such Commodity.

"**Price Materiality Percentage**" means the percentage specified as such in the relevant Pricing Supplement.

"**Price Source**" means the publication(s) and/or Screen Page(s) (or such other origin of reference, including an Exchange) containing (or reporting) the Specified Price (or prices from which the Specified Price is calculated) as specified in the relevant Commodity Reference Price or in the relevant Pricing Supplement, provided that if the relevant Pricing Supplement specifies that "**Futures Contract – Delivery Date Roll**" or "**Futures Contract – Expiry Date Roll**" is applicable, then "Price Source" shall mean the publication(s) and/or Screen Page(s) (or such other origin of reference, including an Exchange) as specified in the relevant Pricing Supplement in order to reference the relevant Futures Contract on the relevant date and at the relevant time as set forth in the applicable proviso relating to such Commodity in the definition of "**Delivery Date**".

"**Price Source Disruption**" means, in respect of a Commodity:

(a) the failure of the Price Source to announce or publish the Specified Price (or the information necessary for determining the Specified Price) for the relevant Commodity Reference Price (or, if there is no Specified Price for a Commodity Reference Price, such Commodity Reference Price);

(b) the temporary or permanent discontinuance or unavailability of the Price Source;

(c) if the Commodity Reference Price is "Commodity - Reference Dealers", the failure to obtain at least three quotations as requested from the relevant Reference Dealers or Bullion Reference Dealers (as applicable); or

(d) if a Price Materiality Percentage is specified to be applicable in the relevant Pricing Supplement, the Specified Price for the relevant Commodity Reference Price differs from the Specified Price determined in accordance with the Commodity Reference Price, "Commodity - Reference Dealers", by such Price Materiality Percentage (or, if there is no Specified Price for a Commodity Reference Price, the Commodity Reference Prices determined by such means differ by such Price Materiality Percentage).

"**Pricing Date**" means, in respect of a Commodity or a Commodity Index, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to adjustment in accordance with the relevant Commodity Business Day Convention (or Bullion Business Day Convention) (in respect of a Commodity) or the relevant Trading Day Convention (in respect of a Commodity Index), as is applicable, and in accordance with the Commodity Linked Provisions.

"**Reference Dealers**" means, if the relevant Commodity Reference Price is "Commodity – Reference Dealers", the four dealers specified in the relevant Pricing Supplement or, if dealers are not so specified, four leading dealers in the relevant market as determined by the Calculation Agent.

"**Reuters Screen**" means, in respect of a Commodity Reference Price, when used in connection with any designated page, the display page so designated on Reuters (or such other page as may replace that page on that service for the purpose of displaying prices comparable to such Commodity Reference Price, as determined by the Calculation Agent).

"**Scheduled Pricing Date**" means, in respect of a Pricing Date, the original day scheduled as such Pricing Date, prior to any adjustment or postponement thereof.

"**Screen Page**" means, in respect of a Commodity Reference Price, the Bloomberg Screen page and/or the Reuters Screen page and/or such other screen page of such other information provider, on which relevant information for such Commodity Reference Price is reported or published, as is specified in the relevant Pricing Supplement.

"**Specified Price**" means, in respect of a Commodity Reference Price, the price specified as such in the relevant Pricing Supplement, being any of the following prices (which must be a price reported in or by, or capable of being determined from information reported in or by, the relevant Price Source), and, if applicable, as of the time so specified: (a) the high price; (b) the low price; (c) the average of the high price and the low price; (d) the closing price; (e) the opening price; (f) the bid price; (g) the asked price; (h) the average of the bid price and the asked price; (i) the settlement price; (j) the official settlement price; (k) the official price; (l) the morning fixing; (m) the afternoon fixing; (n) the spot price; or (o) any other price specified as such in the relevant Pricing Supplement.

"**Tax Disruption**" means, in respect of a Commodity, the imposition of, change in or removal of an excise, severance, sales, use, value-added, transfer, stamp, documentary, recording or similar tax on, or measured by reference to, such Commodity (other than a tax on, or measured by reference to overall gross or net income) by any government or taxation authority after the earlier of the Initial Pricing Date or the Issue Date (or, if there is no Initial Pricing Date, the Issue Date), if the direct effect of such imposition, change, or removal is to raise or lower the Commodity Reference Price on the day that would otherwise be a Pricing Date or any other relevant date, as determined by the Calculation Agent, from what it would have been without that imposition, change, or removal.

"**Trade Date**" means the day specified as such in the relevant Pricing Supplement.

"**Trading Day**" means a day when:

(a) the Commodity Index Sponsor is open for business in Commodity Index Sponsor Business Centre; and

(b) the exchanges of all futures contracts included in the Commodity Index are open for trading.

"**Trading Day Convention**" means, in respect of a Commodity Index, the convention for adjusting any Pricing Date or other relevant date if it would otherwise fall on a day that is not a Trading Day. If the relevant Pricing Supplement specifies, in respect of such Pricing Date or other date, that:

(a) "**Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Trading Day, the Pricing Date or other date will be the first following day that is a Trading Day;

(b) "**Modified Following**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Trading Day, the Pricing Date or other date will be the first following day that is a Trading Day, unless that day falls in the next calendar month, in which case that date will be the first preceding day that is a Trading Day;

(c) "**Nearest**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Trading Day, the Pricing Date or other date will be (i) the first preceding day that is a Trading Day if such date falls on a day other than a Sunday or Monday and (ii) the first following day that is a Trading Day if such date falls on a Sunday or Monday;

(d) "**Preceding**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Trading Day, the Pricing Date or other date will be the first preceding day that is a Trading Day; or

(e) "**No Adjustment**" shall apply to such Pricing Date or other date, then if the Scheduled Pricing Date or other scheduled date corresponding to such date is not a Trading Day, the Pricing Date or other date will nonetheless be such Scheduled Pricing Date or other scheduled date.

If the relevant Pricing Supplement does not specify an applicable Trading Day Convention, then it shall be deemed that "**Modified Following**" shall apply.

"**Trading Disruption**" means the material suspension of, or the material limitation imposed on, trading in the Futures Contract or the Commodity on the Exchange or in any additional futures contract, options contract or commodity on any Exchange as specified in the relevant Pricing Supplement or as determined by the Calculation Agent. For these purposes:

(a) a suspension of the trading in the Futures Contract or the Commodity on any relevant Pricing Date or any other relevant date, as determined by the Calculation Agent, shall be deemed to be material only if:

(i) all trading in the Futures Contract or the Commodity is suspended for the entire Pricing Date or other relevant date; or

(ii) all trading in the Futures Contract or the Commodity is suspended subsequent to the opening of trading on the Pricing Date or other relevant date, trading does not recommence prior to the regularly scheduled close of trading in such Futures Contract or Commodity on such Pricing Date or other relevant date and such suspension is announced less than one-hour preceding its commencement; and

(b) a limitation of trading in the Futures Contract or the Commodity on any Pricing Date or any other relevant date, as determined by the Calculation Agent, shall be deemed to be material only if the relevant Exchange establishes limits on the range within which the price of the Futures Contract or the Commodity may fluctuate and the closing or settlement price of the Futures Contract or the Commodity on such day is at the upper limit of that range or at the lower limit of that range.

"**Unit**" means the unit of measure of the relevant Commodity, as specified in the relevant Commodity Reference Price or the relevant Pricing Supplement.

ANNEX 4 - FX LINKED PROVISIONS

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The terms and conditions set out in this Annex 4 apply to Securities for which the relevant Pricing Supplement specifies that these FX Linked Provisions shall apply.

1. Consequences of FX Disrupted Days

This FX Linked Provision 1 shall only apply where the relevant Pricing Supplement specifies that "EMTA Provisions" are not applicable.

1.1 Single FX Rate and Reference Dates

Where the Securities relate to a single FX Rate, and if the Calculation Agent determines that any Reference Date in respect of such FX Rate is an FX Disrupted Day, the Calculation Agent shall determine such FX Rate on such Reference Date in accordance with the first applicable Disruption Fallback (applied in accordance with its terms).

1.2 FX Rate Basket and Reference Dates

Where the Securities relate to a basket of FX Rates, and if the Calculation Agent determines that any Reference Date in respect of one or more of such FX Rates is an FX Disrupted Day, then:

(a) for each FX Rate for which the Calculation Agent determines that such Reference Date is not an FX Disrupted Day, the FX Rate will be determined on such Reference Date from the relevant FX Price Source; and

(b) for each FX Rate for which the Calculation Agent determines that such Reference Date is an FX Disrupted Day, the Calculation Agent shall determine such FX Rate on such Reference Date in accordance with the first applicable Disruption Fallback (applied in accordance with its terms).

1.3 Averaging Reference Dates

If the relevant Pricing Supplement specifies that "Averaging Reference Dates – Omission" is applicable, if the Calculation Agent determines that any Averaging Reference Date is an FX Disrupted Day, then such Averaging Reference Date will be deemed not to be a relevant Averaging Reference Date for the purposes of determining any amount payable under the Securities or making any other determination thereunder, provided that, if through the operation of this provision there would not be any Averaging Reference Dates, then the final Averaging Reference Date will be deemed to be the sole Averaging Reference Date, and the Calculation Agent shall determine the FX Rate on such sole Averaging Reference Date in accordance with the first applicable Disruption Fallback (applied in accordance with its terms).

1.4 Administrator/Benchmark Event and non-Reference Dates

If the Calculation Agent determines that an Administrator/Benchmark Event has occurred or is in existence on any day in respect of the Securities that is not a Reference Date during the term of the Securities, the Calculation Agent may at any time determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

2. Consequences of an FX Disruption Event and/or an Unscheduled Holiday

This FX Linked Provision 2 shall only apply where the relevant Pricing Supplement specifies that "EMTA Provisions" are applicable.

2.1 Single FX Rate and Reference Dates

Where the Securities relate to a single FX Rate, and, if the Calculation Agent determines that:

(a) (i) any Reference Date in respect of such FX Rate is not an FX Disrupted Day for such FX Rate and (ii) the related Scheduled Reference Date in respect of such FX Rate is not an Unscheduled

Holiday, then the FX Rate for that Reference Date shall be determined in accordance with the definition of "FX Rate" as specified in the relevant Pricing Supplement;

(b) a Scheduled Reference Date is an Unscheduled Holiday, then the Calculation Agent shall determine the FX Rate for the related Reference Date (in accordance with the definition of "FX Rate" as specified in the relevant Pricing Supplement) on the next following FX Business Day which is not an Unscheduled Holiday and such FX Business Day shall be the relevant Reference Date, provided that if such next following FX Business Day has not occurred on or prior to the Last Deferred Day in respect of such Scheduled Reference Date, then the first Scheduled FX Business Day falling after the Last Deferred Day shall be the relevant Reference Date (and, for the avoidance of doubt, the Calculation Agent shall determine the FX Rate on such date in accordance with the definition of "FX Rate" as specified in the relevant Pricing Supplement); or

(c) a Reference Date is an FX Disrupted Day for the FX Rate, then the Calculation Agent shall determine the FX Rate for that Reference Date in accordance with the first applicable Disruption Fallback, subject to sub-paragraphs (i) and, if applicable, (ii) below (applied in accordance with their respective terms).

Notwithstanding anything to the contrary:

(i) in no event shall the total number of consecutive calendar days during which either (A) the relevant Reference Date is deferred due to the occurrence of an Unscheduled Holiday, or (B) postponement as set forth in Valuation Postponement (if applicable) has occurred or is occurring (or any combination of (A) and (B)) exceed the consecutive calendar days in the aggregate equal to the Cumulative Postponement. If, upon the lapse of any such period equal to the Cumulative Postponement, (x) an Unscheduled Holiday has occurred or is continuing on the Scheduled FX Business Day immediately following such period, then such Scheduled FX Business Day shall be deemed to be the relevant Reference Date, and (y) if an FX Disruption Event shall have occurred or be continuing on the Scheduled FX Business Day immediately following such period, then postponement as set forth in Valuation Postponement (if applicable) shall not apply and the FX Rate shall be determined in accordance with the next Disruption Fallback and such Scheduled FX Business Day shall be deemed to be the relevant Reference Date; and

(ii) in respect of Bond Linked Securities, if the relevant Pricing Supplement specifies that "Postponement Override" is applicable, in no event shall Valuation Postponement (if applicable) or Fallback Survey Valuation Postponement (if applicable) (or any postponement as a result of an Unscheduled Holiday) apply if the Calculation Agent determines that an Early Redemption Event has occurred or is continuing on any relevant day in respect of such Bond Linked Securities and the Issuer has determined to early redeem the Securities. If an Early Redemption Event has occurred or is continuing on any relevant day and if such day is an FX Disrupted Day or an Unscheduled Holiday for the FX Rate or the Fallback Reference Price is unavailable, the FX Rate shall be determined in accordance with the next applicable Disruption Fallback on such day regardless of whether such day is an FX Disrupted Day or an Unscheduled Holiday for the FX Rate or such Fallback Reference Price is unavailable. For the avoidance of doubt and for purposes of this sub-paragraph (ii) only, there shall be no postponement to the Reference Date for the FX Rate under Valuation Postponement (if applicable), Fallback Survey Valuation Postponement (if applicable) or with respect to an Unscheduled Holiday.

3. **Fallback Valuation Date**

Notwithstanding any other terms of these FX Linked Provisions, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to any Reference Date or any other relevant date (as specified in the relevant Pricing Supplement) (any such date being, for the purposes of this FX Linked Provision 3, a "**Relevant Date**") for an FX Rate, and if, following adjustment of such Relevant Date on account of the Scheduled Reference Date not being an FX Business Day (for the purposes of this FX Linked Provision 3, an "**Affected FX Rate**") the Relevant Date would otherwise fall after the specified Fallback Valuation Date in respect of such Affected FX Rate, then such Fallback Valuation Date shall be deemed to be such Relevant Date for such Affected FX Rate.

If such Fallback Valuation Date is not an FX Business Day or is an FX Disrupted Day in respect of such Affected FX Rate, as the case may be, then the Calculation Agent shall determine its good faith estimate of the value for such Affected FX Rate on such Fallback Valuation Date.

4. **Corrections to Published and Displayed Rates**

(a) In any case where an FX Rate is based on information obtained from the Reuters Monitor Money Rates Service, or any other financial information service, the FX Rate will be subject to the corrections, if any, to that information subsequently displayed by that source within one hour of the time when such rate is first displayed by such source, unless the Calculation Agent determines in its discretion that it is not practicable to take into account such correction.

(b) Notwithstanding FX Linked Provision 4(a) above, in any case where the FX Rate is based on information published or announced by any governmental authority in a relevant country, the FX Rate will be subject to the corrections, if any, to that information subsequently published or announced by that source within five days of the relevant Reference Date, unless the Calculation Agent determines in its discretion that it is not practicable to take into account such correction.

5. **Successor Currency**

Where the relevant Pricing Supplement specifies that "Successor Currency" is applicable in respect of an FX Rate, then:

(a) each Reference Currency will be deemed to include any lawful successor currency to the Reference Currency (the "**Successor Currency**");

(b) if the Calculation Agent determines that on or after the Successor Currency Cut-off Date, but on or before any relevant date under the Securities on which an amount may be payable, a country has lawfully eliminated, converted, redenominated or exchanged its currency in effect on the Successor Currency Cut-off Date or any Successor Currency, as the case may be (the "**Original Currency**") for a Successor Currency, then for the purposes of calculating any amounts of the Original Currency or effecting settlement thereof, any Original Currency amounts will be converted to the Successor Currency by multiplying the amount of Original Currency by a ratio of Successor Currency to Original Currency, which ratio will be calculated on the basis of the exchange rate set forth by the relevant country of the Original Currency for converting the Original Currency into the Successor Currency on the date on which the elimination, conversion, redenomination or exchange took place, as determined by the Calculation Agent. If there is more than one such date, the date closest to such relevant date will be selected (or such other date as may be selected by the Calculation Agent in its discretion);

(c) notwithstanding paragraph (b) above but subject to paragraph (d) below, the Calculation Agent may (to the extent permitted by the applicable law), select such other exchange rate or other basis for the conversion of an amount of the Original Currency to the Successor Currency and, will make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms in respect of the Securities to account for such elimination, conversion, redenomination or exchange of the Reference Currency; and

(d) notwithstanding the foregoing provisions, with respect to any Reference Currency that is substituted or replaced by the euro, the consequences of such substitution or replacement will be determined in accordance with applicable law.

Upon making any adjustment in accordance with paragraph (c) above, the Calculation Agent shall give notice as soon as practicable to the Holders stating the adjustment to any variable, calculation methodology, valuation, settlement, payment terms or any other terms in respect of the Securities, as applicable, and/or any of the other relevant terms and giving brief details of the adjustment, provided that any failure to give such notice shall not affect the validity of the adjustment or any action taken.

6. **Rebasing of Securities**

(a) If the relevant Pricing Supplement specifies that "Rebasing" is applicable, then if, on or prior to any Reference Date or any other relevant date, the Calculation Agent is unable to obtain a value

for an FX Rate (because the Reference Currency and/or Base Currency ceases to exist, or for any other reason other than a temporary disruption, as determined by the Calculation Agent), the Calculation Agent may rebase the Securities against another foreign exchange rate determined by the Calculation Agent, in its discretion, to be a comparable foreign exchange rate.

(b) If the Calculation Agent determines in its discretion that there is not such a comparable foreign exchange rate, the Calculation Agent will notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities, in which case the Issuer shall redeem the Securities on the date specified in the notice for an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) in respect of each Security.

7. **Consequences of Additional Disruption Events**

Following the determination by the Calculation Agent that an Additional Disruption Event has occurred, the Calculation Agent may, in its discretion:

(a) determine to make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for such Additional Disruption Event; and/or

(b) determine and give notice to Holders that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

8. **Changes to the FX Rate**

If the methodology or formula for the FX Rate of any Securities or any other means of calculating the FX Rate, is changed (irrespective of the materiality of any such change or changes), then for the avoidance of doubt references to the FX Rate in respect of such Securities shall remain as the FX Rate notwithstanding such changes.

9. **Non-compliant Fallbacks**

Notwithstanding anything else in these FX Linked Provisions, if, in respect of the Securities, it (a) is or would be unlawful at any time under any applicable law or regulation or (b) would contravene any applicable licensing requirements, in each case, for the Calculation Agent to determine the FX Rate or make any other determination in respect of the Securities which it would otherwise be obliged to do so under these FX Linked Provisions (or it would be unlawful or would contravene those licensing requirements were a determination to be made at such time), then (where no other applicable provision in these FX Linked Provisions results in such determination being made) the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

10. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which the FX Linked Provisions apply:

"**Additional Disruption Event**" means (a) a Change in Law, and, (b) if Hedging Disruption is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption.

"**Administrator/Benchmark Event**" has the meaning given in General Condition 32.1 (*Definitions*).

"**Averaging Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Averaging Reference Date**" means, in respect of an FX Rate, each Initial Averaging Date or Averaging Date, subject to adjustment in accordance with the FX Linked Provisions.

"**Base Currency**" means the currency specified as such in the relevant Pricing Supplement.

"**Calculation Agent Determination**" means, in respect of an FX Rate and any relevant day, that the FX Rate for such relevant day (or a method for determining the FX Rate) will be determined by the Calculation Agent taking into consideration all available information that it deems relevant, provided that if the relevant Pricing Supplement specifies that "EMTA Provisions" are applicable, the FX Rate will be determined on (a) the first Scheduled FX Business Day falling after the later of the Last Postponement Date or the Last Deferred Day, as the case may be, or (b) if Fallback Survey Valuation Postponement is specified as applicable in the relevant Pricing Supplement, the Last Fallback Postponement Date.

"**Change in Law**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Redemption Date or Settlement Date, as is applicable to the Securities, become illegal to hold, acquire or dispose of any relevant currency or assets, or (y) (if "Change in Law – Increased Cost" is specified to be applicable in the relevant Pricing Supplement) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Coupon Valuation Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Cumulative Postponement**" means the number of days specified as such in the relevant Pricing Supplement.

"**Currency-Reference Dealers**" means, in respect of any relevant day, that the Calculation Agent will request each of the Reference Dealers to provide a quotation of its rate at which it will buy one unit of the Base Currency in units of the Reference Currency at the applicable Valuation Time on such relevant day. If, for any such rate, at least two quotations are provided, the relevant rate will be the arithmetic mean of the quotations. If fewer than two quotations are provided for any such rate, the relevant rate will be the arithmetic mean of the relevant rates quoted by major banks in the relevant market, selected by the Calculation Agent at or around the applicable Valuation Time on such relevant day.

"**Dealer Poll**" means, in respect of an FX Rate and any relevant day, that the FX Rate for such day will be determined by the Calculation Agent on the basis of firm quotations for the sale of the Reference Currency and purchase of the Base Currency (where the Base Currency is payable outside of the jurisdiction in which the principal financial centre of the Reference Currency is located), as provided by the Reference Market Dealers as purchasers of the Reference Currency and sellers of the Base Currency in an amount corresponding to the relevant amount payable by the Issuer (prior to conversion into the Base Currency at the FX Rate and prior to conversion into a proportional amount per Security) at such time as the Calculation Agent shall decide in consultation with the Issuer on such day. The Calculation Agent shall calculate the FX Rate for such day to be the arithmetic mean of such quotations (rounded to the nearest four decimal places, with 0.00005 rounded upwards), provided that if fewer than the Minimum Number of Quotations are provided by the Reference Market Dealers to the Calculation Agent then the FX Rate will be determined in accordance with the next applicable Disruption Fallback (applied in accordance with its terms).

"**Disruption Fallback**" means, in respect of an FX Rate, Calculation Agent Determination, Currency-Reference Dealers, Dealer Poll, Fallback Reference Price, Fallback Survey Valuation Postponement,

Valuation Postponement and/or such other sources or methods specified as such or otherwise determined as an alternative basis for determining such FX Rate as may be provided in the relevant Pricing Supplement. The applicable Disruption Fallback in respect of an FX Rate shall be as specified in the relevant Pricing Supplement, and if two or more Disruption Fallbacks are specified, unless otherwise provided in the relevant Pricing Supplement, such Disruption Fallbacks shall apply in the order in which they are specified, such that if the Calculation Agent determines that the FX Rate cannot be determined by applying one Disruption Fallback, then the next Disruption Fallback specified shall apply, provided that if the Calculation Agent determines that the FX Rate cannot be determined by applying any of the applicable Disruption Fallbacks, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

"**EMTA**" means the Emerging Markets Traders Association.

"**Fallback Maximum Days of Postponement**" means the number of Scheduled FX Business Days specified as such in the relevant Pricing Supplement.

"**Fallback Reference Price**" means, in respect of any relevant day, that (a) if "Published" is specified to be the applicable Fallback Price Source in the relevant Pricing Supplement, the Calculation Agent will determine the FX Rate on such relevant day on the basis of the exchange rate for one unit of the Base Currency in terms of the Reference Currency for such FX Rate, published by available recognised financial information vendors (as selected by the Calculation Agent) other than the applicable FX Price Source, at or around the applicable Valuation Time on such relevant day, or (b) if "Survey" is specified to be the applicable Fallback Price Source in the relevant Pricing Supplement, the Calculation Agent will determine the FX Rate on such relevant day in accordance with the provisions of the Survey Rate specified in the relevant Pricing Supplement.

"**Fallback Survey Valuation Postponement**" means, in respect of the FX Rate and any relevant day, that the FX Rate will be determined (in accordance with the provisions of the Survey Rate specified in the relevant Pricing Supplement) on the first Scheduled FX Business Day on which the Fallback Reference Price is available, unless the Fallback Reference Price is not available (measured from, but excluding, the Last Postponement Date or the Last Deferred Day, as the case may be) for a consecutive number of Scheduled FX Business Days equal to the Fallback Maximum Days of Postponement (such last Scheduled FX Business Day being, the "**Last Fallback Postponement Date**"). In such event, the FX Rate will be determined in accordance with the next applicable Disruption Fallback (applied in accordance with its terms). For the avoidance of doubt, the terms relating to Cumulative Postponement in FX Linked Provision 2.1(c)(i) do not preclude postponement of valuation in accordance with this Disruption Fallback.

"**Fallback Valuation Date**" means, in respect of any FX Rate, the date(s) specified as such in the relevant Pricing Supplement, or, if no date is specified for the Fallback Valuation Date in the relevant Pricing Supplement, then the Fallback Valuation Date for any date on which the FX Rate is required to be determined shall be the second Business Day prior to the next following date upon which any payment or delivery of assets may have to be made by the Issuer by reference to the FX Rate on such day.

"**FX Business Day**" means, in respect of an FX Rate, each day (other than Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange in accordance with the practice of the foreign exchange market) in (a) the principal financial centre of the Reference Currency and (b) the FX Financial Centres (if any) specified in the relevant Pricing Supplement.

"**FX Business Day Convention**" means the convention for adjusting any Reference Date or other relevant date if it would otherwise fall on a day that is not an FX Business Day. If the relevant Pricing Supplement specifies, in respect of such Reference Date or other date, that:

(a) "**Following**" shall apply to such Reference Date or other date, then if the Scheduled Reference Date or other scheduled date corresponding to such date is not an FX Business Day, the Reference Date or other date will be the first following day that is an FX Business Day;

(b) "**Modified Following**" shall apply to such Reference Date or other date, then if the Scheduled Reference Date or other scheduled date corresponding to such date is not an FX Business Day, the Reference Date or other date will be the first following day that is an FX Business Day unless that day falls in the next calendar month, in which case that date will be the first preceding day that is an FX Business Day;

(c) "**Nearest**" shall apply to such Reference Date or other date, then if the Scheduled Reference Date or other scheduled date corresponding to such date is not an FX Business Day, the Reference Date or other date will be (i) the first preceding day that is an FX Business Day if such date falls on a day other than a Sunday or Monday and (ii) the first following day that is an FX Business Day if such date otherwise falls on a Sunday or Monday;

(d) "**Preceding**" shall apply to such Reference Date or other date, then if the Scheduled Reference Date or other scheduled date corresponding to such date is not an FX Business Day, the Reference Date or other date will be the first preceding day that is an FX Business Day; or

(e) "**No Adjustment**" shall apply to such Reference Date or other date, then if the Scheduled Reference Date or other scheduled date corresponding to such date is not an FX Business Day, the Reference Date or other date will nonetheless be such Scheduled Reference Date or other scheduled date.

If the relevant Pricing Supplement does not specify an applicable FX Business Day Convention, then it shall be deemed that "**Following**" shall apply.

"**FX Disrupted Day**" means any day on which an FX Disruption Event occurs or is continuing.

"**FX Disruption Event**" means the occurrence or existence, as determined by the Calculation Agent, of each of the following events where such event is specified to be applicable in the relevant Pricing Supplement: any Price Source Disruption, any Inconvertibility Event, any Administrator/Benchmark Event, any FX Inconvertibility Event, any Market Disruption Event, any Reference Market Dealer Event and/or any other event specified as an FX Disruption Event in the relevant Pricing Supplement.

"**FX Financial Centres**" means, in respect of each FX Rate, the financial centre(s) specified in the relevant Pricing Supplement.

"**FX Inconvertibility Event**" means, in the determination of the Calculation Agent, any action, event or circumstance whatsoever which, from a legal or practical perspective:

(a) has the direct or indirect effect of hindering, limiting or restricting the convertibility of the Reference Currency into the Base Currency through customary legal channels (including, without limitation, any delay, increased costs, discriminatory rates of exchange or current or future restrictions on repatriation of the Reference Currency into the Base Currency); and/or

(b) results in the unavailability of the Reference Currency in the interbank foreign exchange market in accordance with normal commercial practice.

"**FX Price Source**" means, in respect of an FX Rate, the price source(s) specified in the relevant Pricing Supplement for such FX Rate or if the relevant rate is not published or announced by such FX Price Source at the relevant time, the successor or alternative price source or page/publication for the relevant rate as determined by the Calculation Agent in its discretion.

"**FX Rate**" means, in respect of any relevant day, the exchange rate of one currency for another currency expressed as a number of units of the Reference Currency (or fractional amounts thereof) per unit of the Base Currency (and, if the relevant Pricing Supplement specifies a Number of FX Settlement Days, for settlement in the Number of FX Settlement Days reported and/or calculated and/or published by the FX Rate Sponsor), which appears on the FX Price Source at approximately the applicable Valuation Time on such day, or such other rate specified or otherwise determined as provided in the relevant Pricing Supplement.

"**FX Rate Sponsor**" means, for any FX Rate, the entity specified as such in the relevant Pricing Supplement.

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Inconvertibility Event**" means, in respect of an FX Rate, the occurrence of an event which affects the convertibility of the relevant Reference Currency into the Base Currency.

"**Initial Averaging Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Initial Valuation Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Interest Valuation Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Last Deferred Day**" means, in respect of any Scheduled Reference Date, the day which falls on the number of calendar days following such Scheduled Reference Date, as specified in the relevant Pricing Supplement.

"**Last Postponement Date**" means, in respect of any Scheduled Reference Date, the day which falls on the number of calendar days following such Scheduled Reference Date, as specified in the relevant Pricing Supplement.

"**Local Time**" means the local time in the financial centre(s) specified in the relevant Pricing Supplement.

"**Market Disruption Event**" means any event, other than an FX Inconvertibility Event, as a result of which the Calculation Agent is unable to determine any amount required to be determined by it in respect of the Securities, which event shall include, without limitation:

(a) a natural or man-made disaster, armed conflict, act of terrorism, riot, labour disruption or any other circumstance beyond its control; or

(b) the enactment, promulgation, execution, ratification or adoption of, or any change in or amendment to, any rule, law, regulation or statute (or in the applicability or official interpretation of any rule, law, regulation or statute) or the issuance of any order or decree.

"**Maximum Days of Postponement**" means the number of days specified as such in the relevant Pricing Supplement.

"**Minimum Number of Quotations**" means the number of quotations specified as such in the relevant Pricing Supplement.

"**Number of FX Settlement Days**" means such number or amount as is specified in the relevant Pricing Supplement.

"**Price Source Disruption**" means it becomes impossible or otherwise impracticable to obtain the FX Rate on the Reference Date (or if different, the day on which rates for that Reference Date would, in the ordinary course, be published or announced by the relevant FX Price Source).

"**Reference Currency**" means the currency specified as such in the relevant Pricing Supplement.

"**Reference Date**" means, in respect of an FX Rate, each Initial Averaging Date, Initial Valuation Date, Interest Valuation Date, Coupon Valuation Date, Averaging Date, Valuation Date or any other date specified as such in the relevant Pricing Supplement, subject to adjustment in accordance with the FX Linked Provisions.

"**Reference Dealers**" means, in respect of an FX Rate, four leading dealers in the relevant foreign exchange market, as determined by the Calculation Agent (or any other number of dealers as specified in the relevant Pricing Supplement).

"**Reference Market Dealer Event**" means fewer than the Minimum Number of Quotations are provided by the Reference Market Dealers to the Calculation Agent pursuant to the definition of "FX Rate" as specified in the relevant Pricing Supplement, as determined by the Calculation Agent.

"**Reference Market Dealers**" mean, in respect of an FX Rate, three leading dealers, banks or banking corporations (and may include any affiliate of the Calculation Agent) which deal in the Reference Currency, as determined by the Calculation Agent (or any other number of such dealers as specified in the relevant Pricing Supplement).

"**Scheduled FX Business Day**" means each FX Business Day and each day which is not an FX Business Day only because it is an Unscheduled Holiday.

"**Scheduled Reference Date**" means, in respect of an FX Rate and any Reference Date, any original date that, but for such day not being an FX Business Day for such FX Rate, would have been such Reference Date, and, if the relevant Pricing Supplement specifies that "EMTA Provisions" are applicable, prior to any adjustment of such date in accordance with the FX Business Day Convention.

"**Successor Currency Cut-off Date**" means the Trade Date, the Issue Date or any other date specified as such in the relevant Pricing Supplement.

"**Survey Rate**" means the survey rate specified as such in the relevant Pricing Supplement.

"**Trade Date**" means the date specified as such in the relevant Pricing Supplement.

"**Unscheduled Holiday**" means any day that is not an FX Business Day, and the market was not aware of such fact (by means of a public announcement or by reference to other publicly available information) until a time that is later than 9:00 a.m., Local Time, two FX Business Days prior to such day.

"**Valuation Date**" means, in respect of an FX Rate, each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, subject to any adjustment in accordance with the FX Business Day Convention.

"**Valuation Postponement**" means, in respect of an FX Rate and any relevant day, that the FX Rate will be determined (in accordance with the definition of "FX Rate" as specified in the relevant Pricing Supplement) on the FX Business Day first succeeding the day on which the FX Disruption Event ceases to exist, unless the FX Disruption Event continues to exist (measured from, but excluding, the relevant Scheduled Reference Date) for a consecutive number of calendar days equal to the Maximum Days of Postponement. In such event, the FX Rate will be determined in accordance with the next applicable Disruption Fallback (applied in accordance with its terms).

"**Valuation Time**" means, in respect of an FX Rate, each time specified as such or otherwise determined as provided in the relevant Pricing Supplement.

ANNEX 5 - MARKET ACCESS PARTICIPATION PROVISIONS

(for the purpose of this Annex 5, the "**Participation Provisions**")

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The terms and conditions set out in this Annex 5 apply to Notes for which the relevant Pricing Supplement specifies that the Market Access Participation Provisions shall apply.

1. **Redemption and Purchase**

1.1 **Final Redemption**

Unless previously redeemed, each Note will be redeemed on the Redemption Date at its Redemption Value. The Redemption Value will be due and payable on the Redemption Payment Date.

1.2 **Redemption for Regulatory or Taxation Reasons**

(a) Subject to Participation Provision 1.2(b) below, Notes may be redeemed at the option of the Issuer in whole at any time on giving not less than 30 nor more than 60 calendar days' notice to the Holders of the Notes (which notice shall be irrevocable) at the Redemption Value of each Note for payment on the Redemption Payment Date if: (i) the Issuer (or the Guarantor, as the case may be), has or will (or there is a substantial likelihood that it will) become obliged to pay Additional Amounts as provided or referred to in General Condition 18 (*Taxation and Early Redemption or Termination for Taxation*) as a result of any action taken by a Relevant Jurisdiction or any political subdivision or any authority thereof or therein having power to tax or brought in a court of competent jurisdiction on or after the Issue Date or any change in, or amendment to, the laws or regulations of a Relevant Jurisdiction or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after the Issue Date and (ii) such obligation cannot be avoided by the Issuer (or the Guarantor, as the case may be), taking reasonable measures available to it, provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer (or the Guarantor, as the case may be), would be obliged to pay such Additional Amounts were a payment in respect of the Notes then due. Prior to the publication of any notice of redemption pursuant to this Participation Provision 1.2, the Issuer (or the Guarantor, as the case may be) shall deliver to the Relevant Programme Agent a certificate duly signed by the Issuer (or the Guarantor, as the case may be) stating that the Issuer (or the Guarantor, as the case may be) is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to such right of the Issuer (or the Guarantor, as the case may be) so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Issuer (or the Guarantor, as the case may be), has or will (or there is a substantial likelihood that it will) become obliged to pay such Additional Amounts as a result of such change or amendment.

(b) The Notes will be redeemable by the Issuer on shorter notice than the period specified above if the period of notice given to the Issuer of any relevant change, or amendment to the law makes it impracticable for the Issuer to give such notice and the interests of the relevant Holders will not be prejudiced by such action.

1.3 **Redemption at the option of the Issuer**

Notes may be redeemed (and/or transfers voided) by the Issuer as set forth in General Condition 2.3 (*Compulsory Transfer or Redemption*). In addition, the Issuer may, having given not less than five Business Days' notice to Holders in accordance with General Condition 27 (*Notices*), on any date redeem the Notes at the Redemption Value of each relevant Note for payment on the Redemption Payment Date if the Calculation Agent certifies that (1) any Relevant Country Authority has (i) revoked or suspended the Investment Regulations, (ii) suspended or terminated the ability of investors to invest in securities listed on any Relevant Exchange or (iii) imposed material limitations or restrictions on such ability, (2) the Underlying Shares have been delisted from any Relevant Exchange or (3) there has occurred any change in, amendment or non-renewal of (i) any judicial decision relating to the laws of the Relevant Country, (ii) any treaty to which the Relevant Country is a party, (iii) any application or official interpretation of such laws or treaty or (iv) any arrangements pertaining to any applicable investment facility including any hedging arrangements relating to the Notes after the Issue Date.

1.4 **Nationalisation**

If (a) all of the Underlying Shares or all or substantially all of the assets of the Underlying Company are nationalised, expropriated or are otherwise required to be transferred to any governmental agency, authority or entity, or (b) by reason of the voluntary or involuntary liquidation, winding-up or dissolution of or any analogous proceeding affecting the Underlying Company (i) all of the Underlying Shares are required to be transferred to any trustee, liquidator or other similar official or (ii) holders of the Underlying Shares become legally prohibited from transferring them, then, in the case of (a) or (b) above, the Calculation Agent will, upon becoming aware of such event, notify the Holders of Notes of such event and each Note will be redeemed at its Redemption Value for payment on the fifteenth Business Day after the Calculation Agent has given notice to the Holders of such event (for the purposes of this Participation Provision 1.4, the "**Redemption Payment Date**"). For the purposes of this Participation Provision 1.4, the "**Redemption Value**" of a Note will be equal to the amount (if any) received by the holder of an Underlying Share upon the occurrence of either of the above events, less any Taxation, multiplied by the Number of Underlying Shares per Note and converted into the Specified Currency of the Notes at the Exchange Rate on the Redemption Payment Date.

1.5 **Redemption at the option of a Holder**

(a) At any time after the later of (i) the Settlement Date and (ii) the Underlying Settlement Period, a Holder may instruct the Issuer to redeem any Note held by such Holder at its Redemption Value. In order for a Holder to exercise such right, such Holder shall deliver on a Business Day to the Relevant Programme Agent or the relevant Paying Agent (as the case may be) a valid Redemption Notice.

(b) A Holder may exercise its right under this Participation Provision 1.5 only in respect of the Minimum Redemption Number of Notes specified in the relevant Pricing Supplement and such multiples thereof.

1.6 **Suspension Period**

(a) A "**Suspension Period**" is such period from (and including) the date the Calculation Agent determines (in its absolute discretion) that (i) as a result of delivery of Underlying Shares connected with the Issuer's underlying hedging arrangements to the registrar of the Underlying Company for registration, such Underlying Shares cannot be transferred or (ii) as a result of the closure of the register of members of the Underlying Company for the purpose of establishing any dividend or other rights attaching to the Underlying Shares, the Underlying Shares cannot be transferred, in each case to (and including) such date when such transfer may be effected, and notice thereof (including an indication as to whether such Suspension Period has occurred due to the circumstances described in (i) or (ii) above) shall be given to the Holders in accordance with General Condition 27 (*Notices*).

(b) If a Redemption Date or an Early Redemption Date in respect of a Note shall fall within a Suspension Period, such Redemption Date or Early Redemption Date shall be postponed until the first Exchange Business Day after the expiry of such Suspension Period.

(c) Only one Suspension Period may occur during the Term of a Note as a result of the circumstances described in (a)(i) above.

1.7 **Purchase**

The Issuer (and the JPMCFC Guarantor in relation to Notes issued by JPMCFC or the JPMSP Guarantor in relation to Notes issued by JPMSP) and any of their respective subsidiaries may at any time purchase Notes in the open market or otherwise at any price. The Notes so purchased, while held by or on behalf of the Issuer (or the Guarantor, as the case may be) shall not entitle the Holder to vote at any meetings of the Holders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Holders for the purposes of General Condition 24 (*Meeting of Holders and Modifications*).

1.8 **Postponement**

Notwithstanding any other provision to the contrary in the relevant Pricing Supplement, (a) if redemption of the Notes is to be undertaken on a day which is not a Business Day or (b) if the Calculation Agent determines that, due to prevailing market conditions relating to share settlement, foreign exchange conversion or remittance of the Specified Currency of the Notes in the Relevant Country, a Relevant Investor which had sold Underlying Shares during a Valuation Period is not able to receive the proceeds of such sale in the Specified Currency on the relevant Redemption Payment Date, then the Redemption Payment Date will be postponed, in respect of (a) until the next following Business Day or in respect of (b) until such date as a Relevant Investor is able to receive the proceeds of any such sale in the Specified Currency. No interest shall accrue on such proceeds of sale in respect of any such postponement. Any such determination by the Calculation Agent shall be notified immediately by the Calculation Agent to the Issuer and the Relevant Programme Agent. Notice of any postponement of the Redemption Payment Date pursuant to this Participation Provision 1.8 shall be given by the Relevant Programme Agent to the Holders in accordance with General Condition 27 (*Notices*) as soon as practicable after any determination pursuant to this Participation Provision 1.8.

2. **Events Relating to the Underlying Shares**

2.1 **Adjustment Event**

The declaration by an Underlying Company of the occurrence of any of the following (in the determination of the Calculation Agent) shall constitute an "**Adjustment Event**" in respect of the Notes:

(a) A subdivision, consolidation or reclassification of the Underlying Shares or a change in par or paid value of the Underlying Shares, or a free dividend or distribution of any Underlying Shares to existing holders by way of bonus, capitalisation or similar issue including pursuant to a scrip dividend or similar scheme for the time being operated by the Underlying Company or otherwise in lieu of a Cash Dividend;

(b) A distribution to existing holders of the Underlying Shares of (i) Underlying Shares or (ii) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of the Underlying Company equally or proportionately with such payments to holders of Underlying Shares or (iii) any other type of securities, rights or warrants granting the right to a distribution of shares or to purchase, subscribe or receive shares for a consideration determined by the Issuer to be less than the prevailing market price per Underlying Share;

(c) A dividend or distribution other than a Cash Dividend;

(d) A repurchase by the Underlying Company of Underlying Shares whether out of profit or capital and whether the consideration for such repurchase is cash, securities or otherwise; or

(e) Any other similar event that may have a diluting or concentrative effect on the market value of the Underlying Shares or action that may be required to take account of provisions of the laws of the Relevant Country or any Relevant Exchange practice.

2.2 **Action by Calculation Agent**

Following each Adjustment Event during the Term of a Note the Calculation Agent will determine whether such Adjustment Event has a diluting or concentrative effect on the market value of the Underlying Shares, and if so, the Calculation Agent will carry out one or more of the following (provided that, in the case of physical Underlying Shares, a Suspension Period has occurred or is continuing):

(a) calculate the corresponding adjustment, if any, to be made to the terms of the Notes as the Calculation Agent determines appropriate to account for that diluting or concentrative effect and determine the effective date of that adjustment;

(b) distribute to the Holders of outstanding Notes additional Notes and/or a cash amount; and/or

(c) give notice to each Holder in accordance with General Condition 27 (*Notices*) of its right to purchase additional Notes.

2.3 **Fixing of Record Date**

Whenever any cash amount shall become payable or any distribution other than cash shall be made or whenever rights shall be issued with respect to the Notes or whenever for any reason the Calculation Agent causes a change in the Number of Underlying Shares per Note or whenever the Calculation Agent shall find it necessary or convenient, the Calculation Agent shall fix a record date (the "**Record Date**"), which shall be the record date applicable to the Underlying Shares or a date as soon thereafter as practicable;

(a) to determine those Holders who shall be entitled to receive such distribution or rights;

(b) on or after which each Note will relate to the adjusted Number of Underlying Shares per Note; or

(c) the Holders on such Record Date shall be entitled, as the case may be, to receive the amount distributable by the Issuer with respect to such distribution or such rights in proportion to the number of Notes held by them respectively.

2.4 **Notice of Adjustment Event**

As soon as practicable after each Adjustment Event the Relevant Programme Agent will give notice to the Holders in accordance with General Condition 27 (*Notices*) specifying:

(a) in the case of a new issue of Notes at a specified subscription price:

(i) the Record Date;

(ii) the date by which Holders must reply to the notice and pay subscription monies (if any) (the "**Rights Settlement Date**");

(iii) the amount payable by the Holder of each Note to take up the rights relating to each Note;

(iv) the amount of any fees or charges payable by the Holder of each Note in connection with the issue of the new Notes; and

(v) the account of the Issuer with the Relevant Clearing System to be credited with the amount payable by the Holders;

(b) in the case of a free distribution of Notes the Record Date and the number of new Notes to which the Holder of a Note is entitled;

(c) in the case of a cash distribution the Record Date and the amount payable to the Holder of each Note;

(d) in the case of an adjustment to the terms of the Notes (including the Number of Underlying Shares per Note) and all other cases which the Calculation Agent in its discretion considers appropriate, the Record Date and details of the adjustment; or

(e) any combination of the above.

Notes and/or cash will be made available for distribution to eligible Holders as soon as is practicable and the Relevant Programme Agent shall notify Holders in accordance with General Condition 27 (*Notices*) when such Notes and/or cash are so available. Payments of cash amounts will be made in accordance with Participation Provision 3 (*Payments and other Conditions*) and in the case of a new issue of Notes under (a) above, no Holder will be entitled to receive any additional Notes unless and until the Relevant Programme Agent shall have received a notice that the Holder wishes to purchase such Notes and payment of the subscription monies on or prior to the Rights Settlement Date.

2.5 **Coupon Amounts**

Each Coupon Amount is payable on the Coupon Payment Date following the immediately preceding Coupon Period.

2.6 **Subdivisions and Consolidations**

If and whenever an Underlying Company shall subdivide its outstanding share capital into a greater number of shares or consolidate its outstanding share capital into a smaller number of shares, the Calculation Agent will adjust the Number of Underlying Shares per Note which shall be decreased (in the case of a consolidation) or increased (in the case of a subdivision) accordingly.

2.7 **Merger**

If it is announced that an Underlying Company is to, or may, merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of or controlled by any person or corporation) (except where such Underlying Company is the surviving corporation in a merger) or that it is to, or may, sell or transfer all or substantially all of its assets, the rights attaching to a Note may be amended to reflect such merger or consolidation no later than the Business Day preceding the consummation of any such merger, consolidation, sale or transfer (as determined by the Calculation Agent, in its absolute discretion).

2.8 **Change in Law**

If:

(a) there is any change in, or amendment to, the laws and regulations of the Relevant Country or any political subdivision or any authority thereof or therein having power to tax;

(b) there is any change in, or amendment to, any treaty to which the Relevant Country is a party;

(c) there is any change in the application or official interpretation of such laws, regulations or treaties; or

(d) the Calculation Agent in its absolute discretion makes a determination that any other circumstance exists which would or could reduce the Redemption Value or Coupon Amount receivable by a Relevant Investor on repatriation of such amounts from the Relevant Country,

which change or amendment becomes effective or is applied or interpreted, or which determination is made, as the case may be, on or after the Issue Date, the Calculation Agent shall, in its absolute discretion, determine the amount of any additional deduction or withholding from the Redemption Value or Coupon Amount that is required or, in the absolute determination of the Calculation Agent, ought to be made in such circumstances and shall notify the Issuer, the relevant Guarantor (in relation to Notes issued by JPMCFC or JPMSP) and the Relevant Programme Agent of such amount. The Relevant Programme Agent shall thereupon immediately notify Holders in accordance with General Condition 27 (*Notices*).

3. **Payments and other Conditions**

3.1 **Method of Payment**

Payments in respect of the Redemption Value, any Coupon Amount will be made (a) in the case of Registered Notes, to, or to the order of, the relevant Holder appearing on the Register on the relevant Record Date and, (b) in the case of Bearer Notes in the case of all payments other than the Coupon Amount against presentation and surrender (or, in the case of partial payment, endorsement) of the relevant Notes at the specified office of the relevant Paying Agent, by a cheque denominated in the Specified Currency of the Notes drawn on, or by transfer to an account denominated in the Specified Currency of the Notes, maintained by the payee with a bank in the principal financial centre of the Specified Currency of the Notes, as may be specified by the Holder (and, in the case of Registered Notes and in the absence of such specification, by such a cheque posted to the Holder at the address shown in the Register at the risk of the Holder).

3.2 **Payments subject to fiscal laws**

All payments are subject in all cases to any applicable fiscal or other laws and regulations, but without prejudice to the provisions of General Condition 18 (*Taxation and Early Redemption or Termination for Taxation*). Subject to the General Conditions, these Participation Provisions, each as may be amended

by the relevant Pricing Supplement in respect of the Notes, no commissions or expense shall be charged to the Holders in respect of payments.

4. **Definitions**

For the purposes of these Participation Provisions, the following words and expressions shall have the following meanings in relation to Notes to which these Participation Provisions apply:

"**Adjustment Event**" means any one or more of the events referred to in Participation Provision 2.1 (*Adjustment Event*).

"**Authority**" means any governmental authority or any state or agency of a state (in each case whether or not having a separate legal personality).

"**Average Selling Price**" means, in relation to each Note, an amount certified by the Calculation Agent as being equal to the weighted average of the prices at which a Relevant Investor could have sold the Underlying Shares on the Relevant Exchange during an applicable Valuation Period.

"**Business Day**" means a day, other than a Saturday or Sunday, on which banks are open for business in (i) London, (ii) the principal financial centre of the country of the Specified Currency and (iii) the principal centre of the Relevant Country for the type of business contemplated herein.

"**Calculation Agent**" means J.P. Morgan Securities plc.

"**Cash Dividend**" means any ordinary or special dividend paid in cash on an Underlying Share (excluding, for the avoidance of doubt, stock dividends or the cash value of any dividend declared on an Underlying Share in shares of the Underlying Company or in any assets other than cash) in relation to which the ex-dividend date has occurred and payment has been made to the holder of the Underlying Share during the relevant Coupon Period.

"**Closing Price**" means the closing price of an Underlying Share as quoted on the daily quotations list (or equivalent) of a Relevant Exchange as recorded by the Calculation Agent. If the closing price of an Underlying Share is not shown on the daily quotations list (or equivalent) of any Relevant Exchange on the date on which such price is required then, notwithstanding any provision of the Conditions, the Closing Price for an Underlying Share shall be the fair market value of an Underlying Share as determined by the Calculation Agent in its sole discretion.

"**Conditions**" means the General Conditions and these Participation Provisions, each as may be amended by the relevant Pricing Supplement in respect of the Notes.

"**Coupon Amount**" means Cash Dividends less (i) any Taxation and (ii) any Handling Charge multiplied by the Number of Underlying Shares per Note and converted into the Specified Currency of the Notes at the Coupon Exchange Rate.

"**Coupon Exchange Rate**" means the rate specified as such in the relevant Pricing Supplement plus the Exchange Rate on the tenth Business Day after the later of (i) the last day of the applicable Coupon Period or (ii) the day when a Relevant Investor would have received actual payment in United States dollars of the applicable Cash Dividend.

"**Coupon Payment Date**" shall have the meaning given in the relevant Pricing Supplement.

"**Coupon Period**" in relation to a Note, means the period specified as such in the relevant Pricing Supplement, provided that (a) in the case of physical Underlying Shares the first Coupon Period will commence on the first day of the Suspension Period and (b) in the case of dematerialised Underlying Shares the first Coupon Period will commence on the settlement date for delivery of shares in connection with the Issuer's underlying hedging arrangements and in each case the last day of the final Coupon Period will be the earlier of, the Redemption Date, the Early Redemption Date or the Default Redemption Date.

"**Default Redemption Date**" means the first Exchange Business Day after the date upon which notice is received by the Relevant Programme Agent pursuant to General Condition 15 (*Events of Default*).

"**Early Redemption Date**" means (i) any Business Day announced by the Issuer as a date for redemption of the Notes in accordance with Participation Provision 1.2 (*Redemption for Regulatory or Taxation Reasons*) or 1.3 (*Redemption at the option of the Issuer*) or (ii) the first Exchange Business Day after a valid Redemption Notice is received by the Relevant Programme Agent provided that such Redemption Notice is received prior to 4:00 p.m. (London time) or, if received after such time, the following Exchange Business Day.

"**Exchange Business Day**" means a day that is (i) a Business Day, (ii) a trading day on any Relevant Exchange and on any relevant options or futures exchange other than a day on which trading on any Relevant Exchange or any relevant futures or options exchange is scheduled to close prior to its regular weekday closing time and (iii) a day on which no Market Disruption Event has occurred or is continuing.

"**Exchange Rate**" means the rate given as such in the relevant Pricing Supplement or, if no such exchange rate is specified, the exchange rate as determined by the Calculation Agent by reference to such sources as it may in its absolute discretion select.

"**Handling Charge**" has the meaning given in the relevant Pricing Supplement.

"**Investment Regulations**" has the meaning given in the relevant Pricing Supplement and as amended and/or replaced from time to time.

"**Market Disruption Event**" means, as determined by the Calculation Agent, the occurrence or existence of (i) any suspension of, or material limitation on, trading in the Underlying Shares on any Relevant Exchange, or (ii) any suspension of, or material limitation on, trading in stocks generally on any Relevant Exchange, or (iii) a material restriction on the sale and purchase of the Underlying Shares, or (iv) any suspension of, or material limitation imposed on, trading of options or futures relating to the Underlying Shares or options or futures relating to securities generally on any Relevant Exchange on any options or futures exchange on which options or futures relating to the Underlying Shares are traded, or (v) any suspension of or limitation on execution of sales on any Relevant Exchange or elsewhere by reason of illiquidity in any market for the Underlying Shares, or (vi) any prevailing market conditions which prevent Relevant Investors from being able to buy or sell Underlying Shares on any Relevant Exchange, (vii) any failure by local entities in the Relevant Country involved in the process of transfer and/or registration of the Underlying Shares, including, without limitation, custodians, registrars and clearing houses to perform their duties in a timely manner or (viii) any prevailing market conditions which in the determination of the Calculation Agent are such as should constitute a Market Disruption Event.

For the purpose of this definition:

(i) a limitation on the hours and number of days of trading if it results from an announced change in the regular business hours of any Relevant Exchange shall not constitute a Market Disruption Event; and

(ii) a limitation on trading imposed during the course of a day by reason of movements in price exceeding levels permitted by any Relevant Exchange shall constitute a Market Disruption Event.

All determinations by the Calculation Agent as to whether a Market Disruption Event has occurred will be conclusive and binding on the Holders save in the case of manifest error.

"**Minimum Redemption Number**" has the meaning given in the relevant Pricing Supplement.

"**Number of Underlying Shares per Note**" means one Underlying Share per Note (subject to adjustment in accordance with Participation Provision 2 (*Events Relating to the Underlying Shares*)).

"**Record Date**" has the meaning given in Participation Provision 2.3 (*Fixing of Record Date*).

"**Redemption Charge**" has the meaning given in the relevant Pricing Supplement, together with any other levies, fees, commissions, custodial fees, registrations or other charges or costs whatsoever which may be incurred by the Issuer and/or the Hedging Entity as a result of, or in connection with, the holding of and/or selling of and/or realising the Underlying Shares as may be imposed from time to time, such amounts as calculated by the Calculation Agent in its sole and absolute discretion.

"**Redemption Date**" has the meaning given in the relevant Pricing Supplement.

"**Redemption Exchange Rate**" means the Exchange Rate on the first Business Day immediately following the last day of the Valuation Period when a Relevant Investor is able to convert into the Specified Currency of the Notes the proceeds of Underlying Shares sold during the Valuation Period (the "**Redemption Exchange Rate Date**") plus any amount of the relevant currency specified in the relevant Pricing Supplement.

"**Redemption Notice**" means a notice, substantially in the form set out in Schedule 10, Part B to the Agency Agreement and available upon request at the specified office of any Paying Agent, from a Holder to the Issuer exercising its option to redeem Notes in accordance with Participation Provision 1.5 (*Redemption at the option of a Holder*).

"**Redemption Payment Date**" means, in relation to a Note, the date falling not later than five Business Days after the Redemption Exchange Rate Date.

"**Redemption Value**" means, in respect of a Note and subject to Participation Provision 2 (*Events Relating to the Underlying Shares*), 100 per cent. less any Redemption Charge (expressed as a percentage), multiplied by the Average Selling Price of the Underlying Shares during the Valuation Period less any Taxation plus any Coupon Amount multiplied by the Number of Underlying Shares per Note and converted into the Specified Currency of the Notes at the Redemption Exchange Rate provided that if redemption follows the occurrence of an event of default specified in General Condition 15 (*Events of Default*), the Redemption Value will be calculated by reference to the Closing Price of an Underlying Share on the Default Redemption Date.

"**Register**" has the meaning provided in Clause 1.1 (Definitions) of the Agency Agreement.

"**Relevant Country**" has the meaning given in the relevant Pricing Supplement.

"**Relevant Country Authority**" means the Authority of the Relevant Country.

"**Relevant Exchange**" means the Exchange, as defined in the relevant Pricing Supplement or any other successor exchange as selected by the Issuer in its absolute discretion.

"**Relevant Investor**" means, a qualified foreign or non-resident institutional investor as such terms or concepts may be defined (i) under the Investment Regulations or, if such terms or concepts are not defined in the Investment Regulations, (ii) by the Issuer.

"**Rights Settlement Date**" has the meaning given in Participation Provision 2.4 (*Notice of Adjustment Event*).

"**Settlement Date**" has the meaning given in the relevant Pricing Supplement.

"**Specified Currency**" has the meaning given in the relevant Pricing Supplement.

"**Suspension Period**" has the meaning given in Participation Provision 1.6 (*Suspension Periods*).

"**Taxation**" means the aggregate of:

(i) all withholding taxes, capital gains taxes and other duties and taxes whatsoever in effect which the Calculation Agent certifies as would be payable in the Relevant Country by or on behalf of a Relevant Investor had such investor owned an Underlying Share from the Trade Date and sold such Underlying Share on any day during the relevant Valuation Period; and

(ii) all stamp duties or increases introduced in the rates of stamp duties in the Relevant Country in effect on or after the Trade Date.

"**Term**" means, in relation to a Note, the period commencing on the Settlement Date and ending on the earlier of the Redemption Date, the Default Redemption Date or the Early Redemption Date.

"**Trade Date**" has the meaning given in the relevant Pricing Supplement.

"**Underlying Company**" has the meaning given in the relevant Pricing Supplement.

"**Underlying Settlement Period**" means the number of days, from (and including) the Trade Date, required for a Relevant Investor to settle the purchase of the Underlying Shares in the Relevant Exchange.

"**Underlying Shares**" has the meaning given in the relevant Pricing Supplement.

"**Valuation Period**" in relation to a Note means (i) a period commencing on (and including) the first Exchange Business Day immediately following the earlier of the Redemption Date or the Early Redemption Date and ending on (and including) the Exchange Business Day immediately following the date on which a Relevant Investor would have completed the sale of the required number of Underlying Shares or (ii) a period commencing on and ending on the Default Redemption Date in each case excluding, for the avoidance of doubt, any day on which a Market Disruption Event has occurred or is continuing.

ANNEX 6 - LOW EXERCISE PRICE WARRANT PROVISIONS

(for the purpose of this Annex 6, the "**LEPW Provisions**")

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The terms and conditions set out in this Annex 6 apply to Warrants for which the relevant Pricing Supplement specifies that the LEPW Provisions shall apply.

1. **Settlement Amount**

The Issuer shall, for each Warrant being exercised or deemed exercised, on the Settlement Date transfer or procure the transfer of the Settlement Amount to the Holder. Unless otherwise specified in the relevant Pricing Supplement, the Settlement Amount is an amount in the Specified Currency determined by the Calculation Agent in accordance with the following formula:

$$\text{Max}\left\{0; \left[\left(0.99 \times \frac{\text{Final Price}}{\text{FX Rate}}\right) - \text{Strike Price}\right]\right\}$$

Where "Max", "Final Price", "FX Rate" and "Strike Price" have the meanings set out in LEPW Provision 7 (*Definitions*) below.

2. **Dividend Amounts**

In respect of each Dividend Payment Date, the Issuer shall pay to the Holder of each Warrant as of the Record Date the Dividend Amount corresponding to such Dividend Payment Date.

3. **Consequences of Potential Adjustment Events**

3.1 If the Calculation Agent determines that a Potential Adjustment Event (as defined in Share Linked Provision 10 (*Definitions*)) has occurred in respect of a Share, the Calculation Agent will determine whether such Potential Adjustment Event has a diluting or concentrative effect on the theoretical value of the relevant Shares and, if so, the Calculation Agent may:

(a) (i) make adjustment(s), if any, to one or more of any variable relevant to the exercise, settlement, payment or other terms of the Warrants as the Calculation Agent determines appropriate to account for that diluting or concentrative effect (provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Share) and (ii) determine the effective date(s) of the adjustment(s); and/or

(b) determine, subject to the agreement of the Issuer, to (i) distribute to Holders additional Warrants; and/or (ii) allow Holders to purchase additional Warrants; and/or (iii) distribute a cash amount to Holders, in each case, on such terms as the Calculation Agent determines appropriate to account for that diluting or concentrative effect.

3.2 Upon making any such adjustment, the Calculation Agent shall give notice as soon as practicable to the Holders stating:

(a) in respect of a determination pursuant to LEPW Provision 3.1(a)(i), the adjustment to any amount payable under the Warrants and/or any of the other relevant terms;

(b) in respect of a determination pursuant to LEPW Provision 3.1(b)(i), the Record Date and the number of new Warrants to which the Holder is entitled;

(c) in respect of a determination pursuant to LEPW Provision 3.1(b)(ii):

(i) the Record Date;

(ii) the date on or prior to which subscription monies must be paid to the Issuer to take up the rights relating to each Warrant ("**Rights Settlement Date**");

(iii) the amount payable (if any) by the Holder of each Warrant to take up the rights relating to each Warrant;

(iv) the amount of any fees or charges payable by the Holder of each Warrant in connection with the issue of the additional Warrants; and

(v) the account of the Issuer with the Relevant Clearing System(s) to be credited with the amount payable by the Holders; and

(d) in respect of a determination pursuant to LEPW Provision 3.1(b)(iii), the Record Date and the amount payable to the Holder of a Warrant,

provided that any failure to give such notice shall not affect the validity of the Potential Adjustment Event or any action taken.

3.3 In the case of a new issue of Warrants referred to in LEPW Provision 3.1(b)(ii), no Holder will be entitled to receive any additional Warrants unless the Relevant Programme Agent has received notice (in a form prescribed by and that may be obtained from the Issuer) that the Holder wishes to purchase such Warrants and the Issuer has received payment of the subscription monies on or prior to the Rights Settlement Date.

4. **Extraordinary Events, Additional Disruption Events and Termination Events**

4.1 Share Linked Provision 5 (*Consequences of Extraordinary Events for a Share other than a Share that is a share of an Exchange Traded Fund*), as amended pursuant to LEPW Provision 5 (*Early Payment Amount*), shall apply to Warrants for which the relevant Pricing Supplement specifies that the LEPW Provisions shall apply.

4.2 Share Linked Provision 6 (*Consequences of Additional Disruption Events*), as amended pursuant to LEPW Provision 5 (*Early Payment Amount*), shall apply to Warrants for which the relevant Pricing Supplement specifies that the LEPW Provisions shall apply. Notwithstanding Share Linked Provision 10 (*Definitions*), the terms "Additional Disruption Events", "Change in Law" and "Hedging Disruption" shall have the meanings below:

"**Additional Disruption Events**" means (a) a Change in Law, (b) a Hedging Disruption, (c) an Insolvency Filing, (d) an Increased Cost of Hedging and (e) in respect of Warrants for which the relevant Pricing Supplement specifies that the QFII Events are applicable, (i) a QFII Status Disruption and (ii) a QFII Disruption (each, an "**Additional Disruption Event**").

"**Change in Law**" means that, on or after the Trade Date, one or more of the following events occurs:

(a) the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority); or

(b) any change in, or amendment to, the laws and regulations of a relevant country or any political subdivision or any authority including any authority having power to tax;

(c) any change in, or amendment to, any treaty;

(d) any change in the application or official interpretation of such laws, regulations or treaties, as determined by the Calculation Agent;

and the Calculation Agent determines that such event has a material effect on the Warrants (which shall include, without limitation, the relevant event (x) making it illegal for any of the Issuer and/or the Guarantor and/or any of their respective affiliates to hold, acquire or dispose of Shares or any Hedge Positions, or (y) resulting in a Hedging Entity incurring a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position)).

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) (including, without limitation, stock loans and other transactions that can be used to create a long or short exposure to the Shares) that hedge, in a commercially reasonably manner, based on prevailing circumstances applicable to the Hedging Entity, the price risk (or any other relevant price risk or dividend risk) of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Warrants, or (b) freely realise, recover, receive, repatriate, remit or transfer the proceeds of any Hedge Positions

between accounts within the jurisdiction of the Hedge Positions (the "**Affected Jurisdiction**") or from accounts within the Affected Jurisdiction to accounts outside the Affected Jurisdiction.

"**Increased Cost of Hedging**" means that a Hedging Entity would incur a materially increased (as compared with circumstances at the Trade Date) amount of tax, duty, expense or fee (other than brokerage commissions) to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) (including, without limitation, stock loans and other transactions that can be used to create a long or short exposure to the Shares) that hedge, in a commercially reasonably manner, based on prevailing circumstances applicable to the Hedging Entity, the price risk (or any other relevant price risk or dividend risk) of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Warrants, or (b) freely realise, recover, receive, repatriate, remit or transfer the proceeds of any Hedge Positions between accounts within the jurisdiction of the Hedge Positions (the "**Affected Jurisdiction**") or from accounts within the Affected Jurisdiction to accounts outside the Affected Jurisdiction, provided that any such materially increased amount that is incurred solely due to the deterioration of the creditworthiness of the Hedging Entity shall not be deemed an Increased Cost of Hedging.

"**QFII**" means, for the purpose of the definition of QFII Status Disruption and QFII Disruption, each as set out immediately below, an entity outside the People's Republic of China which meets the requirements of the Measures and is approved by the China Securities Regulatory Commission to invest in Chinese securities markets and has obtained the quota from the State Administration of Foreign Exchange, where "Measures" means the provisional measures regarding the regulation of a QFII's investment in domestic securities.

"**QFII Disruption**" means, that, on or after the Trade Date due to any action (an "**Action**") taken by any court, tribunal or regulator authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority) against any QFII in respect of its duties and obligations as a QFII, the Calculation Agent is of the opinion that there has been a material increase in regulatory risk in connection with maintaining, entering into or unwinding any Applicable Hedge Positions. For the avoidance of doubt, in determining whether a QFII Disruption has occurred, the Calculation Agent may take into consideration the responses of other QFII in relation to such Action.

"**QFII Status Disruption**" means, that, on or after the Trade Date (i)(A) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law) or (B) due to the promulgation of or any change in the interpretation by any court, tribunal or regulator authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that there has been (or it expects that there will be) a material change in the scheme for investment in domestic securities in the People's Republic of China by a QFII, or (ii) the approval of the Hedging Entity as a QFII under such scheme is (A) withdrawn, revoked or suspended for any reason whatsoever, or (B) modified in a material manner as determined by the Calculation Agent.

5. **Early Payment Amount**

General Condition 18.4 (*Early Redemption or Termination for Taxation – Additional Amounts/Underlying Hedge Transactions*), General Condition 15.2 (*Consequences of an Event of Default*), General Condition 2.3 (*Compulsory Transfer or Redemption*), General Condition 16 (*Early Redemption or Termination for Illegality*), General Condition 18.3 (*Early Redemption or Termination for Taxation – FATCA*). Share Linked Provision 5 (*Consequences of Extraordinary Events for a Share other than a Share that is a share of an Exchange Traded Fund*), Share Linked Provision 6 (*Consequences of Additional Disruption Events*), shall be amended as follows:

(a) "**Early Payment Amount**" shall mean, notwithstanding the definition of "Early Payment Amount" in General Condition 32.1 (*Definitions*), an amount determined by the Calculation Agent on the first Business Day after the Early Payment Disposal Period, representing the fair value of the Warrants, taking into consideration such matters and information that the Calculation Agent considers relevant, which information shall include (without limitation) the volume weighted average price per Share equal to the price that would be realised by a Hypothetical Broker Dealer (if any), less any expenses and Taxation, acting in a commercially

reasonable manner, in terminating or liquidating Applicable Hedge Positions (corresponding to the number of outstanding Warrants) during the Early Payment Disposal Period; and

(b) notice pursuant to the relevant Condition shall:

(i) be deemed to have been given if that notice is given of not less than the number of days required (if any) pursuant to the Condition; and

(ii) end on the second Business Day following the expiry of the applicable Early Payment Disposal Period; and

(c) the Early Payment Amount shall be payable on the tenth Business Day following the expiry of the applicable Early Payment Disposal Period ("**Early Payment Date**") and the Issuer shall give Holders notice of the Early Payment Date at least five Business Days before the Early Payment Date; and

(d) for the purposes of this LEPW Provision 5:

(i) "**Early Payment Disposal Period**" means the period from (and including) the Initial Notice Day to (and including) the day (as determined by the Calculation Agent) on which a Hypothetical Broker Dealer acting in a commercially reasonable manner could execute the last purchase or sale transaction, as the case may be, that would be necessary to fully unwind the Applicable Hedge Positions, provided that such day shall not fall later than the 365th calendar day following the Initial Notice Day; and

(ii) "**Initial Notice Day**" means the first day on which notice is actually given pursuant to the relevant Condition without regard to any notice period.

6. **FX Inconvertibility Event**

6.1 If an FX Inconvertibility Event has occurred and the Calculation Agent determines that such FX Inconvertibility Event has a material effect on the Warrants and the determination of an amount payable on a Dividend Payment Date, Settlement Date or any other relevant date, subject to LEPW Provision 6.3, the Dividend Payment Date, Settlement Date or other date shall be postponed to a date falling 14 calendar days (or such other date as may be determined by the Calculation Agent and notified to Holders) after the date on which the FX Inconvertibility Event is no longer occurring (such adjusted date, the "**Relevant Payment Date (LEPW)**"). No interest shall be paid by the Issuer in respect of any delay which may occur in the payment of any amounts due and payable under the Warrants as a result of the operation of this LEPW Provision 6.

6.2 Notwithstanding LEPW Provision 6.1, the Issuer may, in its sole discretion, elect to:

(a) satisfy in part any amount that may be due on the Relevant Payment Date (LEPW) by making a partial payment of any such amount before the Relevant Payment Date (LEPW) to Holders; and

(b) make such adjustments (if any) to one or more of any variable relevant to the exercise, settlement, payment or other terms of the Warrants as the Calculation Agent determines appropriate in connection with the partial payment.

6.3 If the FX Inconvertibility Event is still occurring on the date which is 365 calendar days after the originally scheduled Dividend Payment Date, Settlement Date or other date on which an amount is due in respect of the Warrants (the "**FX Event Cut-off Date**"), then:

(a) the Relevant Payment Date (LEPW) shall fall on the first Business Day after FX Event Cut-off Date; and

(b) the Calculation Agent shall determine the amount payable under each Warrant on the Relevant Payment Date (LEPW) taking into consideration such matters and information that the Calculation Agent considers relevant including (without limitation) the rates of exchange (if any) as the Calculation Agent determines would be realised by a Hypothetical Broker Dealer

converting the Currency of the Shares into the Specified Currency as at the FX Event Cut-off Date.

7. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which the Low Exercise Price Warrant Provisions apply:

"**Applicable Hedge Positions**" means, at any time, Hedge Positions that the Calculation Agent determines that a Hypothetical Broker Dealer, acting in a commercially reasonable manner, would consider necessary to hedge the price risk and dividend risk of the Issuer issuing and the Issuer performing its obligations with respect to the Warrants at that time.

"**Cash Dividend**" means any ordinary or extraordinary dividends that (a) are paid in cash by the Share Issuer to holders of record of a Share from (but excluding) the Trade Date to (and including) the first anniversary following the Settlement Date; and (b) have an Ex-Dividend Date that occurs from (but excluding) the Trade Date to (and including) the Expiration Date.

"**Currency of the Shares**" means the currency (a) in which any Cash Dividend would be paid by the Share Issuer, (b) in which the Shares trade on the Exchange, or (c) of any proceeds that the Calculation Agent determines a Hypothetical Broker Dealer holding the Shares would receive on disposition of the Shares, as the case may be.

"**Dividend Amount**" means, in respect of a Dividend Payment Date, an amount equal to 100 per cent. of the relevant Cash Dividend per Share less any Taxation and Expenses, such amount converted (if necessary) into the Specified Currency at the Dividend Exchange Rate.

"**Dividend Exchange Rate**" means the rate determined by the Calculation Agent for converting the currency of the Cash Dividend into the Specified Currency on the Dividend Distribution Date by reference to such sources as the Calculation Agent may, in its discretion, select.

"**Dividend Distribution Date**" means each date that the Share Issuer pays a Cash Dividend to holders of record of the Share, as determined by the Calculation Agent.

"**Dividend Payment Date**" means, in respect of each Dividend Distribution Date, such day as determined by the Calculation Agent, provided that such day shall fall no later than the tenth Business Day after the Dividend Distribution Date.

"**Ex-Dividend Date**" means, in respect of a dividend, the date that the relevant Share commences trading ex-dividend on the Exchange in respect of the dividend as determined by the Calculation Agent.

"**Exchange**" means, in respect of a Share, each exchange or quotation system specified as such in the relevant Pricing Supplement for such Share, any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in such Share has temporarily relocated (provided that the Calculation Agent has determined that there is comparable liquidity relative to such Share on such temporary substitute exchange or quotation system as on the original Exchange).

"**Execution Period**" means the period from (and including) the Expiration Date to (and including) the Final Execution Date.

"**Expenses**" means all expenses, costs, charges, levies, tax, duties, withholding, deductions or other payments including without limitation, all depository, custodial, registration, transaction and exercise charges and stamp, issues, registration or, securities transfer or other similar taxes or duties, as determined by the Calculation Agent, that would be incurred per Share by or on behalf of (i) a Hypothetical Broker Dealer or a Hedging Entity that is a holder of record of a Share in connection with the payment of a Cash Dividend on such Share; or (ii) a Hypothetical Broker Dealer or Hedging Entity terminating or liquidating Applicable Hedge Positions or Hedge Positions (as applicable) during the Execution Period, as applicable.

"**Final Price**" means the weighted average price per Share determined by the Calculation Agent by reference to (i) the price that would be realised by a Hypothetical Broker Dealer, less any Expenses and Taxation, acting in a commercially reasonable manner, in terminating or liquidating its holding of Shares

(corresponding to the number of outstanding Warrants of the relevant Series) during the Execution Period, and (ii) such other matters and information (if any) that the Calculation Agent, in its sole discretion, considers relevant.

"**Final Execution Date**" means the day (as determined by the Calculation Agent) on which a Hypothetical Broker Dealer acting in a commercially reasonable manner could execute the last purchase or sale transaction, as the case may be, that would be necessary to fully unwind the Applicable Hedge Positions, such determination to be made by the Calculation Agent, provided that such day shall fall no later than the 365th calendar day following the Expiration Date.

"**FX Inconvertibility Event**" means any event which affects or may affect at any relevant later time the convertibility of the Currency of the Shares into the Specified Currency, as determined by the Calculation Agent.

"**FX Rate**" means the weighted average rate, determined by the Calculation Agent, for converting the currency of the Shares into the Specified Currency expressed as a number of units (or fractional amounts thereof) of the currency in which the Shares are denominated for one unit of the Specified Currency, taking into consideration all available information that the Calculation Agent considers relevant, which information shall include such sources selected by the Calculation Agent and/or rates of exchange as the Calculation Agent determines would be realised by a Hypothetical Broker Dealer converting into the Specified Currency amounts received in connection with a hypothetical disposition of Applicable Hedge Positions during the Execution Period at the time of receipt of such amounts.

"**Hypothetical Broker Dealer**" means a hypothetical broker dealer subject to the same securities laws and rules and regulations of any securities regulators, exchanges and self-regulating organisations as applying to the Hedging Entity.

"**Hedge Positions**" means any purchase, sale, entry into or maintenance of one or more (i) positions or contracts in securities, options, futures, derivatives or foreign exchange, (ii) stock loan transactions or (iii) other instruments or arrangements (howsoever described) by a Hedging Entity or a Hypothetical Broker Dealer (as applicable) in order to hedge, individually or on a portfolio basis, the Issuer issuing, and the Issuer performing its obligations with respect to, the Warrants.

"**Max**" followed by a series of amounts inside brackets, means whichever is the greater of the amounts separated by a semi-colon inside those brackets.

"**Record Date**" means such date, as determined and fixed by the Calculation Agent in its sole and absolute discretion, in relation to any payment or distribution of assets under the Warrants or the determination of the rights of any Holder under the Warrants, utilised to determine those Holders who shall be entitled in respect of such payment, distribution or rights, as applicable.

"**Rights Settlement Date**" has the meaning given in LEPW Provision 3.2(c)(ii).

"**Settlement Amount**" has the meaning given in LEPW Provision 1 (*Settlement Amount*).

"**Settlement Date**" means, unless otherwise specified in the relevant Pricing Supplement, in respect of each Warrant, the fifth Business Day following the Final Execution Date.

"**Share**" means, subject to adjustment in accordance with these LEPW Provisions, the share or shares specified as such in the relevant Pricing Supplement and related expressions shall be construed accordingly.

"**Share Issuer**" means, in respect of a Share, the issuer of such Share.

"**Strike Price**" means, unless otherwise specified in the relevant Pricing Supplement, an amount equal to 0.0001 of the Specified Currency.

"**Taxation**" means the aggregate of all withholding taxes, capital gains taxes and other duties and taxes whatsoever in effect which, in the sole and absolute determination of the Calculation Agent, would be payable per Share by or on behalf of (i) a Hypothetical Broker Dealer or a Hedging Entity that is a holder of record of a Share in connection with the payment of a Cash Dividend on such Share; or (ii) a

Hypothetical Broker Dealer or Hedging Entity terminating or liquidating Applicable Hedge Positions or Hedge Positions (as applicable) during the Execution Period, as applicable.

"**Trade Date**" means the date specified as such in the relevant Pricing Supplement.

Capitalised terms in these LEPW Provisions that are not defined have the respective meaning given in the General Conditions and/or the Share Linked Provisions.

8. **Additional Terms and Conditions of Saudi Arabian LEPWs**

If the Warrant is a Saudi Arabia LEPW, then the following terms shall apply:

(a) In the event that the Issuer receives an instruction by the CMA under the CMA Rules in relation to it or its affiliates in respect of the Warrants, including any quantitative or qualitative restriction or requirement (including termination or other requirement) imposed on any Hedge Positions in relation to the Warrants, the Issuer may, at its option, take any action in relation to the Warrants it deems appropriate to account for such event, including (without limitation) to:

(i) make any adjustment to the exercise, settlement, payment or any other terms of the Warrants; and/or

(ii) determine and give notice to Holders that the Warrants shall be terminated on a date determined by the Issuer, in which event the Issuer shall terminate the Warrants and cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as may be adjusted pursuant to paragraph (i) above).

(b) Only if the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Investor Agreement Letter " is applicable, in the event that the Calculation Agent determines that (x) a Holder is in breach of any of the agreements made in the Saudi Arabia LEPW Investor Agreement Letter; or (y) any of the representations or warranties made by the Holder in the Saudi Arabia LEPW Investor Agreement Letter are not or are no longer true and accurate, the Issuer may determine and give notice to Holders that the Warrants shall be terminated on a date determined by the Issuer, in which event the Issuer shall terminate the Warrants and cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount.

(c) To the extent that the Holder or any Third Party which is the Ultimate Beneficiary (as applicable) in relation to Relevant Shares, from time to time, receives or recovers any amounts from or out of the sale or appropriation of, or from or out of a claim against, or otherwise out of, any Relevant Shares and/or any assets or monies derived from or referable to any Relevant Shares, a corresponding quantity of the Holder's claims against the Issuer in respect of the Warrants shall be extinguished by adjusting the terms of the Settlement Amount in respect of such Warrants to reduce the amount otherwise payable. Any such adjustment to the terms of such Warrants shall be determined and made by the Calculation Agent.

(d) For the purposes of this LEPW Provision 8, the following terms shall have the following meanings:

(i) "**CMA**" means the Capital Market Authority of the Kingdom of Saudi Arabia or any successor entity thereof;

(ii) "**CMA Circular**" means the resolutions of the Board of Commissioners of the CMA dated 11/10/1436H corresponding to 27/7/2015G as restated in the CMA's circular dated 19 December 2016 regarding the approval for Authorised Persons to enter into Swap Agreements, as may be amended from time to time;

(iii) "**CMA Rules**" means the resolutions, regulations and decisions of the CMA from time to time;

(iv) "**Saudi Arabia LEPW**" means a Warrant in respect of which the applicable Pricing Supplement specifies that the Saudi Arabia LEPW Provisions apply;

(v) "**Saudi Arabia LEPW Investor Agreement Letter**" means an approved investor letter of representations, warranties, consents, undertakings and indemnities for the benefit of the relevant Dealer, the relevant Issuer and (if applicable) the Guarantor (together with their respective affiliates and control persons) in respect of Saudi Arabia LEPWs, as determined by the Calculation Agent;

(vi) "**Third Party**" means a person or entity other than the Holder; and

(vii) "**Ultimate Beneficiary**" has the meaning given to such term in the CMA Circular.

ANNEX 7 - FUND LINKED PROVISIONS

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The terms and conditions set out in this Annex 7 apply to Securities for which the relevant Pricing Supplement specifies that the Fund Linked Provisions shall apply.

1. **Consequences of Disrupted Days**

1.1 **Single Fund and Reference Dates**

Where the Securities relate to a single Fund Share of a Fund, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then the Reference Date shall be the first succeeding Scheduled Trading Day that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day. In that case:

(a) the last consecutive Scheduled Trading Day shall be deemed to be the Reference Date, notwithstanding the fact that such day is a Disrupted Day; and

(b) the Calculation Agent shall determine its good faith estimate of the value for the Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (b) shall be deemed to be the Closing Fund Price in respect of the Reference Date.

1.2 **Single Fund and Averaging Reference Dates**

Where the Securities relate to a single Fund Share of a Fund, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then the Averaging Reference Date will be deemed not to be a relevant Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Dates then the sole Averaging Reference Date shall be the first succeeding Scheduled Trading Day following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following such final Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the sole Averaging Reference Date, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine its good faith estimate of the value for the Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Fund Price in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then the Averaging Reference Date shall be the first succeeding Scheduled Trading Day following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day (irrespective of whether that deferred Averaging Reference Date is already or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine its good faith estimate of the value for the Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii)

shall be deemed to be the Closing Fund Price in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then the Averaging Reference Date shall be the first succeeding Valid Date. If the first succeeding Valid Date has not occurred as of the Valuation Time on the last consecutive Scheduled Trading Day equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date, then:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(ii) the Calculation Agent shall determine its good faith estimate of the value for the Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Fund Price in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then, it shall be deemed that the consequence specified in "Modified Postponement" will apply.

1.3 **Fund Basket and Reference Dates**

Where the Securities relate to a basket of Fund Shares of one or more Funds, and if the Calculation Agent determines that any Reference Date is a Disrupted Day, then:

(a) the Reference Date for each Fund Share of each Fund which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Reference Date; and

(b) the Reference Date for each Fund Share of a Fund which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day that the Calculation Agent determines is not a Disrupted Day relating to that Fund Share, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Reference Date is a Disrupted Day relating to that Fund Share of such Fund. In that case:

(i) the last consecutive Scheduled Trading Day shall be deemed to be the Reference Date for such Fund Share of such Fund, notwithstanding the fact that such day is a Disrupted Day; and

(ii) the Calculation Agent shall determine its good faith estimate of the value for the Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (ii) shall be deemed to be the Closing Fund Price for such Fund Share of such Fund in respect of the Reference Date.

1.4 **Fund Basket and Averaging Reference Dates**

Where the Securities relate to a basket of Fund Shares of one or more Funds, and if the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, in the relevant Pricing Supplement the consequence specified is:

(a) "**Omission**", then:

(i) the Averaging Reference Date for each Fund Share of each Fund which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date;

(ii) the Averaging Reference Date for each Fund Share of a Fund which the Calculation Agent determines is affected by the occurrence of a Disrupted Day will be deemed not

to be an Averaging Reference Date, provided that, if through the operation of this provision there would be no Averaging Reference Date for such Fund Share of such Fund, then the sole Averaging Reference Date for each Fund Share of each Fund which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day following the final Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to that Fund Share of a Fund, unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date is a Disrupted Day relating to that Fund Share of that Fund. In that case:

(A) that last consecutive Scheduled Trading Day shall be deemed to be the sole Averaging Reference Date for such Fund Share of such Fund, notwithstanding the fact that such day is a Disrupted Day; and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the Closing Fund Price for such Fund Share of such Fund in respect of the sole Averaging Reference Date;

(b) "**Postponement**", then:

(i) the Averaging Reference Date for each Fund Share of each Fund which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Fund Share of a Fund which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Scheduled Trading Day following the Scheduled Averaging Reference Date that the Calculation Agent determines is not a Disrupted Day relating to such Fund Share of that Fund (irrespective of whether that deferred Averaging Reference Date is or is deemed to be another Averaging Reference Date), unless the Calculation Agent determines that each of the consecutive Scheduled Trading Days equal in number to the Maximum Days of Disruption immediately following the Scheduled Averaging Reference Date is a Disrupted Day relating to such Fund Share of such Fund. In that case:

(A) the last consecutive Scheduled Trading Day shall be deemed to be such Averaging Reference Date for such Fund Share of such Fund (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the relevant Closing Fund Price for such Fund Share of such Fund in respect of the relevant Averaging Reference Date; or

(c) "**Modified Postponement**", then:

(i) the Averaging Reference Date for each Fund Share of each Fund which the Calculation Agent determines is not affected by the occurrence of a Disrupted Day shall be the Scheduled Averaging Reference Date; and

(ii) the Averaging Reference Date for each Fund Share of a Fund which the Calculation Agent determines is affected by the occurrence of a Disrupted Day shall be the first succeeding Valid Date relating to that Fund Share. If the first succeeding Valid Date has not occurred as of the relevant Valuation Time on the last consecutive Scheduled Trading

Day equal in number to the Maximum Days of Disruption immediately following the final Scheduled Averaging Reference Date:

(A) that last consecutive Scheduled Trading Day shall be deemed to be the Averaging Reference Date for such Fund Share of such Fund (irrespective of whether that last consecutive Scheduled Trading Day is already or is deemed to be another Averaging Reference Date or is a Disrupted Day); and

(B) the Calculation Agent shall determine its good faith estimate of the value for such Fund Share of such Fund as of the Valuation Time on that last consecutive Scheduled Trading Day, and such determination by the Calculation Agent pursuant to this paragraph (B) shall be deemed to be the Closing Fund Price for such Fund Share of such Fund in respect of the relevant Averaging Reference Date.

If the Calculation Agent determines that any Averaging Reference Date is a Disrupted Day and, if in the relevant Pricing Supplement no consequence is specified, then, it shall be deemed that the consequence specified in "Modified Postponement" will apply.

2. **Fallback Valuation Date**

Notwithstanding any other terms of the Fund Linked Provisions, if a Fallback Valuation Date is specified in the relevant Pricing Supplement to be applicable to any Reference Date or Averaging Reference Date (any such date being, a "**Relevant Date**"), and if:

(a) following adjustment of the original date on which such Relevant Date is scheduled to fall pursuant to either or both of Fund Linked Provision 1 (*Consequences of Disrupted Days*) or Fund Linked Provision 10 (*Definitions*), the Relevant Date in respect of a Fund Share of a Fund would otherwise fall after the Fallback Valuation Date in respect of such Fund Share of such Fund; or

(b) the Maximum Days of Disruption for the Relevant Date is specified to be "Zero" or "None",

then the Fallback Valuation Date for such Reference Date or Averaging Reference Date, as the case may be, shall be deemed to be the Relevant Date for such Fund Share of such Fund. If the Fallback Valuation Date is not a Scheduled Trading Day or is a Disrupted Day relating to such Fund Share of that Fund, as the case may be, then the Calculation Agent shall determine its good faith estimate of the value for such Fund Share of such Fund as of the relevant Valuation Time on such Fallback Valuation Date and such determination by the Calculation Agent pursuant to this Fund Linked Provision 2 shall be deemed to be the relevant Closing Fund Price for such Fund Share of such Fund in respect of the Relevant Date.

3. **Correction of Prices**

In the event that any price of a Fund Share of a Fund which is utilised for any calculation or determination in connection with the Securities is subsequently corrected and the correction is published by such Fund by the second Business Day prior to the next date on which any relevant payment or delivery may have to be made by the Issuer or in respect of which any relevant determination in respect of the Securities may have to be made, then the Calculation Agent may determine the amount that is payable or deliverable or make any determination in connection with the Securities after taking into account such correction, and, to the extent necessary, may adjust any relevant terms of the Securities to account for such correction (for the avoidance of doubt, in order to preserve as nearly as practicable the original economic objective and rationale of the Securities).

On making any such adjustment(s) or determination(s), the Calculation Agent shall give notice as soon as practicable to the Holders stating the relevant correction of prices and the subsequent adjustments, if any, to the relevant terms of the Securities, provided that any failure to give such notice shall not affect the validity of such determination or adjustment or any action taken by the Issuer or Calculation Agent in respect of the Securities.

4. **Consequences of Potential Adjustment Events**

If the Calculation Agent determines that a Potential Adjustment Event has occurred in respect of a Fund Share of a Fund, the Calculation Agent will determine whether such Potential Adjustment Event has a diluting or concentrative effect on such Fund Share, and if so, the Calculation Agent will:

(a) make the corresponding adjustment(s), if any, to one or more of any variables relevant to the exercise, settlement, payment or other terms of the Securities as the Calculation Agent determines appropriate to account for that diluting or concentrative effect in order to preserve as nearly as practicable the original economic objective and rationale of the Securities (provided that no adjustments will be made to account solely for changes in volatility, expected dividends or liquidity relative to the Fund Shares of such Fund, as applicable); and

(b) determine the effective date(s) of the adjustments.

The Calculation Agent shall give one or more notices as soon as practicable to the Holders upon the Calculation Agent (i) determining the occurrence of such Potential Adjustment Event including to give brief details of the Potential Adjustment Event, and (ii) making the relevant adjustments, specifying the relevant adjustments made to any amount payable under the Securities and/or any of the other relevant terms, provided that any failure to give such notice shall not affect the validity of the Potential Adjustment Event or any action taken by the Issuer or Calculation Agent in respect of the Securities.

5. **Consequences of Fund Events**

If a Fund Event has occurred in relation to a Fund Share of a Fund (in any such case, an "**Affected Fund**"), the following consequences shall apply and in the following order:

(a) First, the Calculation Agent may make such adjustments to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the effect on the Securities of such Fund Event in order to preserve as nearly as practicable the original economic objective and rationale of the Securities, and determine the effective date of such adjustments;

(b) Second, if the Calculation Agent determines that no adjustments to the terms of the Securities under Fund Linked Provision 5(a) will achieve a commercially reasonable result, and:

(i) if the relevant Pricing Supplement specifies a Pre-selected Replacement Fund, and:

(A) provided that, in relation to a Pre-selected Replacement Fund, as of the date of occurrence of the Fund Event and as at (or immediately prior to) the Fund Substitution Date, the Pre-selected Replacement Fund has not been liquidated, dissolved or otherwise discontinued and is not subject to a Disruption Event, then the Calculation Agent shall determine to replace the Affected Fund with such Pre-selected Replacement Fund (and, where the Securities relate to a basket of Fund Shares of one or more Funds, determine the weighting as applicable to such Pre-selected Replacement Fund), including to determine the relevant Fund Substitution Date; or

(B) if such Pre-selected Replacement Fund has been liquidated, dissolved or otherwise discontinued or is subject to a Disruption Event, and:

(1) if the relevant Pricing Supplement specifies "Cash Index" to be applicable, the Calculation Agent shall determine to replace the Affected Fund with the Cash Index, including to determine the relevant Cash Index Substitution Date; or

(2) if the relevant Pricing Supplement specifies "Cash Index" to be not applicable, the Calculation Agent shall select one or more Potential Replacement Underlying(s) to replace the Affected Fund, including to determine the Fund Substitution Date.

In selecting the Potential Replacement Underlying(s), the Calculation Agent shall take into consideration the following characteristics of the Potential Replacement Underlying(s) (and any others it considers relevant) in relation to the Affected Fund in order to most closely replicate the Affected Fund:

(aa) investment objectives;

(bb) currency;

(cc) economic sectors and geographical regions;

(dd) portfolio diversification; and

(ee) size; or

(ii) if no Pre-selected Replacement Fund is specified in the relevant Pricing Supplement, and:

(A) the relevant Pricing Supplement specifies "Cash Index" to be applicable, the Calculation Agent shall determine to replace the Affected Fund with the Cash Index, including to determine the relevant Cash Index Substitution Date; or

(B) the relevant Pricing Supplement specifies "Cash Index" to be not applicable, then Fund Linked Provision 5(b)(i)(B)(2) above shall apply.

Following any such determination and replacement pursuant this Fund Linked Provision 5, the Calculation Agent shall make such adjustment to any variable, calculation methodology, valuation, exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the effect on the Securities of such determination and replacement (including, for the avoidance of doubt, the manner in which the Securities shall be redeemed, any amount payable on redemption and/or whether any asset is to be delivered (and, if so, the amount thereof) on redemption) in order to preserve as nearly as practicable the original economic objective and rationale of the Securities.

(c) Third, if the Calculation Agent determines that no adjustments to the terms of the Securities under Fund Linked Provision 5(a) will achieve a commercially reasonable result and, further, it is unable to, or determines that it is not commercially practicable to, or does not for any other reason, select a Replacement Underlying(s) or a Cash Index, as the case may be, in accordance with Fund Linked Provision 5(b), it shall notify the Issuer and the Holders that the relevant consequence shall be the early redemption of the Securities by the Issuer on a date determined by the Calculation Agent, in which event the Securities shall be redeemed by the Issuer by payment to each Holder in respect of each Security of an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) and payment shall be made on such date selected by the Calculation Agent.

The Calculation Agent shall give one or more notices as soon as practicable to the Holders upon the Calculation Agent (i) determining the occurrence of such Fund Event including to give brief details of such Fund Event, and (ii) making the relevant adjustments, replacements or determinations, specifying the relevant adjustments made to any amount payable under the Securities, the relevant replacement and/or any of the other relevant terms, provided that any failure to give such notice shall not affect the validity of the Fund Event or any action taken by the Issuer or Calculation Agent in respect of the Securities.

6. **Consequences of Additional Disruption Events**

If an Additional Disruption Event has occurred, then the Calculation Agent may:

(a) make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for the effect on the Securities of such Additional Disruption Events in order to preserve as nearly as practicable the original economic objective and rationale of the Securities (including adjustments to account for changes in volatility, expected dividends or liquidity relevant to the Fund Shares of the relevant Fund or to the Securities, as applicable) and determine the effective date of the relevant adjustments. The Calculation Agent shall give one or more notices as soon as practicable to the Holders upon the Calculation Agent (i) determining the occurrence of such Additional Disruption Adjustment Event including to give brief details of such Additional Disruption Event, and (ii) making the relevant adjustments, specifying the relevant adjustments made to any amount payable under the Securities and/or any of the other relevant terms, provided that any failure to give such notice shall not affect the validity of the Additional Disruption Event or any action taken by the Issuer or Calculation Agent in respect of the Securities; or

(b) determine that no adjustments to the terms of the Securities would achieve a commercially reasonable result, on giving notice to the Issuer and the Holders that the Securities as soon as practicable, in which event the Securities shall be redeemed by the Issuer by payment to each Holder in respect of each Security of an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) and payment shall be made on such date selected by the Calculation Agent.

7. **Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events**

If an Unpaid Redemption Proceeds Event and/or an In-kind Redemption Proceeds Event has occurred in respect of the Fund Shares of a Fund (the "**Relevant Fund Share**") and both (a) (i) in the case of the occurrence of an Unpaid Redemption Proceeds Event, such event continues to subsist as of the second Business Day prior to a Relevant Payment Date (such day, the "**Payment Cut-off Date**") and/or (ii) in the case of the occurrence of an In-kind Redemption Proceeds Event, a Hypothetical Investor is not able (or would not be able) to realise and receive in full and in cash an amount equal to the proceeds of sale of all outstanding In-kind Redemption Proceeds in respect of the Relevant Fund Share on the Payment Cut-off Date and (b) the amount payable on the Securities on the Relevant Payment Date (such amount, the "**Relevant Payment Amount**") is linked (in whole or in material part) to the performance of the Relevant Fund Shares, then:

(A) the Relevant Payment Amount payable on the Relevant Payment Date shall be reduced by an amount determined by the Calculation Agent to take into account the amount of the Unpaid Redemption Proceeds and/or In-kind Redemption Proceeds as of the Payment Cut-off Date (for the avoidance of doubt, the amount so payable on the Relevant Payment Date may be reduced to zero, if so determined by the Calculation Agent in accordance with the terms of this paragraph); and

(B) the amount by which the Relevant Payment Amount has been reduced in accordance with paragraph (A) immediately above (such amount, the "**Unpaid Relevant Payment Amount**") shall be payable on the date falling two Business Days after the later of (I) in the case of the occurrence of an Unpaid Redemption Proceeds Event, the day on which the Calculation Agent determines that such event has ceased to occur and (II) in the case of the occurrence of an In-kind Redemption Proceeds Event, the day on which the Calculation Agent determines that a Hypothetical Investor holding Relevant Fund Shares would be able to realise and receive in full and in cash an amount equal to the proceeds of sale for all outstanding In-kind Redemption Proceeds in respect of the Relevant Fund Shares (or such day falling around such date as may be determined by the Calculation Agent and notified to the Holders) (such date, the "**Extended Relevant Payment Date**"), provided that:

(x) if, after the Payment Cut-off Date and before the Extended Relevant Payment Date, (1) in the case of the occurrence of an Unpaid Redemption Proceeds Event, a Hypothetical Investor holding the Relevant Fund Shares receives (or would receive) any Cash Redemption Proceeds (in addition to those received or receivable on the Payment Event Cut-off Date, and following any further payment made under this sub-paragraph (x))

and/or (2) in the case of the occurrence of an In-kind Redemption Proceeds Event, a Hypothetical Investor holding the Relevant Fund Shares receives (or would receive) any Cash Redemption Proceeds and/or realises (or would be able to realise) any In-kind Redemption Proceeds in respect of the Relevant Fund Share (in addition to those received or receivable on the Payment Event Cut-off Date, and following any further payment made under this sub-paragraph (x)), the Calculation Agent may determine that the Issuer shall make further payment of some or all of the then Outstanding Unpaid Relevant Payment Amount as soon as reasonably practicable to reflect such Cash Redemption Proceeds received and/or In-kind Redemption Proceeds realised by such Hypothetical Investor; and

(y) notwithstanding anything else, in the event that (1) in the case of the occurrence of an Unpaid Redemption Proceeds Event, such event continues to subsist on the Redemption Cut-off Date and/or (2) in the case of the occurrence of an In-kind Redemption Proceeds Event, any In-kind Redemption Proceeds in respect of the Relevant Fund Shares remain unrealised on the Redemption Cut-off Date, then the Extended Relevant Payment Date shall be deemed to fall on the Redemption Cut-off Date, and any then Outstanding Unpaid Relevant Payment Amount shall be deemed to be reduced to zero without any amount being paid and no further amounts shall be due to the Holder in respect thereof (and, if the Relevant Payment Date was the Maturity Date, the Redemption Date or the Settlement Date, as is applicable to the Securities, the Securities will be deemed to be fully redeemed or settled, as applicable, on such date with no further action); and

(z) where the Calculation Agent determines that the above adjustment and/or payments will not achieve a commercially reasonable result, the Calculation Agent shall make such other adjustments to any variable, calculation methodology, valuation, redemption or settlement payment or other term of the Conditions of the Securities as the Calculation Agent determines appropriate to account for such Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event; and

(C) the Calculation Agent shall as soon as practicable notify the Holders of the relevant Securities of the occurrence of such Unpaid Redemption Proceeds Event and/or In-kind Redemption Proceeds Event together with any adjustments, calculations or payments made in accordance with the terms of paragraphs (a) and (b) immediately above on or around such time and on each adjustment or payment made, provided that any failure to give any such notice shall not affect the validity of any action taken by the Issuer or Calculation Agent in respect of the Securities.

A Holder shall not be entitled to any payment, whether of interest or otherwise, on the Securities in the event of any delay which may occur in the payment of any amounts due and payable under the Securities as a result of the operation of this Fund Linked Provision 7, and no liability in respect thereof shall attach to the Issuer, the Guarantor or the Calculation Agent.

For the purposes of the above, the following terms have the following meanings:

"**Cash Redemption Proceeds**" means, in respect of any Fund Shares of a Fund and any day (or, where such day is not a Fund Redemption Proceeds Date, the most recent Fund Redemption Proceeds Date), the amount of redemption proceeds per such Fund Share paid (or which the Calculation Agent determines would be paid) in cash by or on behalf of such Fund on the Fund Redemption Proceeds Date in respect of the relevant Fund Redemption Date to a Hypothetical Investor holding such Fund Shares of such Fund and who redeems such Fund Shares on such day. Such amount shall be determined after deducting (a) any and all relevant fees, hold-backs (including without limitation, and by way of example only, contingency reserves or amounts held back until after completion of the Fund's annual audit) or other deductions that the Calculation Agent determines that the Fund would impose on the Hypothetical Investor's subscription and/or redemption from the Fund (including, without limitation, subscription and redemption fees), and (b) any charges, fees, taxes, levies, penalties and/or any other similar costs or expenses (howsoever described) that the Calculation Agent determines that the Hypothetical Investor would incur or otherwise bear in holding, subscribing, redeeming or otherwise transacting in any shares of the Fund (without duplication, in the case of clauses (a) and (b) above, of any costs, charges, fees and expenses taken into account in determining the relevant NAV).

"**Fund Redemption Date**" means, in respect of any Fund Shares of a Fund, the redemption date in respect of such Fund scheduled by the relevant Management Company for the redemption of the Fund Shares of such Fund at the NAV observed by the Calculation Agent for the relevant Scheduled Trading Day.

"**Fund Redemption Proceeds Date**" means, in respect of any Fund Shares of a Fund and any relevant Fund Redemption Date, the date on which any Hypothetical Investor holding such Fund Shares of such Fund, who has redeemed its Fund Shares on such Fund Redemption Date, should have received the proceeds of such redemption in full and in cash as specified in the Fund Offering Documents in place as at the Fund Determination Date.

"**In-kind Redemption Proceeds**" means, in respect of any Fund Shares of a Fund and any relevant day (or, where such day is not a Fund Redemption Proceeds Date, the most recent Fund Redemption Proceeds Date), any in-kind distribution per such Fund Share in full or part satisfaction of the Payable Redemption Proceeds made (or which would be made) by or on behalf of such Fund on such day to a Hypothetical Investor holding the relevant Fund Shares of such Fund redeeming such Fund Shares on the relevant Fund Redemption Date (the occurrence of such event being an "**In-kind Redemption Proceeds Event**").

"**Outstanding Unpaid Relevant Payment Amount**" means, on any day, an amount equal to the Unpaid Relevant Payment Amount less any further amounts paid by the Issuer pursuant to Fund Linked Provision 7(B)(x) prior to such day in respect of such Unpaid Relevant Payment Amount (or subsequent related Outstanding Unpaid Relevant Payment Amount).

"**Payable Redemption Proceeds**" means, in respect of any Fund Shares of a Fund and any day (or, where such day is not a Fund Redemption Proceeds Date, the most recent Fund Redemption Proceeds Date), an amount determined by the Calculation Agent to be the amount of redemption proceeds per such Fund Share of such Fund which should have been paid by such Fund (or any other entity on its behalf) to any Hypothetical Investor redeeming any Fund Shares of such Fund on the relevant Fund Redemption Date (without giving effect to any gating, deferral, suspensions or other provisions permitting the Fund to delay or refuse redemption in full).

"**Redemption Cut-off Date**" means the date falling 1 calendar year after the Relevant Payment Date.

"**Relevant Payment Date**" means the Maturity Date, the Exercise Date, the Redemption Date, the Settlement Date, a Coupon Payment Date or any other date on which the Securities may be exercised or redeemed or any other amounts in respect of the relevant Securities which would otherwise be due and payable or deliverable but for the occurrence of the Unpaid Redemption Proceeds Event and/or the In-kind Redemption Proceeds Event (and the definition of "Relevant Payment Date" in General Condition 32.1 (*Definitions*) shall not apply).

"**Unpaid Redemption Proceeds**" means, in respect of any Fund Shares of a Fund and any day (or, where such day is not a Fund Redemption Proceeds Date, the most recent Fund Redemption Proceeds Date), an amount determined by the Calculation Agent equal to:

(a) Payable Redemption Proceeds in respect of such Fund Share for such Fund and such day, minus

(b) the sum of (i) the Cash Redemption Proceeds in respect of such Fund Share and such day, and (ii) In-kind Redemption Proceeds in respect of such Fund Share and such day to the extent that a Hypothetical Investor holding such Fund Shares would be able to realise and receive in full and in cash an amount equal to the proceeds of sale for all outstanding In-kind Redemption Proceeds in respect of such Fund Shares.

"**Unpaid Redemption Proceeds Event**" means (and an Unpaid Redemption Proceeds Event will be deemed to have occurred if), in respect of any Fund Shares of a Fund and any day (or, where such day is not a Fund Redemption Proceeds Date, the most recent Fund Redemption Proceeds Date), the Calculation Agent determines (based on notices published by or on behalf of the relevant Fund and any other relevant information available to the Calculation Agent) that if a Hypothetical Investor were to apply to redeem any such Fund Shares on such day, it would

not receive the full (or substantially the full) Payable Redemption Proceeds and within (or substantially within) the time frame specified in the Fund Offering Documents in place as at the Fund Determination Date (without giving effect to any gating, deferral, suspensions or other provisions permitting the Fund to delay or refuse redemption in full).

8. **Adjustments to Securities linked to Fund Shares of a Fund in European Currencies**

In respect of any Securities linked to or relating to Fund Shares of a Fund originally quoted, listed and/or dealt, as applicable, as of the Issue Date in a currency of a member state of the European Union that has not adopted the single currency in accordance with the EC Treaty, if such Fund Shares are at any time after the Issue Date quoted, listed and/or dealt, as applicable, exclusively in euro on the relevant market, then the Calculation Agent may make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to preserve as nearly as practicable the economic terms of the Securities. The Calculation Agent will make any conversion necessary for purposes of any such adjustment based on the relevant official conversion rate or at an appropriate mid-market spot rate of exchange determined by the Calculation Agent to be prevailing as of the Valuation Time, as determined to be appropriate by the Calculation Agent, and shall give notice as soon as practicable to the Holders of any relevant adjustment. No adjustments under this Fund Linked Provision 8 will affect the currency denomination of any payment obligation arising out of the Securities.

9. **Hedging arrangements in relation to the Securities**

The Issuer and/or any Hedging Entity may receive rebates from the Management Company of a Fund in respect of the Fund Shares of such Fund or any other asset which the Issuer or any such Hedging Entity may hold as a hedge to the Securities. Nothing in these Fund Linked Provisions or the relevant Pricing Supplement for the Securities shall oblige the Issuer or any Hedging Entity to hedge the Securities or to hedge the Securities in any particular way.

10. **Definitions**

The following terms and expressions shall have the following meanings in relation to Securities to which these Fund Linked Provisions apply:

"**Affected Fund**" has the meaning given in Fund Linked Provision 5 (*Consequences of Fund Events*).

"**Additional Disruption Events**" means (a) a Change in Law, and (b) if Hedging Disruption is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption (each, an "**Additional Disruption Event**").

"**Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Averaging Reference Date**" means each Initial Averaging Date or Averaging Date, in each case, subject to adjustment in accordance with the Fund Linked Provisions.

"**Cash Index**" means the cash index so specified in such Pricing Supplement.

"**Cash Index Substitution Date**" means such date as selected by the Calculation Agent from which the Cash Index shall replace the relevant Affected Fund. For the avoidance of doubt, such date may be set by the Calculation Agent on any date, including, without limitation, prior to the event which resulted in the replacement, including, without limitation, on or prior to the Issue Date of the relevant Securities, or on or prior to the first day on which any Fund Shares of such Affected Fund is valued for the purposes of the Securities.

"**Cash Redemption Proceeds**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Event and In-kind Redemption Proceeds Event*).

"**Change in Law**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any (i) tax law or (ii) adoption or promulgation of new regulations authorised or mandated by existing statute or (iii) any change to the regulatory capital treatment of the Hedging Entity or its obligations and/or any hedging

transactions in relation to the Securities), or (b) due to the promulgation of or any change, announcement or statement of the formal or informal interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date, Settlement Date and Redemption Date or Settlement Date, or any other date on which such Securities will be redeemed or settled, as is applicable to the Securities, become illegal to hold, acquire or dispose of any Fund Shares of the relevant Fund, or (y) the value of the Fund Shares are or will be materially adversely affected or the rights and remedies of the Hypothetical Investor as a Fund Shareholder of the Fund are or will be materially adversely affected, or (z) the ability of a Fund to carry out its investment objective or comply with its investment guidelines or restrictions is or will be materially adversely affected, (aa) the Hedging Entity will be subject to materially increased regulatory capital requirements in performing its obligations and/or executing any hedging transactions in relation to the Securities or (bb) (if "Change in Law – Increased Cost" is specified to be applicable in the relevant Pricing Supplement) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Closing Fund Price**" means, on any day, the NAV calculated and published or announced by such Fund (or on its behalf) in respect of such day, or as otherwise determined by the Calculation Agent subject as provided in the Fund Linked Provisions.

"**Coupon Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Disrupted Day**" means any Scheduled Trading Day on which a Market Disruption Event has occurred (provided that the Calculation Agent may, in its discretion, determine that such event instead results in the occurrence of a Fund Event).

"**Disruption Event**" means, in relation to a Pre-selected Replacement Fund, any of an Additional Disruption Event, Fund Event, Unpaid Redemption Proceeds Event, In-kind Redemption Proceeds Event or other disruption event in relation to the relevant shares or otherwise of the Pre-selected Replacement Fund, as determined by the Calculation Agent, and for the purposes of this definition, each reference to "a Fund" in the definitions of Additional Disruption Event, Fund Event, Unpaid Redemption Proceeds Event and In-kind Redemption Proceeds Event (and any corresponding definitions, as applicable) shall be deemed to refer to such Pre-selected Replacement Fund.

"**Extended Relevant Payment Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Event and In-kind Redemption Proceeds Event*).

"**Fallback Valuation Date**" means, in respect of any Fund Shares of a Fund, the date(s) specified as such in the relevant Pricing Supplement, or, if no date is specified for the Fallback Valuation Date in the relevant Pricing Supplement, then the Fallback Valuation Date for any date on which the price of such Fund Shares is required to be determined shall be the second Business Day prior to the next following date upon which any payment or delivery of assets may have to be made by the Issuer by reference to the price of such Fund Share on such day.

"**Fund**" means the Original Fund, or, following the replacement thereof, the Pre-selected Replacement Fund or Potential Replacement Underlying(s) replacing the Original Fund (and any fund or index replacing such Pre-selected Replacement Fund or Potential Replacement Underlying(s)). Any fund that is replaced shall cease to be a Fund for the purposes of the Securities upon being replaced, and any Pre-selected Replacement Fund or Potential Replacement Underlying(s) shall become the relevant Fund for the purposes of these Fund Linked Provisions effective from the Fund Substitution Date.

"**Fund Determination Date**" means, in respect of (a) an Original Fund or a Pre-selected Replacement Fund, the Trade Date, or (b) a Potential Replacement Underlying(s) which is a fund, following the replacement in accordance with Fund Linked Provision 5(b) (*Consequences of Fund Events*), the Fund Substitution Date corresponding to such Potential Replacement Underlying(s) which is a fund (as applicable).

"**Fund Event**" means, where specified to be applicable in the relevant Pricing Supplement, the occurrence of any of the following, as determined by the Calculation Agent (and, for the avoidance of doubt, the Calculation Agent has no obligation actively to monitor whether or not any of the following events has occurred, and provided that, if any of the following events would amount to both a Fund Extraordinary Event and a Market Disruption Event, the Calculation Agent may determine whether to treat such event as a Fund Extraordinary Event or a Market Disruption Event in respect of such Fund):

(a) Insolvency in respect of a Fund, its Management Company or any of its Fund Service Providers;

(b) a Fund Merger Event in respect of a Fund;

(c) a Fund Termination in respect of a Fund;

(d) Nationalisation in respect of a Fund;

(e) the occurrence of any of the following events (each, a "**Fund Extraordinary Event**"):

(i) ***Global Events:***

(A) ***Modification of Fund Offering Documents***: the Calculation Agent determines that the Fund Offering Documents of a Fund have been amended, supplemented or otherwise modified since the Fund Determination Date, which the Calculation Agent determines would adversely affect a Hypothetical Investor in relation to its hedging activities in respect of the Securities, including without limitation and by way of example only, to change the strategy or investment objective of such Fund or any investment guidelines or restrictions, the currency in which the Fund Shares of such Fund are denominated.

(B) ***Disputes***: The Calculation Agent determines that a Fund, the Management Company of a Fund or any of the Fund Service Providers of a Fund become party to any litigation or dispute, which in the determination of the Calculation Agent, could materially impact the performance of the Fund.

(ii) ***Net Asset Value and Performance:***

(A) ***Failure to Calculate NAV***: The Calculation Agent determines a Fund or any applicable Fund Service Provider of a Fund fails to calculate and announce and/or publish the NAV per Fund Share on the date in respect of which such value is scheduled to be published according to the Fund Offering Documents of such Fund, and such breach is not cured within 3 Business Days' to the satisfaction of the Calculation Agent (provided that, if such breach occurs on five consecutive occasions, the cure period specified above shall not apply in respect of any fifth or subsequent breach), or any changes are made to the frequency with which, or the dates on which, the NAV per Fund Share is calculated, as set out in the Fund Offering Documents of such Fund on the Fund Determination Date, and which the Calculation Agent determines that such change will have a material effect on the Securities.

(B) ***Audited NAV***: in respect of a Fund, the Calculation Agent determines that any audited NAV per Fund Share of such Fund is different from the NAV per Fund Share of such Fund previously announced and/or published by such Fund or any Fund Service Provider of such Fund, or such Fund's auditors qualify or refuse to provide an unqualified report in respect of such Fund or any NAV per Fund Share of such Fund.

(C) ***Assets under Management***: The Calculation Agent determines that a Fund's assets under management have declined by a percentage equal to or greater than the AUM Threshold Percentage over the preceding three months , or if "AUM Threshold" is specified as applicable in the relevant Pricing Supplement, the Calculation Agent determines that a Fund’s assets under management have fallen below the AUM Threshold.

Where:

"**AUM Threshold**" means the amount specified in the relevant Pricing Supplement; and

"**AUM Threshold Percentage**" means, in respect of a Fund, 50 per cent. (or such other percentage specified in the relevant Pricing Supplement).

(D) ***Performance and Risk Measurements***: The annualised historical volatility of a Fund over the preceding 250 days, using the historical NAV per Fund Share figures that are available for the preceding 250 days, is greater than the Volatility Threshold, as determined by the Calculation Agent.

Where "**Volatility Threshold**" means, in respect of a Fund, the greater of (i) 200 per cent. of the annualised historical volatility of a Fund over the preceding 250 days as at Fund Determination Date, using the historical NAV per Fund Share figures that are available for the 250 days preceding the Fund Determination Date and (ii) 10 per cent. (or such percentage as specified in the relevant Pricing Supplement).

(iii) ***Trading:***

(A) ***Mandatory Redemption***: the Calculation Agent determines that the Hypothetical Investor would be required, or that it would be appropriate for the Hypothetical Investor, for any reason whatsoever including without limitation, regulatory reasons or any mandatory redemption imposed by a Fund, to redeem any Fund Shares it may hold as a hedge in respect of the Securities.

(B) ***Material Change in Strategy***: (I) A material change is made to (x) the risk profile, (y) the investment objective or (z) the investment restrictions, of a Fund in place as at the Fund Determination Date, or (II) the Calculation Agent is not satisfied that a Fund is being managed in accordance with its rules or in accordance with the description of the Fund's (x) risk profile, (y) investment objective or (z) investment restrictions, of such Fund as set out in its Fund Offering Documents in place as at the Fund Determination Date.

(C) ***Notification from Manager***: If written notification (or other indication or acknowledgement) by the Management Company to Fund Shareholders or to the administrator of a Fund that, in its opinion, (I) it is not advisable to continue operation of such Fund because it is not economically prudent to do so, (II) the risk profile, strategy or investment objective of a Fund will not, or can no longer, be met in the foreseeable future or (II) liquidation, dissolution or discontinuance of such Fund is recommended.

(D) ***Suspension on Trading***: (I) Any suspension of, or limitation is imposed on, trading of a Fund (by reason of liquidity restrictions or otherwise), or (II) any limitation or other event which prevents the timely payment of redemption proceeds in cash to any investor (as specified in the Fund Offering Documents in place as at the Fund Determination Date), or (III) any dealing request made by any investor or prospective investor in such Fund is deferred in whole or in part.

(E) ***Increase in Fees***: the Calculation Agent determines that (I) a Fund, its Management Company or any Fund Service Provider has amended the management and/or incentive fee (or any other analogous fee) payable to the Management Company and/or any Fund Service Provider, as applicable, or (II) there is an increase in fees payable by the Hypothetical Investor or the Hedging Entity in respect of a purchase, sale or holding in the Fund Shares of such Fund, or any dealing in the Fund Shares of such Fund or otherwise investing in such Fund Shares, from that in place as at the Fund Determination Date.

(iv) ***Operational failures:***

(A) ***Change in Manager and/or Service Providers***: The Calculation Agent determines that (I) the Management Company of a Fund or any Fund Service Provider of a Fund resigns, has its appointment terminated or is otherwise replaced, (II) the Fund or any of the relevant Fund Service Provider has experienced or is experiencing or will experience a material adverse change in its business, assets, operations or financial condition, (III) the Management Company of a Fund or any Fund Service Provider of a Fund has breached any term of any contract between such Fund and its Management Company or any of its Fund Service Provider (as applicable), or (IV) that any contract between a Fund and its Management Company or any of its Fund Service Provider (as applicable) terminates or is otherwise not renewed or replaced, and the Calculation Agent further determines, in its discretion, that such occurrence could have an adverse economic impact (x) on the Fund or (y) (if "Change in Manager – Hedging" is specified to be applicable in the relevant Pricing Supplement) on the Hedging Entity as a holder of an interest in such Fund.

(B) ***Operational Failures***: the Calculation Agent determines that the operation or organisation of a Fund, the Management Company of a Fund, or any applicable Fund Service Provider of a Fund (including, without limitation, its organisational structure and its procedures, processes or policies in respect of investment selection, due diligence, asset allocation, risk management or investment monitoring) has changed from that as at the Fund Determination Date, or that any such procedures, processes or policies are either not being applied or are not being applied consistently with their application on the Fund Determination Date, where such change has, in the determination of the Calculation Agent, a material effect on the Securities and such changes are not rectified to the satisfaction of the Calculation Agent within five Business Days.

(C) ***Reporting Failures***: there occurs any failure of a Fund, the Management Company of a Fund or any Fund Service Provider of a Fund to deliver or cause to be delivered to the Hypothetical Investor any information (I) that it is normal practice to deliver or (II) which the Calculation Agent deems necessary for any determinations, including but not be limited to, determinations in respect of the occurrence of any Fund Event or in the execution of its and the Issuer's duties and obligations with respect to the Securities, cause to be delivered to any Shareholder or the Hypothetical Investor on or before the time specified in the Fund Offering Documents of such Fund, and such breach is not cured within five Business Days or, if none, within a reasonable time, as determined by the Calculation Agent.

(v) ***Regulatory and legal constraints:***

(A) ***Regulatory Action***: the Calculation Agent determines that the activities of a Fund, the Management Company of a Fund or any Fund Service Provider of a Fund and/or any of their respective directors, officers, employees or agents are placed under review or investigation by any governmental, legal, administrative or regulatory authority or court of competent jurisdiction and/or are subject to any charges or actions by any governmental, legal, administrative or regulatory authority for reasons of wrongdoing, suspected wrongdoing, breach (or suspected breach) of any applicable law, rule or regulation or other similar reason and/or a Fund, the Management Company of a Fund or any Fund Service Provider of a Fund and/or any of their respective directors, officers, employees or agents have any of their respective registrations, authorisations, licences or memberships with any governmental, legal, administrative or regulatory authorities revoked, suspended, terminated, limited or qualified in any way.

(B) ***Regulatory Constraints***: the Calculation Agent determines that the Hypothetical Investor is or may in the future be unable, or that it is or may become impractical or difficult for the Hypothetical Investor to perform any obligation imposed on the Hypothetical Investor by any law, rule, regulation or interpretation thereof by any governmental, regulatory or administrative body or authority or court or stock exchange, in each case of competent authority including, without limitation and

by way of example only, any reporting or accounting obligation, due to its investment in the Fund Shares of a Fund / Hedging Entity (I) would be obliged (whether by the Management Company or otherwise) or (II) deems it necessary or appropriate in order to comply with or remain compliant within any applicable legal and/or regulatory limits on the amount of Fund Shares of such Fund that it may hold, to redeem all or some of the Fund Shares of such Fund that it is holding in relation to its hedging activities in respect of the Securities.

"**Fund Merger Date**" means, in respect of a Fund Merger Event, the date which is the earlier of:

(a) a date selected by the Calculation Agent which falls on or after the date on which such Fund Merger Event occurred, as determined by the Calculation Agent; and

(b) the date upon which all Fund Shareholders have agreed or become obliged to transfer their Fund Shares, as determined by the Calculation Agent.

"**Fund Merger Event**" means the occurrence of:

(a) in respect of a Fund, any (i) reclassification or change of such Fund that results in a transfer of, or an irrevocable commitment to transfer, all of the Fund Shares of such Fund outstanding to another entity or person, (ii) consolidation, amalgamation, merger or binding share exchange of the Fund with or into another entity or person (other than a consolidation, amalgamation, merger or binding share exchange in which such Fund is the continuing entity and which does not result in a reclassification or change of all such Fund Shares outstanding), (iii) takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person to purchase or otherwise obtain 100 per cent. of the outstanding Fund Shares of the Fund that results in a transfer of or an irrevocable commitment to transfer all such Fund Shares (other than such Fund Shares owned or controlled by such other entity or person), or (iv) consolidation, amalgamation, merger or binding share exchange of the Fund or its subsidiaries with or into another entity in which the Fund is the continuing entity and which does not result in a reclassification or change of all such Fund Shares outstanding but results in the outstanding Fund Shares (other than Fund Shares owned or controlled by such other entity) immediately prior to such event collectively representing less than 50 per cent. of the outstanding Fund Shares immediately following such event, in each case if the Fund Merger Date is on or before the final Reference Date or Averaging Reference Date, as is applicable; and

(b) in respect of the Management Company of a Fund or any service provider to such Fund, any (i) reclassification or change of the shares of such entity that results in a transfer of or an irrevocable commitment to transfer all of the shares of such entity outstanding to another entity or person, (ii) consolidation, amalgamation, merger or binding share exchange of such entity with or into another entity or person (other than a consolidation, amalgamation, merger or binding share exchange in which such entity is the continuing entity and which does not result in a reclassification or change of all of the shares of such entity outstanding), (iii) other takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person to purchase or otherwise obtain 100 per cent. of the outstanding shares of such entity that results in a transfer of or an irrevocable commitment to transfer all of such shares (other than the shares of such entity owned or controlled by such other entity or person), or (iv) consolidation, amalgamation, merger or binding share exchange of such entity or its subsidiaries with or into another entity in which such entity is the continuing entity and which does not result in a reclassification or change of all the shares of such entity outstanding but results in the outstanding shares of such entity (other than the shares owned or controlled by such other entity) immediately prior to such event collectively representing less than 50 per cent. of the outstanding shares of such entity immediately following such event, in each case if the Fund Merger Date is on or before the final Reference Date or Averaging Reference Date, as is applicable.

"**Fund Offering Documents**" means such Fund's offering memorandum, prospectus or similar offering document and any supplements and addenda thereto, its constitutional documents, its subscription and redemption documents, as applicable.

"**Fund Redemption Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Fund Redemption Proceeds Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Fund Shares**" means the shares or units of a Fund specified as such in the relevant Pricing Supplement, and, following a replacement thereof in accordance with the Fund Linked Provisions, the relevant shares or units of the relevant class of a relevant Pre-selected Replacement Fund or a Potential Replacement Underlying(s) which is a fund (and "**Fund Share"** means any such share of the relevant class of the relevant Fund).

"**Fund Service Provider**" means each of the administrator, the custodian, the auditors, prime brokers or any entities providing services to a Fund.

"**Fund Shareholder**" means a holder of a Fund Share of a Fund.

"**Fund Substitution Date**" means such date as selected by the Calculation Agent from which the Pre-selected Replacement Fund or Potential Replacement Underlying(s) (as applicable) shall replace the relevant Affected Fund. For the avoidance of doubt, such date may be set by the Calculation Agent on any date, including, without limitation, prior to the event which resulted in the replacement, or on or prior to the first day on which any Fund Shares of such Affected Fund is valued for the purposes of the Securities.

"**Fund Termination**" means, in relation to a Fund, where the trust deed, partnership agreement, memorandum and articles of association, fund rules, or other similar or equivalent documents constituting such Fund (each, the "**Constitutional Documents**") has been terminated or otherwise ceased to exist in accordance with the Constitutional Documents. For the avoidance of doubt, and without limiting the generality of the preceding sentence, the following events will constitute a Fund Termination:

(a) cancellation of the Constitutional Documents by the Fund Manager or directors;

(b) an order being made by any competent regulatory authority for cancellation or termination of such Fund; and/or

(c) an order being made by any competent regulatory authority for (i) cancellation or suspension of the relevant licence of the Management Company required to manage such Fund; or (ii) the winding up of the Management Company.

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s) or (c) subscribe, redeem, realise, recover or remit the proceeds of any Fund Shares in the Fund where such inability has arisen by reason of any gates or restrictions or suspensions on subscriptions or redemptions of such Fund Shares.

"**Hedging Entity**" means, for the purposes of these Fund Linked Provisions, and unless otherwise specified in the relevant Pricing Supplement, the Issuer or any affiliate(s) of the Issuer or any entity or entities acting on behalf of, or as counterparty to, the Issuer and, in each case, engaged in any underlying hedging transactions relating to the Fund Shares of any Fund or other instruments in respect of the Issuer's obligations under the Securities, provided that neither the Issuer nor any of its affiliates is obliged to hedge the Issuer's obligations under the Securities (and the definition of "Hedging Entity" in General Condition 32.1 (*Definitions*) shall not apply).

"**Hypothetical Investor**" means a hypothetical investor comparable to a sophisticated international financial institution, and incorporated in the jurisdiction of the Issuer or any Hedging Entity, having exposure to an investment in the Fund Shares of any Fund.

"**Initial Averaging Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**In-kind Redemption Proceeds**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**In-kind Redemption Proceeds Event**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Initial Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Insolvency**" means, in respect of any relevant entity, that the relevant entity (a) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (b) becomes insolvent or is unable to pay its debts or fails or admits in writing its inability generally to pay its debts as they become due; (c) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (d)(i) institutes or has instituted against it, by a regulator, court, administrator, supervisor, government body or any similar official with primary insolvency, rehabilitative, legal or regulatory jurisdiction over it in the jurisdiction of its incorporation or organisation of its head or home office, a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation by it or such regulator, court, administrator, supervisor, government body or similar official, or (ii) has instituted against it a proceeding seeking judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation, and such proceeding or petition is instituted or presented by a person or entity not described in (i) above and either (A) results in a judgement or insolvency or bankruptcy or the entry of an order for relief or the making of an order for its winding-up or liquidation or (B) is not dismissed, discharged, stayed or restrained in each case with 15 calendar days of the institution or presentation thereof; (e) has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger); (f) seeks or becomes subject to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets; (g) has a secured party take possession of all or substantially all of its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all its assets and such secured party maintains possession, or any such process is not dismissed, discharged, stayed or restrained, in each case within 15 calendar days thereafter; (h) causes or is subject to any event with respect to it which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in (a) to (g) above; or (i) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the forgoing acts.

"**Interest Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement, or if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Management Company**" means, in respect of a Fund, such entity or entities as the Calculation Agent may determine is for the time being the duly appointed manager of such Fund (and/or any entity or entities to whom such entity or entities may delegate any of its duties, rights, obligations or liabilities in respect of such Fund), or such other entity or entities specified as such in the relevant Pricing Supplement.

"**Market Disruption Event**" means the failure of such Fund (or such entity acting on its behalf) to calculate and publish or announce the NAV of such Fund on any Scheduled Trading Day or in respect of such Scheduled Trading Day within the scheduled or usual timeframe for publication or announcement.

"**Maximum Days of Disruption**" means eight Scheduled Trading Days or such other number of Scheduled Trading Days specified in the relevant Pricing Supplement.

"**Nationalisation**" means, in respect of a Fund, that all the Fund Shares of such Fund or all or substantially all the assets of the Fund are nationalised, expropriated or are otherwise required to be transferred to any governmental agency, authority, entity or instrumentality thereof.

"**NAV**" means, in respect of the Fund Shares of a Fund and on any relevant day, the net asset value (or, if applicable, the estimated or provisional net asset value) per such Fund Share in respect of such day (or, if such day is not a Scheduled Trading Day, the most recent Scheduled Trading Day), as calculated and published (or, if not published, as notified) to the Fund Shareholder of such Fund by the relevant Management Company.

"**Observation Date (Closing Valuation)**" means, if specified to be applicable in the relevant Pricing Supplement, in respect of a Fund and an Observation Period, and unless otherwise provided in the relevant Pricing Supplement, each Scheduled Trading Day which is not a Disrupted Day for the Fund Shares of such Fund falling in the Observation Period.

"**Observation Period**" means, if specified to be applicable in the relevant Pricing Supplement, in respect of a Fund, the period commencing on the relevant Observation Period Start Date and ending on the relevant Observation Period End Date.

"**Observation Period End Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of a Fund, the date specified as such in the relevant Pricing Supplement, which shall be the last day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Observation Period Start Date**" means, if "Observation Period" is specified to be applicable in the relevant Pricing Supplement, in respect of a Fund, the date specified as such in the relevant Pricing Supplement, which shall be the first day of the relevant Observation Period, and shall be included or excluded from the Observation Period, as provided in the relevant Pricing Supplement.

"**Original Fund**" means the fund or funds specified as such in the relevant Pricing Supplement and related expressions shall be construed accordingly.

"**Outstanding Unpaid Relevant Payment Amount**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Payable Redemption Proceeds**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Payment Cut-off Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Periodic Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Potential Adjustment Event**" means, with respect to any Fund Shares of a Fund, any of the following, as determined by the Calculation Agent:

(a) a subdivision, consolidation or reclassification of relevant Fund Shares (unless resulting in a Merger Event), or a free distribution or dividend of any such Fund Shares to existing Fund Shareholders by way of bonus, capitalisation or similar issue;

(b) a distribution, issue or dividend to existing Fund Shareholders of (i) such Fund Shares, or (ii) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of such Fund equally or proportionately with such payments to Fund Shareholders, or (iii) share capital or other securities of another share issuer acquired or owned (directly or indirectly) by such Fund as a result of a spin-off or other similar transaction, or (iv) any other type of securities, rights or warrants or other assets, in any case for payment (cash or other consideration) at less than the prevailing market price as determined by the Calculation Agent;

(c) a distribution of an amount per Fund Share which the Calculation Agent determines should be characterised as an extraordinary dividend;

(d) a call by such Fund in respect of relevant Fund Shares that are not fully paid;

(e) a repurchase by such Fund or any of its subsidiaries of relevant Fund Shares whether out of profits or capital and whether the consideration for such repurchase is cash, securities or otherwise; or

(f) there occurs any other event that may have, in the opinion of the Calculation Agent, a diluting or concentrative effect on the theoretical value of the relevant Fund Share of such Fund.

"**Potential Replacement Underlying(s)**" means any (a) fund, (b) basket of funds, (c) index (other than a Cash Index) or (d) basket of indices (other than a Cash Index).

"**Pre-selected Replacement Fund**" means a fund, specified as such in the relevant Pricing Supplement.

"**Redemption Cut-off Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Reference Date**" means each Initial Valuation Date, Coupon Valuation Date, Interest Valuation Date, Periodic Valuation Date or Valuation Date, in each case, subject to adjustment in accordance with the Fund Linked Provisions.

"**Relevant Date**" has the meaning given in Fund Linked Provision 2 (*Fallback Valuation Date*).

"**Relevant Fund Share**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Relevant Payment Amount**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Relevant Payment Date**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Replacement Underlying(s)**" means a Pre-selected Replacement Fund or Potential Replacement Underlying(s) selected by the Calculation Agent in accordance with Fund Linked Provision 5 (*Consequences of Fund Events*) to replace (in whole or in part) an Affected Fund, (where applicable) in the weighting as determined by the Calculation Agent.

"**Scheduled Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Averaging Date.

"**Scheduled Averaging Reference Date**" means each Scheduled Averaging Date or Scheduled Initial Averaging Date.

"**Scheduled Coupon Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Coupon Valuation Date.

"**Scheduled Initial Averaging Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Averaging Date.

"**Scheduled Initial Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Initial Valuation Date.

"**Scheduled Interest Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been an Interest Valuation Date.

"**Scheduled Periodic Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Periodic Valuation Date.

"**Scheduled Reference Date**" means each Scheduled Initial Valuation Date, Scheduled Interest Valuation Date, Scheduled Coupon Valuation Date, Scheduled Periodic Valuation Date or Scheduled Valuation Date.

"**Scheduled Trading Day**" means any day on which such Fund (or any entity acting on its behalf) is scheduled to publish the NAV of such Fund.

"**Scheduled Valuation Date**" means any original date that, but for the occurrence of an event causing a Disrupted Day, would have been a Valuation Date.

"**Trade Date**" means the date specified as such in the applicable Pricing Supplement.

"**Unpaid Redemption Proceeds**" has the meaning given in Fund Linked Provision 7 (Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events).

"**Unpaid Redemption Proceeds Event**" has the meaning given in Fund Linked Provision 7 (*Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events*).

"**Unpaid Relevant Payment Amount**" has the meaning given in Fund Linked Provision 7 (Consequences of Unpaid Redemption Proceeds Events and In-kind Redemption Proceeds Events).

"**Valid Date**" means a Scheduled Trading Day that is not a Disrupted Day and on which another Averaging Reference Date does not or is not deemed to occur.

"**Valuation Date**" means each date specified as such or otherwise determined as provided in the relevant Pricing Supplement or, if such date is not a Scheduled Trading Day, the next following Scheduled Trading Day.

"**Valuation Time**" means the time at which the NAV per Fund Share of the Fund is calculated and published or announced on the relevant day by the Fund (or on its behalf).

ANNEX 8 – RATE LINKED PROVISIONS

The terms and conditions set out in this Annex 8 apply to Securities for which the relevant Pricing Supplement specifies that the Rate Linked Provisions shall apply.

1. **Rate Linked Fallbacks**

(a) ***Original Rate Disruption***

Subject to Rate Linked Provision 1(b) (*Index Cessation/Benchmark Event*) below, if the Calculation Agent determinates that an Original Rate does not appear on the relevant Page and the Reference Rate is not published by the administrator of the Original Rate or an authorised distributor and is not otherwise provided by the administrator of the Original Rate, then an "Original Rate Disruption" ("**Original Rate Disruption**") shall have occurred and the Original Rate shall be determined by the Calculation Agent in good faith and in a commercially reasonable manner, having regard to alternative benchmarks then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). For the avoidance of doubt and without limitation, the Calculation Agent may determine the Original Rate by reference to one or more of the following methods:

(1) the Original Rate may be the rate formally recommended for use by the administrator of the Original Rate or the supervisor or competent authority (or a committee endorsed or convened by any such entity) responsible for supervising the Original Rate or the administrator thereof; and

(2) the Original Rate may be the Original Rate last provided or published by the relevant administrator.

Notwithstanding the above, where an Original Rate Disruption has occurred in respect of an Original Rate that is a Swap Rate, the Original Rate shall be such commercially reasonable alternative rate as is determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market).

(b) ***Index Cessation/Benchmark Event***

If the Calculation Agent determines that an Index Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred or are existing on any day (i) in respect of an Original Rate, or (ii) where the relevant Original Rate is a Compounded RFR, in respect of the RFR referenced in such Compounded RFR, in each case in respect of the Securities (such affected Original Rate, a "**Discontinued Reference Rate**"), then the Calculation Agent shall determine the Original Rate in respect of such Securities in accordance with the following methodologies, as applicable:

(1) *Compounded RFRs*: where the Discontinued Reference Rate is a Compounded RFR, the Discontinued Reference Rate shall be replaced by the applicable Recommended Fallback Rate with effect from and including the Index Cessation/Benchmark Event Effective Date and the Recommended Fallback Rate will be deemed to be the Original Rate with effect from such date. Where the Recommended Fallback Rate is used, the Calculation Agent may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Original Rate, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Original Rate. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates;

(2) *Compounded Indices – Index Cessation*: where the Discontinued Reference Rate is a Compounded Index, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Original Rate shall be determined by the Calculation Agent by reference to:

(A) the last published level of the applicable Compounded Index;

(B) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(C) the Underlying RFR, as provided by the administrator of the Underlying RFR for each day in respect of which the Underlying RFR is required for such determination;

(3) *Compounded Indices – Underlying Rate Cessation*: where the specified Original Rate is a Compounded Index and an Index Cessation/Benchmark Event and its related Index Cessation/Benchmark Event Effective Date have occurred in respect of the Underlying RFR, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Original Rate shall be determined by the Calculation Agent by reference to:

(A) the last published level of the applicable Compounded Index;

(B) the benchmark methodology for the applicable Compounded Index, as published by the administrator thereof; and

(C) the rate that would apply for derivative transactions referencing the 2021 Definitions, on or after the occurrence of an Index Cessation Effective Date (as defined in the 2021 Definitions) (which definition is substantively the same as "Index Cessation/Benchmark Event Effective Date") with respect to the applicable Underlying RFR;

(4) *Swap Rates*: where the specified Original Rate is a Swap Rate, with effect from and including the Index Cessation/Benchmark Event Effective Date, the Original Rate shall be determined by the Calculation Agent by reference to the alternative rate of interest (the "**Alternative Recommended Rate**") formally recommended by (in the following order):

(A) the central bank for the currency in which the Discontinued Reference Rate is denominated; or

(B) if no such recommendation is made by such central bank, the central bank (if different) or other supervisor responsible for supervising (i) the Discontinued Reference Rate, or (ii) the administrator of the Discontinued Reference Rate; or

(C) if no such recommendation is made by such central bank or supervisor, any working group or committee officially endorsed or convened by any such central bank or supervisor, or any group thereof, or

(D) if no such recommendation is made in accordance with (a), (b) or (c), the Financial Stability Board or any part thereof, or

(E) if no such recommendation is made in accordance with (a), (b), (c) or (d), where such Alternative Recommended Rate is substantially the same as the Discontinued Reference Rate, the administrator,

provided that if the Calculation Agent determines that there is no Alternative Recommended Rate, the Original Rate shall be determined by the Calculation Agent by reference to such other reference rate(s) and/or price source(s) and/or combination thereof that the Calculation Agent determines to be a commercially reasonable alternative to the Discontinued Reference Rate. If the Calculation Agent determines the Original Rate in accordance with this paragraph (4), it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Original Rate, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the

Original Rate. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

(5) *Generic Permanent Fallback*: notwithstanding any other provision or term of this Annex 8, where (a) the Original Rate is not a rate in respect of which a determination methodology is specified in any of paragraphs (1), (2), (3) and (4) above, or (b) the Original Rate is a rate in respect of which a determination methodology is specified in any of sub-paragraphs (1), (2), (3) and (4) above and "Generic Permanent Fallback" is specified as applicable in the Pricing Supplement, the Calculation Agent shall determine the Original Rate in respect of such Securities in good faith and in a commercially reasonable manner, after consulting any source it deems to be reasonable, as:

(A) a substitute or successor rate, index, benchmark or other price source that it has determined is the industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source for the relevant Original Rate; or

(B) if it determines there is no such industry-accepted standard in any related market (including, without limitation, the derivatives market) substitute or successor rate, index, benchmark or other price source, then a substitute or successor rate, index, benchmark or other price source that it determines is a commercially reasonable alternative to the Original Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market),

in each case provided that (i) any such substitute or successor rate, index, benchmark or other price source, may (without limitation) comprise a replacement rate, index, benchmark or other price source, which is determined on a backwards-looking compounding basis by reference to a "risk-free rate", (ii) there may be more than one such substitute or successor rate, index, benchmark or other price source (which may be applied as of one or more effective dates), (iii) the Original Rate may include an adjustment factor or adjustment spread pursuant to the paragraph immediately below and (iv) the Conditions may be subject to adjustment pursuant to the paragraph immediately below.

If the Calculation Agent determines the Original Rate in accordance with paragraph (5) above, it may make such adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such change to the method of determination of the Original Rate, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such change to the method of determination of the Original Rate. Any such adjustment(s) which the Calculation Agent determines to be appropriate (1) shall be made to the extent reasonably practicable, but also taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), (2) may include an adjustment factor and/or adjustment spread (which may be positive or negative) together with any technical, administrative or operational changes and (3) may be applied on more than one occasion and may be made as of one or more effective dates.

If the Calculation Agent determines that the application of paragraphs (1), (2), (3), (4) and (5) above would not achieve a commercially reasonable result (because it is not possible or commercially reasonable to identify a replacement or successor rate, index, benchmark or other price source, or relevant adjustments or for any other reason) and/or (ii) is or would be unlawful at any time under any applicable law or regulation or it would contravene any applicable licensing requirements to determine the Original Rate in accordance with the terms of such provisions, the Calculation Agent may determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (provided that, if Early Payment

Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted) on a date specified by it in a notice to the Holders.

(c) ***USD LIBOR Benchmark Transition Event***

Notwithstanding anything else in this Rate Linked Provision 1 (*Rate Linked Fallbacks*) of Annex 8, if the Original Rate is a USD LIBOR Benchmark Rate and the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect thereof on any date of determination of the Original Rate or other variable or amount under the Conditions that depends on the determination of a USD LIBOR Benchmark Rate, then:

(1) the provisions of the USD LIBOR Benchmark Transition Event Appendix shall apply in respect of the Securities in relation to such Original Rate; and

(2) the provisions of this Rate Linked Provision 1 (*Rate Linked Fallbacks*) of Annex 8 shall not apply in respect of the Securities in respect of such Original Rate.

If both a Benchmark Transition Event and an Administrator/Benchmark Event have occurred and are occurring, then it shall be deemed that only a Benchmark Transition Event has occurred.

(d) ***Definitions***

For the purposes of this Rate Linked Provision 1 (*Rate Linked Fallbacks*) of Annex 8, each of "**Benchmark Replacement Date**", "**Benchmark Transition Event**" and "**Reference Time**" have the respective meanings given to those terms in the USD LIBOR Benchmark Transition Event Appendix, and "**Original Rate**" means each rate specified as such in the Pricing Supplement.

2. **Administrator/Benchmark Event**

If the Calculation Agent determines that an Administrator/Benchmark Event and its related Administrator/Benchmark Event Effective Date have occurred or are existing on any day in respect of any Securities and a Relevant Benchmark, the Calculation Agent may:

(a) make such adjustment to the terms of the Securities as the Calculation Agent determines appropriate to account for the economic effect on the Securities of such Administrator/Benchmark Event (including without limitation, to select a successor Relevant Benchmark) and any adjustment(s) that it determines to be appropriate, if any, to any variable, calculation methodology, valuation, settlement, payment terms or any other terms of the Securities to account for such replacement and/or change to the method of determination of the Original Rate, including (but not limited to) any such adjustment(s) that the Calculation Agent determines are required in order to reduce or eliminate, to the extent reasonably practicable, any change in the economic value of the Securities from such replacement and/or change to the method of determination of the Original Rate;

(b) determine that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (provided that, if Early Payment Amount 1 or Early Payment Amount 2 applies, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

Notwithstanding anything else in this Rate Linked Provision 2 (*Administrator/Benchmark Event*), in the event that the Administrator/Benchmark Event comprises a Material Methodology Change Event, the Calculation Agent may determine not to undertake any or all of the actions described in this Rate Linked Provision 2 (*Administrator/Benchmark Event*).

3. **Interim measures**

If, at any time, following (i) an Index Cessation/Benchmark Event but prior to any replacement or amendment having become effective pursuant to Rate Linked Provision 1(b) (*Index Cessation/Benchmark Event*) above and/or (ii) an Administrator/Benchmark Event but prior to any adjustment and/or redemption and/or cancellation and/or any other action the Issuer may take under Rate Linked Provision 2 (*Administrator/Benchmark Event*) taking effect, the relevant Original Rate is required for any determination in respect of the Securities, then:

(a) if the Original Rate is still available, and it is still permitted under applicable law or regulation for the Securities to reference the Original Rate and for the Issuer and/or the Calculation Agent to use the Original Rate to perform its or their respective obligations under the Securities, the level of the Original Rate shall be determined pursuant to the terms that would apply to the determination of the Original Rate as if no Index Cessation/Benchmark Event or Administrator/Benchmark Event (as applicable) had occurred; or

(b) if the Original Rate is no longer available or it is no longer permitted under applicable law or regulation applicable to the Issuer and/or to the Calculation Agent (as applicable) for the Securities to reference the Original Rate or for any such entity to use the Original Rate to perform its or their respective obligations under the Securities, the level of the Original Rate shall be determined by the Calculation Agent acting in good faith and in a commercially reasonable manner having regard to such sources as it considers appropriate and any alternative benchmark then available and taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market), as (a) a substitute or successor rate that it has determined is the industry-accepted (in the derivatives market) substitute or successor rate for the relevant Original Rate or (b) if it determines there is no such industry-accepted (in the derivatives market) substitute or successor rate, a substitute or successor rate that it determines is a commercially reasonable alternative to the Original Rate, taking into account prevailing industry standards in any related market (including, without limitation, the derivatives market). If such Original Rate is determined as any such substituted or successor rate, the Calculation Agent may determine such other amendments to the Securities which it considers are necessary and/or appropriate in order to reflect the replacement of the Original Rate with such substituted or successor rate. If the Calculation Agent determines the Original Rate in accordance with this paragraph, the Calculation Agent shall notify the Issuer of such determination made by it and the action that it proposes to take in respect of any such determination and the Issuer, in turn, shall notify the Holders thereof as soon as reasonably practicable thereafter.

4. **Hierarchy if both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event occurs**

If the Calculation Agent determines that an event in respect of an Original Rate constitutes both an Index Cessation/Benchmark Event and an Administrator/Benchmark Event, then it will be deemed to an Index Cessation/Benchmark and not an Administrator/Benchmark Event, provided that if an Administrator/Benchmark Event Effective Date has not occurred before the Relevant Benchmark ceases to be available, then Rate Linked Provision 3 (*Interim measures*) shall apply as if an Administrator/Benchmark Event had occurred.

5. **Corrections to Published and Displayed Rates**

In the event that the Original Rate is subsequently corrected, and the correction (the "**Corrected Rate**") is published after the original publication but no later than the longer of (a) one hour after such original publication and (b) any other period for corrections specified by a relevant administrator in its methodology for the relevant Original Rate, then provided that such Corrected Rate is published on or prior to the date falling two Business Days prior to the date on which a related payment is scheduled to be made under the Securities (the "**Relevant Scheduled Payment Date**"), then such Corrected Rate shall be deemed to be the relevant Original Rate and the Calculation Agent shall use such Corrected Rate in determining the relevant Original Rate. Any corrections published after the second Business Day prior to the Relevant Scheduled Payment Date shall be disregarded for the purposes of determining the relevant Original Rate.

ANNEX 9 – BOND LINKED PROVISIONS

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The terms and conditions set out in this Annex 9 apply to Securities for which the relevant Pricing Supplement specifies that the Bond Linked Provisions shall apply.

1. **Consequences of Early Redemption Events**

If the Calculation Agent determines that an Early Redemption Event has occurred, the Securities may be redeemed at the option of the Issuer by giving an Optional Redemption Notice to the Holders (whether or not the relevant Early Redemption Event is then continuing on the date such Optional Redemption Notice is given) in accordance with General Condition 5.1 (*Redemption at the Option of the Issuer*) (and, for the avoidance of doubt, the notice period set out in General Condition 5.1 (*Redemption at the Option of the Issuer*) shall not apply).

If an Optional Redemption Notice is delivered by or on behalf of the Issuer, then each outstanding Security shall be redeemed by the Issuer in accordance with the terms set out in the relevant Pricing Supplement.

Nothing in this Bond Linked Provision 1 shall be construed as an obligation on the Issuer to exercise the option to early redeem the Securities. For the avoidance of doubt the Issuer may only exercise such option in respect of all Securities of the relevant series and not in respect of some Securities only.

2. **Consequences of Additional Disruption Events**

If the Calculation Agent determines that an Additional Disruption Event has occurred, the Calculation Agent may, in its discretion:

(a) determine to make such adjustment to the exercise, settlement, payment or any other terms of the Securities as the Calculation Agent determines appropriate to account for such Additional Disruption Event; and/or

(b) determine and give notice to Holders that the Securities shall be redeemed, in which event the Issuer will cause to be paid to each Holder in respect of each Security held by it an amount equal to the Early Payment Amount (as defined in General Condition 32.1 (*Definitions*), provided that, in respect of Securities for which the relevant Pricing Supplement specifies that Early Payment Amount 1 or Early Payment Amount 2 is applicable, the words "(but ignoring the event which resulted in such early redemption)" shall be deleted).

3. **Consequences of Adjustment Events**

If the Calculation Agent determines that an Adjustment Event has occurred on any day falling in the period commencing on, and including, the Adjustment Event Start Date and ending on, and including, the Adjustment Event End Date, the Securities will not, subject to the terms in the relevant Pricing Supplement, be redeemed early, provided that any amount payable by the Issuer to a Holder shall be reduced pro rata (to the proportion of the Securities of the same series held by such Holder) by an amount determined by the Calculation Agent equal to the loss that would be suffered by, or the costs or expenses that would be reasonably incurred by a Hypothetical Broker Dealer as a result of the occurrence of the Adjustment Event, in order to restore such Hypothetical Broker Dealer to the same (or nearly equivalent) position in which such Hypothetical Broker Dealer would have been but for the occurrence of the Adjustment Event. The loss suffered, or costs or expenses reasonably incurred by such Hypothetical Broker Dealer, as a result of an Adjustment Event shall be determined by the Calculation Agent.

4. **Amendment to General Conditions 6.2(a) (*Payments of principal and interest in respect of Registered Global Notes*) and 6.2(i) (*Record Date*)**

In respect of Bond Linked Securities, the following Conditions shall be amended as follows:

4.1 General Condition 6.2(a) (*Payments of principal and interest in respect of Registered Global Notes*) shall be amended by deleting the first sentence thereof beginning with the words "In respect of any Registered Notes", and replacing it with the following:

"In respect of any Registered Notes represented by a Global Note, payments of principal and interest shall be paid to the person shown on the Register at the close of business on the date on which the relevant payment in respect of a Bond, whether scheduled or not, was actually, in the

determination of the Calculation Agent, received by a Hypothetical Broker Dealer, and if no further payment falls to be made, on surrender of the Global Note to or to the order of the Registrar, subject to the provisions of General Condition 13 (*Payment Disruption*)."

4.2 General Condition 6.2(i)(*Record Date*) shall be amended by deleting the first sentence thereof beginning with the words "Each payment in respect of a Registered Note in definitive form", and replacing it with the following:

"Each payment in respect of a Registered Note in definitive form will be paid to the person shown as the Holder in the Register at the close of business on the date on which the relevant payment in respect of a Bond, whether scheduled or not, was actually, in the determination of the Calculation Agent, received by a Hypothetical Broker Dealer (in respect of Registered Notes in definitive form, the "**Record Date**")."

5. Limited Recourse

Notwithstanding anything else, payments under the Securities will be limited to the amounts actually received by a Hypothetical Broker Dealer (notionally holding an amount of the relevant Bond at the time of the entitlement to the payment arising equal to the Bond Principal Amount corresponding to such Bond at such time) from or on behalf of the relevant issuer of such Bond, reduced by any Additional Costs or any other costs or fees deducted from any payment under the Securities (provided that to the extent that Additional Costs include any withheld amounts otherwise payable to or on behalf of a Hypothetical Broker Dealer in respect of such Bond due to the imposition of any applicable Sovereign Withholding Tax, the foregoing shall not apply to further reduce payments under the Securities in respect of such amounts) in respect of any relevant period (as determined by the Calculation Agent in accordance with the relevant Pricing Supplement). The Holders will not have any additional recourse to the Issuer or the Guarantor (if applicable) or any recourse to any Bond or any Reference Entity.

6. No Interest or Voting Rights in the Bond

The Holders of the Securities shall not have any interest in or right to the Bond. In addition, the Holders of the Securities shall not have any voting rights under the terms of the Bond or on any matter in connection with the Bond. The Issuer has no obligation to deliver any information, communication, notices it may receive regarding the Bond. The Issuer shall not have an obligation to take any action to collect any principal, interest or other distribution on the Bond or to enforce any conditions of the Bond to the extent that the Issuer or any of its affiliates hold the Bond at any time.

7. Definitions

The following terms and expressions shall have the following meanings in relation to Securities to which these Bond Linked Provisions apply:

"**Additional Costs**" means any incidental costs (including taxes, withholdings or deductions) of any kind incurred by a Hypothetical Broker Dealer in connection with acquiring, holding, redeeming, selling or transferring any Bond or maintaining any hedging transactions in connection with the Securities which costs (other than costs referred to in (b) below) were not in existence or reasonably anticipated by such Hypothetical Broker Dealer on the Trade Date, including (a) any relevant costs, as determined by the Calculation Agent, incurred by reason of an Adjustment Event or an Early Redemption Event, as determined by the Calculation Agent and (b) any amounts withheld from payments otherwise payable to or on behalf of the Hypothetical Broker Dealer in respect of the Bond on account of any applicable Sovereign Withholding Tax. For the purposes of calculation only, and, if applicable, each amount of Additional Costs shall be in the Reference Currency and, to the extent that any Additional Costs are in the Base Currency, such amounts shall be converted into the Reference Currency at such rate(s) of exchange as may be determined by the Calculation Agent on the last day of the relevant period.

"**Additional Disruption Event**" means each of (a) if Change in Law (Hedge) is specified in the relevant Pricing Supplement to be applicable, a Change in Law (Hedge), and, (b) if Hedging Disruption is specified in the relevant Pricing Supplement to be applicable, a Hedging Disruption.

"**Adjustment Event**" means any one of the following events, each as determined by the Calculation Agent:

(a) Residual Risk Event;

(b) Settlement/Custodial Event; or

(c) Tax Event (provided that if the Calculation Agent determines that such event may also be classified as a Bond Tax Event, then the Calculation Agent may determine that such event instead results in the occurrence of an Early Redemption Event),

collectively, the "**Adjustment Events**", and if, in the determination of the Calculation Agent, an event occurs which constitutes an Adjustment Event, such event will constitute an Adjustment Event whether or not the occurrence of such event arises, directly or indirectly, from:

(i) any lack or alleged lack of authority or capacity of the Reference Entity to issue the Bond or otherwise enter into the obligations constituting the Bond;

(ii) any actual or alleged unenforceability, illegality, impossibility or invalidity with respect to the Bond (however described);

(iii) any applicable law, order, regulation, decree or notice (however described) or the promulgation of, or any change in, the interpretation by any court, tribunal, regulatory authority or similar administrative of judicial body with competent or apparent jurisdiction of any applicable law, order, regulation, decree or notice (however described); or

(iv) the imposition of, or any change in, any exchange controls, capital restrictions or any other similar restrictions imposed by any monetary or other authority (however described).

"**Adjustment Event End Date**" means the date specified as such in the relevant Pricing Supplement.

"**Adjustment Event Start Date**" means the date specified as such in the relevant Pricing Supplement.

"**Bankruptcy**" means a Reference Entity (a) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (b) becomes insolvent or is unable to pay its debts or fails or admits in writing in a judicial, regulatory or administrative proceeding or filing its inability generally to pay its debts as they become due; (c) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (d) institutes or has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation, and, in the case of any such proceeding or petition instituted or presented against it, such proceeding or petition (i) results in a judgment of insolvency or bankruptcy or the entry of an order for relief or the making of an order for its winding-up or liquidation or (ii) is not dismissed, discharged, stayed or restrained in each case within thirty calendar days of the institution or presentation thereof; (e) has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger); (f) seeks or becomes subject to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all its assets; (g) has a secured party take possession of all or substantially all its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all its assets and such secured party maintains possession, or any such process is not dismissed, discharged, stayed or restrained, in each case within thirty calendar days thereafter; or (h) causes or is subject to any event with respect to it which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (a) to (g) (inclusive).

"**Base Currency**" has the meaning given to it in FX Linked Provision 10 (*Definitions*).

"**Bond**" means, subject to adjustment in accordance with the Bond Linked Provisions, the bond or other debt security specified as such in the relevant Pricing Supplement scheduled to mature on the relevant Bond Maturity Date and listed (or under its terms described as listed, or previously listed) on the relevant Exchange(s) (if applicable), and related expressions shall be construed accordingly.

"**Bond Maturity Date**" means, in respect of a Bond, the date specified as such in the relevant Pricing Supplement.

"**Bond Principal Amount**" means, in respect of a Bond and any relevant day, (unless another amount is specified as such in the relevant Pricing Supplement) the aggregate nominal amount in respect of the Series on such day (as such amount may be reduced following cancellations and/or redemptions from time to time or increased following any issuance of further Securities of the same Series), provided that such amount may be adjusted by the Calculation Agent upon the occurrence of any event falling within paragraph (b) of the definition of "Early Redemption Event", and provided further that such amount shall be adjusted correspondingly in respect of any other event which results in the reduction or the adjustment of the principal amount of such Bond, as determined by the Calculation Agent.

"**Bond Redemption**" means the Bond is redeemed in whole or in part prior to the Bond Maturity Date.

"**Bond Tax Event**" means (and a Bond Tax Event shall be deemed to have occurred if) a Hypothetical Broker Dealer is unable to receive any payment due in respect of the Bond in full on the due date therefor without deduction for or on account of any increase over the withholding tax, back-up withholding or other tax, duty or charge of whatsoever nature in force as of the Trade Date imposed by, or if a Hypothetical Broker Dealer is required to pay any tax, duty or charge (other than ordinary taxes on income) of whatsoever nature in respect of any payment received in respect of the Bond imposed by, the Reference Entity or any political subdivision thereof or the effective rate of taxes for any holders of the Bond in the jurisdiction of such Hypothetical Broker Dealer increases under the tax treaty between the jurisdiction of such Hypothetical Broker Dealer and the Reference Entity due to any change in the tax treaty or any change in the application or official interpretation of the tax treaty on or after the Trade Date or any change in the procedures to claim under the tax treaty or if such tax treaty ceases to be available to holders of the Bond resident in the jurisdiction of such Hypothetical Broker Dealer for any reason whatsoever.

"**Change in Law (Hedge)**" means that, on or after the Issue Date of the Securities (a) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Calculation Agent determines that (x) it has, or it will, within the next 15 calendar days but on or prior to the Maturity Date become illegal to hold, acquire or dispose of any Bond in relation to the Underlying Hedge Transactions, or (y) the Hedging Entity will incur a materially increased cost in performing its obligations in relation to the Securities (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).

"**Early Redemption Event**" means, where specified to be applicable in the relevant Pricing Supplement, the occurrence of any of the following events, each as determined by the Calculation Agent:

(a) a Failure to Pay;

(b) a Bond Redemption;

(c) an Obligation Acceleration;

(d) a Repudiation/Moratorium;

(e) a Restructuring;

(f) an Inconvertibility Event;

(g) a Sovereign Event;

(h) an Expropriation/Hedge Event;

(i) a Bond Tax Event (provided that if the Calculation Agent determines that such event may also be classified as a Tax Event, then the Calculation Agent may determine in its discretion that such event instead results in the occurrence of an Adjustment Event);

(j) a Bankruptcy;

(k) a Sanction Event;

(l) a Governmental Intervention; or

(m) any other event specified as such in the relevant Pricing Supplement,

and collectively, the "**Early Redemption Events**".

If, in the determination of the Calculation Agent, an event constitutes an Early Redemption Event, such event will constitute an Early Redemption Event whether or not the occurrence of such event arises, directly or indirectly, from:

(i) any lack or alleged lack of authority or capacity of the Reference Entity to issue the Bond or otherwise enter into the obligations constituting the Bond;

(ii) any actual or alleged unenforceability, illegality, impossibility or invalidity with respect to the Bond (however described);

(iii) any applicable law, order, regulation, decree or notice (however described) or the promulgation of, or any change in, the interpretation by any court, tribunal, regulatory authority or similar administrative of judicial body with competent or apparent jurisdiction of any applicable law, order, regulation, decree or notice (however described); or

(iv) the imposition of, or any change in, any exchange controls, capital restrictions or any other similar restrictions imposed by any monetary or other authority (however described).

"**Exchange(s)**" means, in respect of a Bond, each securities exchange or trading market specified as such in the relevant Pricing Supplement (including any successor to that securities exchange or trading market) for so long as such Bond is listed or otherwise included in that securities exchange or trading market.

"**Expropriation/Hedge Event**" means the Bond fails to be duly registered, is expropriated, confiscated or seized by any person or any hedging transaction of a Hedging Entity in relation to the Securities is invalidated or repudiated by any person including a registrar of such Bond.

"**Failure to Pay**" means, after the expiration of any applicable grace period (after the satisfaction of any conditions precedent to the commencement of such grace period), the failure by the Reference Entity to make, when and where due, any payments in any amount under the Bond, in accordance with the terms of the Bond at the time of such failure.

"**Governmental Authority**" means any de facto or de jure government (or any agency, instrumentality, ministry or department thereof), court, tribunal, administrative or other governmental authority or any other entity (private or public) charged with the regulation of the financial markets (including the central bank) in the jurisdiction of the Reference Entity, or the Reference Entity.

"**Governmental Intervention**" means any one or more of the following events occurs as a result of action taken or an announcement made by a Governmental Authority pursuant to, or by means of, a restructuring and resolution law or regulation (or any other similar law or regulation), in each case, applicable to the Reference Entity in a form which is binding, irrespective of whether such event is expressly provided for under the terms of the Bond:

(a) any event which would affect creditors' rights so as to cause:

  (i) a reduction in the rate or amount of interest payable or the amount of scheduled interest accruals (including by way of redenomination);

  (ii) a reduction in the amount of principal or premium payable at redemption (including by way of redenomination);

  (iii) a postponement or other deferral of a date or dates for either (A) the payment or accrual of interest, or (B) the payment of principal or premium; or

  (iv) a change in the ranking in priority of payment of the Bond, causing the subordination of the Bond to any other obligation of the Reference Entity;

(b) an expropriation, transfer or other event which mandatorily changes the beneficial holder of the Bond;

(c) a mandatory cancellation, conversion or exchange; or

(d) any event which has an analogous effect to any of the events specified in (a) to (c).

"**Hedging Disruption**" means that the Hedging Entity is unable, after using commercially reasonable efforts, to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to hedge the price risk of the Issuer issuing and the Issuer performing its obligations with respect to or in connection with the relevant Securities, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"**Hypothetical Broker Dealer**" means a hypothetical broker dealer (or any of its agents or affiliates) holding the Bond in an aggregate principal amount equal to the Bond Principal Amount corresponding to such Bond and having the status of "non-resident" for the purposes of the exchange control regulations in respect of the jurisdiction of the Reference Entity (a "**non-resident holder**") and subject to the same laws, rules and regulations applying to the Hedging Entity (as defined in General Condition 32.1), as determined by the Calculation Agent.

"**Inconvertibility Event**" means any action, event or circumstance whatsoever which, from a legal or practical perspective:

(a) has the direct or indirect effect of hindering, limiting or restricting the convertibility of the Reference Currency into the Base Currency, or the transfer of the Base Currency from the jurisdiction of the Reference Entity to other countries (including, without limitation, by way of any delays, increased costs or discriminatory rates of exchange or any current or future restrictions on conversion or repatriation of the Reference Currency into the Base Currency); or

(b) results in the unavailability of the Base Currency in the interbank foreign exchange market located in the jurisdiction of the Reference Entity in accordance with normal commercial practice; or

(c) results in the imposition of, or any change in, any exchange controls, capital restrictions or any other similar restrictions imposed by any monetary or other authority (however described) in the jurisdiction of the Reference Entity or any other relevant country.

"**Obligation Acceleration**" means any amount payable in respect of the Bond has become due and payable before it would otherwise have been due and payable as a result of, or on the basis of, the occurrence of a default, event of default or other similar condition or event (however described) under the terms of the Bond, other than a failure to make any required payment.

"**Optional Redemption Notice**" means, in respect of the occurrence of any Early Redemption Event, a notice of such Early Redemption Event from the Issuer (or the Calculation Agent on behalf of the Issuer) to the Holders, exercising the option to redeem the Securities early pursuant to such Early Redemption Event.

"**Reference Currency**" has the meaning given to it in FX Linked Provision 10 (*Definitions*)

"**Reference Entity**" means, in respect of a Bond, the issuer of such Bond as specified in the relevant Pricing Supplement or, if applicable, its Successor.

"**Repudiation/Moratorium**" means the occurrence of both of the following events:

(a) an authorised officer of the Reference Entity or a Governmental Authority (i) disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, the Bond, or (ii) declares or imposes a moratorium, standstill, roll-over or deferral, whether de facto or de jure, with respect to the Bond; and

(b) a Failure to Pay or a Restructuring occurs in respect of the Bond on or prior to the later of (i) the date that is 60 days after the occurrence of an event described in paragraph (a) above, and (ii) the first payment date under the Bond following the occurrence of an event described in

paragraph (a), taking into account any grace period applicable to the terms of the Bond as of the Trade Date.

"**Residual Risk Event**" means the occurrence of any event, action or circumstance whatsoever which:

(a) results in a Hypothetical Broker Dealer receiving less than the full value of any principal, interest or other amounts due on, or sale proceeds in respect of, the Bond on the date such amounts are due; or

(b) affects in any way the cost to a Hypothetical Broker Dealer of acquiring, holding or redeeming the Bond, or of hedging, directly or indirectly, the obligations of the Issuer in respect of the Securities, or of converting any amount of the Reference Currency into the Base Currency (or any other freely convertible and transferable currency) or vice versa.

"**Restructuring**" means, in respect of the Bond, any one or more of the following events occurs in a form that binds all holders of the Bond, is agreed between the Reference Entity or a Governmental Authority and a sufficient number of holders of the Bond to bind all holders of the Bond or is announced (or otherwise decreed) by the Reference Entity or a Governmental Authority in a form that binds all holders of such Bond (including, in each case, by way of an exchange), and such event is not expressly provided for under the terms of the Bond in effect as of the Trade Date:

(a) a reduction in the rate or amount of interest payable or the amount of scheduled interest accruals (including by way of redenomination);

(b) a reduction in the amount of principal or premium payable at redemption (including by way of redenomination);

(c) a postponement or other deferral of a date or dates for either (i) the payment or accrual of interest or (ii) the payment of principal or premium;

(d) a change in the ranking in priority of payment of the Bond, causing the subordination of the Bond to any other obligation of the Reference Entity; or

(e) any change in the currency of any payment of interest, principal or premium to any currency other than the lawful currency of Canada, Japan, Switzerland, the United Kingdom and the United States of America and the euro and any successor currency to any of the aforementioned currencies (which in the case of the euro, shall mean the currency which succeeds to and replaces the euro in whole).

Notwithstanding the foregoing, none of the following shall constitute a Restructuring:

(i) the occurrence of, agreement to or announcement of any of the events described in paragraphs (a) to (d) due to an administrative adjustment, accounting adjustment or tax adjustment or other technical adjustment occurring in the ordinary course of business; and

(ii) the occurrence of, agreement to or announcement of any of the events described in paragraphs (a) to (d) in circumstances where such event does not directly or indirectly result from a deterioration in the creditworthiness or financial condition of the Reference Entity.

If an exchange has occurred, the determination as to whether one of the events described under clauses (a) to (e) has occurred will be based on a comparison of the terms of the Bond immediately prior to such exchange and the terms of the resulting obligations immediately following such exchange.

"**Sanction Event**" means, in the opinion of the Calculation Agent, that any Reference Entity or Bond has become the subject or target of Sanctions that restrict or prevent the Issuer, the Hedging Entity, the Guarantor (if applicable), or any other entity in JPMorgan Chase that is involved in or otherwise acts in connection with the Securities or the related hedging transactions or positions (or the relevant employees of each such entity) from entering into, holding, unwinding or providing services with respect to the hedging transactions or positions related to the Securities or restrict the Issuer's or any of the Issuer's affiliates' ability to make payments due under the Securities or to comply with other obligations under the Securities, as determined by the Calculation Agent in its sole discretion.

"**Sanctions**" means any sanctions administered or enforced by the United States government as at the applicable time (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury ("**OFAC**") or the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person"), the United Nations Security Council ("**UNSC**"), or the European Union or Her Majesty's Treasury of the United Kingdom ("**HMT**"), or any other sanctions specified as such in the relevant Pricing Supplement.

"**Settlement/Custodial Event**" means that the custodian used by a Hypothetical Broker Dealer in respect of the Bond:

(a) is dissolved, becomes insolvent or is unable to pay its debts as they become due, makes a general assignment, arrangement or composition with or for the benefit of its creditors, institutes or has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any law, has a secured party take possession of all or substantially all its assets, or takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts; or

(b) fails, for any reason, to do one or more of the following:

(i) deliver or credit any amount denominated in the Reference Currency, or any Bond owned by such Hypothetical Broker Dealer, to the account of such Hypothetical Broker Dealer as instructed by such Hypothetical Broker Dealer;

(ii) deliver any amount denominated in the Reference Currency to a third party when requested to do so by such Hypothetical Broker Dealer;

(iii) surrender any Bond owned by such Hypothetical Broker Dealer when requested to do so by such Hypothetical Broker Dealer;

(iv) purchase or sell any Bond or take any other action when instructed to do so by such Hypothetical Broker Dealer; or

(v) perform in a full and timely manner all of its obligations to such Hypothetical Broker Dealer under any custodial or similar arrangements entered into by such Hypothetical Broker Dealer at any time in relation to the Bond (which shall include, for the avoidance of doubt, a repudiation or termination of any such arrangements without the prior consent of such Hypothetical Broker Dealer).

"**Sovereign Event**" means the government of the Reference Entity, its agencies, instrumentalities or entities by means of any law, regulation, ruling, directive or interpretation, whether or not having the force of law, at any time takes any action which legally or de facto results in or will result in the non-payment of the Bond in accordance with its original terms.

"**Sovereign Withholding Tax**" means, as of the Trade Date, any relevant withholding tax in respect of a Reference Entity that will be deducted from all payments under the Securities to Holders, as applicable.

"**Successor**" means any direct or indirect successor to the Reference Entity irrespective of whether such successor assumes any of the obligations of the Reference Entity, as determined by the Calculation Agent.

"**Tax Event**" means the occurrence of any of the following events:

(a) (i) the enactment, promulgation, execution, ratification or adoption of, or any change in or amendment to, any rule, law, regulation or statute (or in the applicability or official interpretation of any rule, law, regulation or statute) by any taxing authority of the Reference Entity or any Governmental Authority, (ii) the issuance of any order or decree relating to taxation by any Governmental Authority, (iii) any action being taken by a taxing authority in the jurisdiction of the Reference Entity or (iv) the occurrence of any other act or event at any time relating to withholding or deduction for or on account of tax in relation to the Bond, which (in the case of (i), (ii), (iii) or (iv) above) will adversely affect the economic value of the Securities and/or related hedging arrangements of the Issuer (or any of its agents or affiliates);

(b) the imposition of or an adverse change in (compared to the relevant position as of the Trade Date) any taxes on the transfer of the Base Currency out of the jurisdiction of the Reference Entity;

(c) the imposition of any additional taxes on debt of the Reference Entity issued in the jurisdiction of the Reference Entity; or

(d) the imposition of or an adverse change in (compared to the relevant position as of the Trade Date) any taxes on any conversion of the Reference Currency into the Base Currency or vice-versa.

"**Trade Date**" means the date specified as such in the relevant Pricing Supplement.

APPENDIX 1 - PROVISIONS REGARDING RESOLUTIONS OF HOLDERS OF GERMAN SECURITIES

The following provisions regarding resolutions of Holders constitute part of the Conditions of German Securities. See General Condition 24.1(e) (Modification of German Securities with Holder Consent)

Part A
PROVISIONS APPLICABLE TO RESOLUTIONS TO BE PASSED AT MEETINGS OF HOLDERS

§ 1
Convening the Meeting of Holders

1. Meetings of Holders (each a "**Holders' Meeting**") shall be convened by the Issuer or by the Joint Representative. A Holders' Meeting must be convened if one or more Holders holding together not less than 5 per cent. of the outstanding Securities so require in writing, stating that they wish to appoint or remove a Joint Representative, that pursuant to section 5 paragraph 5, sentence 2 of the German Bond Act of 2009 (*Schuldverschreibungsgesetz*) a notice of termination ceases to have effect or that they have another specific interest in having a Holders' Meeting convened.

2. Holders whose legitimate request is not fulfilled may apply to the competent court to authorise them to convene a Holders' Meeting. The court may also determine the chairman of the meeting. Any such authorisation must be disclosed in the publication of the Convening Notice.

3. The competent court shall be the local court (*Amtsgericht*) in Frankfurt am Main. The decision of the court may be appealed.

4. The Issuer shall bear the costs of the Holders' Meeting and, if the court has granted leave to the application pursuant to subsection 2 above, also the costs of such proceedings.

§ 2
Notice Period, Registration, Proof

1. A Holders' Meeting shall be convened not less than 14 days before the date of the meeting.

2. If the Convening Notice provide(s) that attendance at a Holders' Meeting or the exercise of the voting rights shall be dependent upon a registration of the Holders before the meeting, then for purposes of calculating the period pursuant to subsection 1 the date of the meeting shall be replaced by the date by which the Holders are required to register. The registration notice must be received at the address set forth in the Convening Notice no later than on the third day before the Holders' Meeting.

3. The Convening Notice shall provide what proof is required to be entitled to take part in the Holders' Meeting. Unless otherwise provided in the Convening Notice, for Securities represented by a Global Security a voting certificate obtained from an agent to be appointed by the Issuer shall entitle its bearer to attend and vote at the Holders' Meeting. A voting certificate may be obtained by a Holder if at least six days before the time fixed for the Holders' Meeting, such Holder (a) deposits its Securities for such purpose with an agent to be appointed by the Issuer or to the order of such agent with a Custodian or other depository nominated by such agent for such purpose or (b) blocks its Securities in an account with a Custodian in accordance with the procedures of the Custodian and delivers a confirmation stating the ownership and blocking of its Securities to the agent of the Issuer. The voting certificate shall be dated and shall specify the Holders' Meeting concerned and the total number, the outstanding amount and the serial numbers (if any) of the Securities either deposited or blocked in an account with the Custodian. The Convening Notice may also require a proof of identity of a person exercising a voting right. Once the relevant agent of the Issuer has issued a voting certificate for a Holders' Meeting in respect of a Security, the Securities shall neither be released nor permitted to be transferred until either such Holders' Meeting has been concluded or the voting certificate has been surrendered to the relevant agent of the Issuer. "**Custodian**" means any bank or other financial institution of recognised standing authorised to engage in securities custody business

with which the Holder maintains a securities account in respect of the Securities and includes the Relevant Clearing System.

§ 3
Contents of the Convening Notice, Publication

1. The notice convening a Holders' Meeting (the "**Convening Notice**") shall state the name, the place of the registered office of the Issuer, the time and venue of the Holders' Meeting, and the conditions on which attendance in the Holders' Meeting and the exercise of voting rights is made dependent, including the matters referred to in § 2 paragraphs 2 and 3.

2. The Convening Notice shall be published promptly in the Federal Gazette (*Bundesanzeiger*) and additionally in accordance with the General Condition 27 (*Notices*). The costs of publication shall be borne by the Issuer.

3. From the date on which the Holders' Meeting is convened until the date of the Holders' Meeting, the Issuer shall make available to the Holders, on the Issuer's website the Convening Notice and the precise conditions on which the attendance of the Holders' Meeting and the exercise of voting rights shall be dependent.

§ 4
Agenda

1. The person convening the Holders' Meeting shall make a proposal for resolution in respect of each item on the agenda to be passed upon by the Holders.

2. The agenda of the Holders' Meeting shall be published together with the Convening Notice. § 3 paragraphs 2 and 3 shall apply *mutatis mutandis*. No resolution may be passed on any item of the agenda which has not been published in the prescribed manner.

3. One or more Holders holding together not less than 5 per cent. of the outstanding Securities may require that new items are published for resolution. § 1 paragraphs 2 to 4 shall apply *mutatis mutandis*. Such new items shall be published no later than the third day preceding the Holders' Meeting.

4. Any counter motion announced by a Holder before the Holders' Meeting shall promptly be made available by the Issuer to all Holders up to the day of the Holders' Meeting on the Issuer's website.

§ 5
Proxy

1. Each Holder may be represented at the Holders' Meeting by proxy. Such right shall be set out in the Convening Notice regarding the Holders' Meeting. The Convening Notice shall further specify the prerequisites for valid representation by proxy.

2. The power of attorney and the instructions given by the principal to the proxy holder shall be made in text form (*Textform*). If a person nominated by the Issuer is appointed as proxy, the relevant power of attorney shall be kept by the Issuer in a verifiable form for a period of three years.

§ 6
Chair, Quorum

1. The person convening the Holders' Meeting shall chair the meeting unless another chairman has been determined by the court.

2. In the Holders' Meeting the chairman shall prepare a roster of Holders present or represented by proxy. Such roster shall state the Holders' names, their registered office or place of residence as well as the number of voting rights represented by each Holder. Such roster shall be signed by the chairman of the meeting and shall promptly be made available to all Holders.

3. A quorum shall be constituted for the Holders' Meeting if the persons present represent by value not less than 50 per cent. of the outstanding Securities. If it is determined at the meeting that no quorum exists, the chairman may convene a second meeting for the purpose of passing a new resolution. Such second meeting shall require no quorum. For those resolutions the valid adoption of which requires a qualified majority, the persons present at the meeting must represent not less than 25 per cent. of the outstanding Securities. Securities for which voting rights are suspended shall not be included in the outstanding Securities.

§ 7
Information Duties, Voting, Minutes

1. The Issuer shall be obliged to give information at the Holders' Meeting to each Holder upon request in so far as such information is required for an informed judgment regarding an item on the agenda or a proposed resolution.

2. The provisions of the German Stock Corporation Act (*Aktiengesetz*) regarding the voting of shareholders at general meetings shall apply *mutatis mutandis* to the casting and counting of votes, unless otherwise provided for in the Convening Notice.

3. In order to be valid each resolution passed at the Holders' Meeting shall be recorded in minutes of the meeting. If the Holders' Meeting is held in Germany, the minutes shall be recorded by a notary. If a Holders' Meeting is held abroad, it must be ensured that the minutes are taken in form and manner equivalent to minutes taken by a notary. Section 130 paragraphs 2 to 4 of the German Stock Corporation Act (*Aktiengesetz*) shall apply *mutatis mutandis*. Each Holder present or represented by proxy at the Holders' Meeting may request from the Issuer, for up to one year after the date of the meeting, a copy of the minutes and any annexes.

§ 8
Publication of Resolutions

1. The Issuer shall at its expense cause publication of the resolutions passed in appropriate form.

2. In addition, the Issuer shall make available to the public the resolutions passed and, if the resolutions amend the Conditions, the wording of the original Conditions, for a period of not less than one month commencing on the day following the date of the Holders' Meeting. Such publication shall be made on the Issuer's website.

§ 9
Insolvency Proceedings in Germany

1. If insolvency proceedings have been instituted over the assets of the Issuer in Germany, then any resolutions of Holders shall be subject to the provisions of the German Insolvency Code (*Insolvenzordnung*), unless otherwise provided for in the provisions set out below. Section 340 of the German Insolvency Code (*Insolvenzordnung*) shall remain unaffected.

2. The Holders may by majority resolution appoint a Joint Representative to exercise their rights jointly in the insolvency proceedings. If no Joint Representative has been appointed, the insolvency court shall convene a Holders' Meeting for this purpose in accordance with the provisions of the German Bond Act of 2009 (*Schuldverschreibungsgesetz*) and the provisions set out in this Appendix.

3. The Joint Representative shall be obliged and exclusively entitled to assert the rights of the Holders in the insolvency proceedings. The Joint Representative need not present the debt instrument.

4. In any insolvency plan, the Holders shall be offered equal rights.

5. The insolvency court shall cause that any publications pursuant to the provisions of the German Bond Act of 2009 (*Schuldverschreibungsgesetz*) are published additionally in the internet on the website prescribed in section 9 of the German Insolvency Code (Insolvenzordnung).

6. If the Issuer includes claims under the Securities in an instrument within the stabilisation and restructuring framework under the Act on the Stabilisation and Restructuring of Businesses (*Unternehmensstabilisierungs- und -restrukturierungsgesetz*), the foregoing paragraphs will apply accordingly.

§ 10
Action to set aside Resolutions

1. An action to set aside a resolution of Holders may be filed on grounds of a breach of law or of the Conditions. A resolution of Holders may be subject to an action to set aside by a Holder on grounds of inaccurate, incomplete or denied information only if the furnishing of such information was considered to be essential in the reasonable judgement of such Holder for its voting decision.

2. An action to set aside a resolution may be brought by:

(a) any Holder who has taken part in the vote and has raised an objection against the resolution in the time required, provided that such Holder has acquired the Security before the publication of the Convening Notice for the Holders' Meeting or before the call to vote in a voting without a meeting;

(b) any Holder who did not take part in the vote, provided that his exclusion from voting was unlawful, the meeting had not been duly convened, the voting had not been duly called for, or if the subject matter of a resolution had not been properly notified.

3. The action to set aside a resolution passed by the Holders is to be filed within one month following the publication of such resolution. The action shall be directed against the Issuer. The court of exclusive jurisdiction shall be the Regional Court (*Landgericht*) of Frankfurt am Main. Section 246 paragraph 3 sentences 2 to 6 of the German Stock Corporation Act (*Aktiengesetz*) shall apply *mutatis mutandis*. A resolution which is subject to court action may not be implemented until the decision of the court has become *res judicata*, unless a senate of the Higher Regional Court (*Oberlandesgericht*) of the appropriate instance superior to the court competent pursuant to sentence 3 above rules, pursuant to section 246a of the German Stock Corporation Act (*Aktiengesetz*), upon application of the Issuer that the filing of such action to be set aside does not impede the implementation of such resolution. Section 246a, paragraph 1 sentences 1 and 2, paragraphs 2 and 3 sentences 1 to 4 and 6, and paragraph 4 of the German Stock Corporation Act (*Aktiengesetz*) shall apply *mutatis mutandis*.

§ 11
Implementation of Resolutions

1. Resolutions passed by the Holders' Meeting which amend or supplement the contents of the Conditions shall be implemented by supplementing or amending the relevant Global Security. If the Global Security is held with a securities depository, the chairman of the meeting or the person presiding over the taking of votes shall to this end transmit the resolution passed and recorded in the minutes to the securities depository requesting it to attach the documents submitted to the existing documents in an appropriate manner. The chairman or the person presiding over the taking of votes shall confirm to the securities depository that the resolution may be implemented.

2. The Joint Representative may not exercise any powers or authorisations granted to it by resolution for as long as the underlying resolution may not be implemented.

Part B
PROVISIONS APPLICABLE TO RESOLUTIONS TO BE PASSED BY VOTES OF HOLDERS WITHOUT MEETINGS

Taking of Votes without Meeting

1. §§ 1 to 11 of Part A shall apply *mutatis mutandis* to the taking of votes without a meeting, unless otherwise provided in paragraphs 2 to 6 below.

2. The voting shall be conducted by the person presiding over the taking of votes. Such person shall be a notary appointed by the Issuer, or the Joint Representative if the latter has called for the taking of votes, or a person appointed by the court. § 1 paragraph 2 sentence 2 of Part A shall apply *mutatis mutandis*.

3. The call for the taking of votes shall specify the period within which votes may be cast. Such period shall not be less than 72 hours. During such period, the Holders may cast their votes in text form (*Textform*) to the person presiding over the taking of votes. The Convening Notice may provide for other forms of casting votes. The call for the taking of votes shall give details as to the prerequisites which must be met for the votes to qualify for being counted.

4. The person presiding over the taking of votes shall determine the entitlement to vote on the basis of proof presented and shall prepare a roster of the Holders entitled to vote. If a quorum does not exist, the person presiding over the taking of votes may convene a Holders' Meeting. Such meeting shall be deemed to be a second meeting within the meaning of § 6 paragraph 3 sentence 3 of Part A. Minutes shall be taken of each resolution passed. § 7 paragraph 3 sentences 2 and 3 of Part A shall apply *mutatis mutandis*. Each Holder who has taken part in the vote may request from the Issuer, for up to one year following the end of the voting period, a copy of the minutes and any annexes.

5. Each Holder who has taken part in the vote may object in writing to the result of the vote within two weeks following the publication of the resolutions passed. The objection shall be decided upon by the person presiding over the taking of votes. If he remedies the objection, he shall promptly publish the result. § 8 of Part A shall apply *mutatis mutandis*. If the person presiding over the taking of votes does not remedy the objection, he shall promptly inform the objecting Holder in writing.

6. The Issuer shall bear the costs of a vote taken without meeting and, if the court has granted leave to the application pursuant to § 1 paragraph 2 of Part A, also the costs of such proceedings.

APPENDIX 2 – USD LIBOR BENCHMARK TRANSITION EVENT APPENDIX

The provisions of this USD LIBOR Benchmark Transition Event Appendix apply in the circumstances set out in General Condition 4.2(c)(ii) (*USD LIBOR Benchmark Transition Event*), General Condition 8.3(c)(ii) (*USD LIBOR Benchmark Transition Event*) and Rate Linked Provision 1 (*Rate Linked Fallbacks – USD LIBOR Benchmark Transition Event*), as applicable.

1. *Benchmark Replacement*: If the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any determination of the relevant Benchmark Rate on any date for the purposes of the determination of the Rate of Interest, Floating Rate Coupon or other variable or amount under the Conditions that depends on the determination of the Benchmark Rate, the Benchmark Replacement will replace the then-current Benchmark Rate for all purposes relating to the Securities during the applicable Interest Period or Floating Rate Coupon Period or other applicable period or date(s), as the case may be, in respect of such determination on such date and all determinations on all subsequent dates under the Securities.

2. *Benchmark Replacement Conforming Changes*: In connection with the implementation of a Benchmark Replacement, the Issuer or the Calculation Agent may make Benchmark Replacement Conforming Changes from time to time.

3. For the purposes of this USD LIBOR Benchmark Transition Event Appendix only, unless the context otherwise requires, the following terms shall have the respective meanings set out below:

   "**Benchmark Rate**" means, initially, USD LIBOR of the appropriate tenor; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to USD LIBOR or the then-current Benchmark Rate, then "Benchmark Rate" means the applicable Benchmark Replacement.

   "**Benchmark Replacement**" means the Interpolated Benchmark with respect to the then-current Benchmark Rate, plus the Benchmark Replacement Adjustment for such Benchmark Rate; provided that if the Calculation Agent cannot determine the Interpolated Benchmark as of the Benchmark Replacement Date, then "Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Calculation Agent as of the Benchmark Replacement Date:

   (a) the sum of: (i) Term SOFR and (ii) the Benchmark Replacement Adjustment;

   (b) the sum of: (i) Compounded SOFR and (ii) the Benchmark Replacement Adjustment;

   (c) the sum of: (i) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark Rate for the applicable Corresponding Tenor and (ii) the Benchmark Replacement Adjustment;

   (d) the sum of: (i) the ISDA Fallback Rate and (ii) the Benchmark Replacement Adjustment;

   (e) the sum of: (i) the alternate rate of interest that has been selected by the Issuer or the Calculation Agent as the replacement for the then-current Benchmark Rate for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark Rate for U.S. dollar-denominated floating rate notes at such time and (ii) the Benchmark Replacement Adjustment.

   "**Benchmark Replacement Adjustment**" means the first alternative set forth in the order below that can be determined by the Calculation Agent as of the Benchmark Replacement Date:

   (a) the spread adjustment (which may be a positive or negative value or zero), or method for calculating or determining such spread adjustment, that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;

(b) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment;

(c) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer or the Calculation Agent giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark Rate with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time.

"**Benchmark Replacement Conforming Changes**" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including without limitation changes to the definition of "Interest Period", "Floating Rate Coupon Period" or "Interest Determination Date" or other applicable periods and dates, as the case may be, timing and frequency of determining rates and making payments of interest or coupon, rounding of amounts or tenors, the introduction of any time delay or lag between the calculation or observation period of a rate and the related payment dates and other administrative matters) that the Calculation Agent determines is appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Calculation Agent determines that adoption of any portion of such market practice is not administratively feasible or if the Calculation Agent determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Calculation Agent determines is reasonably necessary).

"**Benchmark Replacement Date**" means the earliest to occur of the following events with respect to the then-current relevant Benchmark Rate:

(a) in the case of paragraph (a) or (b) of the definition of "Benchmark Transition Event", the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the Benchmark Rate permanently or indefinitely ceases to provide the Benchmark Rate; or

(b) in the case of paragraph (c) of the definition of "Benchmark Transition Event", the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the Benchmark Rate ceases to be representative by reference to the most recent public statement or publication of information referenced therein or, if earlier, the date the Benchmark Rate is no longer provided.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

"**Benchmark Transition Event**" means the occurrence of one or more of the following events with respect to the then-current Benchmark Rate:

(a) a public statement or publication of information by or on behalf of the administrator of the Benchmark Rate announcing that such administrator has ceased or will cease to provide the Benchmark Rate, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate;

(b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate, the central bank for the currency of the Benchmark Rate, an insolvency official with jurisdiction over the administrator for the Benchmark Rate, a resolution authority with jurisdiction over the administrator for the Benchmark Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark Rate, which states that the administrator of the Benchmark Rate has ceased or will cease to provide the Benchmark Rate permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate; or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate announcing that the Benchmark Rate is no longer representative, or as of a specified future date will no longer be capable of being representative, of the market or economic reality that such Benchmark Rate is intended to measure.

"**Compounded SOFR**" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate being established by the Issuer or the Calculation Agent in accordance with:

(a) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:

(b) if, and to the extent that, the Issuer or the Calculation Agent determines that Compounded SOFR cannot be determined in accordance with clause (a) above, then the rate, or methodology for this rate, and conventions for this rate that have been selected by it giving due consideration to any industry-accepted market practice for U.S. dollar-denominated floating rate notes at such time.

"**Corresponding Tenor**" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark Rate.

"**Federal Reserve Bank of New York's Website**" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source. Information contained in the Federal Reserve Bank of New York's Website is not incorporated by reference in, and should not be considered part of, this Offering Circular.

"**Interpolated Benchmark**" with respect to the Benchmark Rate means the rate determined for the Corresponding Tenor by interpolating on a linear basis between: (1) the Benchmark Rate for the longest period (for which the Benchmark Rate is available) that is shorter than the Corresponding Tenor and (2) the Benchmark Rate for the shortest period (for which the Benchmark Rate is available) that is longer than the Corresponding Tenor.

"**ISDA Fallback Adjustment**" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the Relevant ISDA Definitions to be determined in relation to the occurrence of an index cessation event with respect to the Benchmark Rate for the applicable tenor.

"**ISDA Fallback Rate**" means the rate that would apply for derivatives transactions referencing the Relevant ISDA Definitions to be effective in relation to the occurrence of an index cessation event with respect to the Benchmark Rate for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

"**Reference Time**" with respect to any determination of the Benchmark Rate means (1) if the Benchmark Rate is USD LIBOR, 11:00 a.m. (London time) on the relevant Interest Determination Date or Floating Rate Coupon Determination Date, as the case may be, and (2) if the Benchmark Rate is not USD LIBOR, the time determined by the Calculation Agent in accordance with the Benchmark Replacement Conforming Changes.

"**Relevant Governmental Body**" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"**Relevant ISDA Definitions**" means any of (i) the 2006 ISDA Definitions or (ii) the 2021 Definitions or (iii) any successor definitional booklet to the 2006 Definitions or the 2021 Definitions for interest rate derivatives published from time to time.

"**SOFR**" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"**Term SOFR**" means the forward-looking term rate for the applicable Corresponding Tenor based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"**Unadjusted Benchmark Replacement**" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

"**USD LIBOR**" means the London inter-bank offered rate for deposits in USD.

APPENDIX 3 – SWISS PRODUCT DESCRIPTION

The following product descriptions are only relevant to Securities that (i) are publicly offered in Switzerland and do not fall within an exemption from the prospectus requirements under the FinSA or (ii) are to be listed on a trading venue in Switzerland ("**Swiss Non-Exempt Public Offers**").

Product Description

A. General Information about the Securities

The below listed product categories and products features are based on the categories and additional product features used in the "SSPA Swiss Derivatives Map 2022" issued by the Swiss Structured Products Association SSPA (see https://www.sspa.ch/en). The product categories and products features are not universal and, in different markets and jurisdictions, different products categories and product features may be used for the same product.

Each Security issued under this Offering Circular will be linked to one or more underlying assets, which may be a share or a depositary receipt, a share index, a commodity, a commodity index, a foreign exchange rate, a fund (regulated or unregulated, mutual, exchange traded tracker or hedge), the credit of a specified entity or entities, a consumer price or other inflation index, an interest rate, or constant maturity swap rate or any other rate, a loan or bond or other debt obligation or certificate, a basket of the above or any combination of any of the above or other types of reference asset(s) (each an "**Underlying Asset**" and together, the "**Underlying Assets**"). The performance of the Securities will depend to some degree on the performance of such Underlying Asset.

Securities issued under this Offering Circular may have characteristics which partially or significantly deviate from those of the main product categories described in the following.

For additional information and a more detailed explanation of the products, including calculation examples, investors should consult the website www.sspa.ch/en (or any successor or replacement address thereto). Investors further should be aware that the SSPA categorization model may be changed from time to time by the SSPA without further notice. The Issuer has no obligation to update or supplement this Offering Circular in case of such a change in the SSPA categorization model.

B. Product categories

The main categories of Securities that may be issued under this Offering Circular are described in the following. The Issuer is free to modify the Securities issued under this Offering Circular by adding additional product features. Additional information on the Securities, including a description of the particular Securities will be included in the relevant Pricing Supplement.

Capital Protection Products (SSPA Category 11)

- Capital Protection Note with Participation (formerly known as: "Capital Protection Certificate with Participation") (SSPA Category 1100)
- Capital Protection Note with Barrier (formerly known as: "Barrier Capital Protection Certificate") (SSPA Category 1130)
- Capital Protection Note with Twin-Win (formerly known as: "Capital Protection Certificate with Twin Win") (SSPA Category 1135)
- Capital Protection Note with Coupon (formerly known as: "Capital Protection Certificate with Coupon") (SSPA Category 1140)

Yield Enhancement Products (SSPA Category 12)

- Discount Certificate (SSPA Category 1200)
- Barrier Discount Certificate (SSPA Category 1210)
- Reverse Convertible (SSPA Category 1220)
- Barrier Reverse Convertible (SSPA Category 1230)
- Conditional Coupon Reverse Convertible (formerly known as: "Express Certificate without Barriers") (SSPA Category 1255)

- Conditional Coupon Barrier Reverse Convertible (formerly known as: "Express-Barrier Certificates") (SSPA Category 1260)

Participation Products (SSPA Category 13)
- Tracker Certificate (SSPA Category 1300)
- Outperformance Certificate (SSPA Category 1310)
- Bonus Certificate (SSPA Category 1320)
- Bonus Outperformance Certificate (SSPA Category 1330)
- Twin-Win Certificate (SSPA Category 1340)
- Airbag Certificate
- Buy-the-Dip Certificate

Investment Products with Additional Credit Risk (formerly known as "Products with Reference Entities") (SSPA Category 14)
- Credit Linked Notes (SSPA Category 1400)
- Conditional Capital Protection Note with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Conditional") (SSPA Category 1410)
- Yield Enhancement Certificate with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Yield Enhancement") (SSPA Category 1420)
- Participation Certificate with Additional Credit Risk (formerly known as: "Reference Entity Certificate with Participation") (SSPA Category 1430)

Leverage Products (SSPA Category 20)
- Warrant (SSPA Category 2100)
- Spread Warrant (SSPA Category 2110)
- Warrant with Knock-Out (SSPA Category 2200)
- Mini-Future (SSPA Category 2210)
- Constant Leverage Certificate (SSPA Category 2300)

Other Products
- Accummulator Securities

For a more detailed explanation of the products, including calculation examples, investors should contact their relationship manager and/or professional advisor.

C. Description of certain product features

Securities issued under this Offering Circular may provide for one or more of the following product features.

AMC	Actively Managed Certificates. These Securities are based on a dynamic strategy. The composition of the underlying basket may be altered during the lifetime of the Securities depending on the predefined investment guidelines (discretionary or rule based).
Asian Option	Uses the average price of the Underlying Asset over a number of predefined periods (monthly, quarterly, annually) rather the price at a specific time.
Autocallable	If, on an observation day, the price of the Underlying Asset is either on or above (bull) or on or below (bear) a previously defined barrier ("**autocall trigger**"), the product is redeemed prior to maturity.
Bearish; with a bear feature	The Security benefits from falling prices of the Underlying Asset.

Best-of	The return of the Securities depends on the performance of the best performing Underlying Asset.
Bullish; with a bull feature	The Security benefits from rising prices of the Underlying Asset.
Callable	The Issuer has the right to cancel early, however, there is no obligation to do so.
Capped participation	The Security has a maximum yield.
Conditional coupon	A scenario exists where the coupon is not repaid (coupon at risk) or an unpaid coupon can be recouped at a later date (memory coupon).
European barrier	Only the last day closing price is relevant for monitoring the barrier.
Floor	Represents the minimum amount which is redeemed at a product's expiry, independent of the performance of the Underlying Asset
Inverse	The Security performs in inverse proportion to the Underlying Asset.
Lock-in	If the lock-in level is reached, the minimum repayment is a preassigned amount regardless of the future development of the Underlying Asset price.
Look-back	Barrier and/or strike are set with a time delay (look-back phase).
Open-end	The Securities do not have a predetermined fixed maturity.
Partial Capital Protection	Capital protection is between 90% and 100% of the nominal value.
Participation	This indicates to what proportion the investor profits from the price performance of the Underlying Asset. This can be 1:1, over- or underproportional.
Puttable	The investor has the right to return the Security to the Issuer on certain days during the term.
Variable Coupon	The coupon amount can vary depending on a predefined scenario.
Worst-of	The return of the Securities depends on the performance of the worst performing Underlying Asset.

The above list of product features is not exhaustive and a particular Security may have other product features.

D. Explanation of mechanism of certain product types

1. Capital Protection Products (SSPA Category 11)

"Capital Protection Products" are primarily targeted at investors that (i) expect the value of the Underlying Asset to increase (or, in the case of "Capital Protection Products" with a bear feature, to decrease) but (ii) cannot exclude a sharp decrease (or, in the case of "Capital Protection

Products" with a bear feature, a sharp increase) of the value of the Underlying Asset throughout the term of such "Capital Protection Products".

"Capital Protection Products" provide for a specific minimum redemption amount. The level of the minimum redemption amount representing the level of capital protection indicates the percentage of the nominal or par value of the "Capital Protection Product" that the investor will be entitled to at the settlement date. The Issuer sets it at the time of the issuance and it applies only at the end of the term or at maturity. The Issuer may set the level of the minimum redemption amount representing the level of capital protection below 100% of the nominal or par value of the "Capital Protection Products" (partial capital protection). Capital protection therefore does not mean that the investor is entitled to a redemption amount equal to the full nominal or par value of the "Capital Protection Products". The potential loss is limited by the minimum redemption amount, subject to the credit risk of the Issuer.

The product category "Capital Protection Products" includes in particular the following product types:

(a) Capital Protection Notes with Participation (formerly known as: "Capital Protection Certificates with Participation") (SSPA Category 1100)

"Capital Protection Notes with Participation" are primarily targeted at investors that (i) expect the value of the Underlying Asset and its volatility to increase (or, in the case of "Capital Protection Notes with Participation" with a bear feature, the value of the Underlying Asset to decrease) but (ii) consider a sharp decrease of the value of the Underlying Asset to be possible (or, in the case of "Capital Protection Notes with Participation" with a bear feature, a sharp increase of the value of the Underlying Asset).

"Capital Protection Notes with Participation" allow investors to participate in the performance of the Underlying Asset. If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset has increased or, in case of "Capital Protection Notes with Participation" with a bear feature, decreased), the return will exceed the minimum redemption amount of the "Capital Protection Notes with Participation".

(b) Capital Protection Notes with Barrier (formerly known as: "Barrier Capital Protection Certificates") (SSPA Category 1130)

"Capital Protection Notes with Barrier" are primarily targeted at investors that (i) expect the value of the Underlying Asset to increase (or, in the case of "Capital Protection Notes with Barrier" with a bear feature the value of the Underlying Asset to decrease) but (ii) consider a sharp decrease of the value of the Underlying Asset to be possible (or, in the case of "Capital Protection Notes with Barrier" with a bear feature, a sharp increase of the value of the Underlying Asset) and (iii) expect that the value of the Underlying Asset will not increase above (or, in case of "Capital Protection Notes with Barrier" with a bear feature, fall below) the specified barrier throughout the term of such "Capital Protection Notes with Barrier".

"Capital Protection Notes with Barrier" allow investors to participate in the performance of the Underlying Asset up (or, in case of "Barrier Capital Protection Certificates" with a bear feature, down) to such barrier. If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset has increased or, in case of "Barrier Capital Protection Certificates" with a bear feature, decreased), the return will exceed the minimum redemption amount of the "Barrier Capital Protection Certificates" but is limited by the level of the specified barrier. In case of a breach of such barrier, the redemption amount will be reduced but be at least equal to the minimum redemption amount.

(c) Capital Protection Notes with Twin-Win (formerly known as: "Capital Protection Certificates with Twin Win") (SSPA Category 1135)

"Capital Protection Notes with Twin-Win" are primarily targeted at investors that (i) expect the value of the Underlying Asset to slightly increase or fall but (ii) consider a sharp decrease of the value of the Underlying Asset to be possible and (iii) expect that the value of the Underlying Asset will not increase above a specified upper barrier and not fall below a specified lower barrier throughout the term of such "Capital Protection Notes with Twin-Win".

"Capital Protection Notes with Twin-Win" allow investors to participate in the absolute performance (positive as well as negative performance) of the Underlying Asset within the upper and lower barrier. If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset has increased or decreased but not breached either of the barriers), the return will exceed the minimum redemption amount of the "Capital Protection Notes with Twin-Win" but is limited by the level of the upper and lower barrier, respectively. In case of a breach of a barrier, the redemption amount will be reduced but be at least be equal to the minimum redemption amount.

(d) Capital Protection Notes with Coupon (formerly known as: "Capital Protection Certificates with Coupon") (SSPA Category 1140)

"Capital Protection Notes with Coupon" are primarily targeted at investors that (i) expect the value of the Underlying Asset to increase (or, in the case of "Capital Protection Notes with Coupon" with a bear feature, the value of the Underlying Asset to decrease) but (ii) consider a sharp decrease of the value of the Underlying Asset to be possible (or, in the case of "Capital Protection Notes with Coupon" with a bear feature, a sharp increase of the value of the Underlying Asset).

"Capital Protection Notes with Coupon" allow investors to participate in the performance of the Underlying Asset by receiving a periodic coupon payment. The amount of the coupon payment may be fixed or may be variable and depend on the value of the Underlying Asset at a specific date prior to each coupon payment date (variable coupon). In case of a variable coupon, the amount of the coupon payment increases (or, in case of "Capital Protection Notes with Coupon" with a bear feature, decreases) if the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset has increased or, in case of "Capital Protection Notes with Coupon" with a bear feature, decreased). In case of "Capital Protection Notes with Coupon" with a fixed coupon, the payment of the coupon may depend on the value of the Underlying Asset not breaching a specified barrier (coupon at risk). If such barrier is breached, the investor will not be entitled to a coupon payment on the relevant coupon payment date.

2. **Yield Enhancement Products (SSPA Category 12)**

"Yield Enhancement Products" are primarily targeted at investors that expect (i) the value of the Underlying Asset to remain constant or to slightly increase (or, in the case of "Yield Enhancement Products" with a bear feature, to slightly decrease) and (ii) volatility of the Underlying Asset to decrease, in each case, throughout the term of the "Yield Enhancement Products".

"Yield Enhancement Products" provide for a redemption amount that is limited to a maximum amount (cap) and may provide for (fixed or variable) periodic coupon payments during the term.

"Yield Enhancement Products" may be linked to several Underlying Assets and may therefore offer a larger discount or coupon than "Yield Enhancement Products" linked to just one Underlying Asset.

The product category "Yield Enhancement Products" includes in particular the following product types:

(a) Discount Certificates (SSPA Category 1200)

"Discount Certificates" are primarily targeted at investors that expect the value of the Underlying Asset to move sideways or to slightly increase (or, in the case of "Discount

Certificates" with a bear feature to move sideways or to slightly decrease), with falling volatility.

"Discount Certificates" are issued at a discount, i.e. a discount compared to a direct investment in the Underlying Asset. The redemption amount depends on the value of the Underlying Asset at redemption. If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset at redemption is above or, in case of "Discount Certificates" with a bear feature, below) the specified strike price (typically the initial value of the Underlying Asset), the redemption amount will be equal to such strike price.

(b) Barrier Discount Certificates (SSPA Category 1210)

"Barrier Discount Certificates" are primarily targeted at investors that expect the value of the Underlying Asset (i) to remain constant or to slightly increase (or, in the case of "Barrier Discount Certificates" with a bear feature, to slightly decrease), with falling volatility, and (ii) not to fall below (or, in case of "Barrier Discount Certificates" with a bear feature, rise above) the specified barrier throughout the term of the "Barrier Discount Certificates".

"Barrier Discount Certificates" are issued at a discount, i.e. a discount compared to a direct investment in the Underlying Asset and provide for a conditional minimum redemption amount (i.e., the redemption amount is at least equal to, generally, 100% of the nominal or par value of the "Barrier Discount Certificates" if the specified barrier is not breached during the term of the "Barrier Discount Certificates").

If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset did not fall below or, in case of "Barrier Discount Certificates" with a bear feature, rise above) the specified barrier throughout the term of the "Barrier Discount Certificates" or, if the barrier is breached, the value of the Underlying Assets at redemption is at or above (or, in case of "Barrier Discount Certificates" with a bear feature, below) the specified strike price (typically the initial value of the Underlying Asset), the redemption amount will be equal to such strike price.

In contrast to "Discount Certificates" (SSPA Category 1200), the probability of receiving the maximum redemption amount under "Barrier Discount Certificates" is higher due to the conditional protection provided by the barrier, although the discount at which they are issued is generally smaller and therefore the return on an investment in "Barrier Discount Certificates" generally lower.

(c) Reverse Convertibles (SSPA Category 1220)

"Reverse Convertibles" are primarily targeted at investors that expect (i) the value of the Underlying Asset to move sideways or to slightly increase (or, in the case of "Reverse Convertibles" with a bear feature to move sideways or to slightly decrease) and (ii) falling volatility.

"Reverse Convertibles" allow investors to benefit from an enhanced return by receiving a periodic coupon payment. The redemption amount depends on the value of the Underlying Asset at the end of the term of the "Reverse Convertibles". If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset at redemption is above (or, in case of "Reverse Convertibles" with a bear feature, below) the specified strike price (typically the initial value of the Underlying Asset)), the redemption amount will be equal to such strike price.

(d) Barrier Reverse Convertibles (SSPA Category 1230)

"Barrier Reverse Convertibles" are primarily targeted at investors that expect the value of the Underlying Asset (i) to remain constant or to slightly increase (or, in the case of "Barrier Reverse Convertibles" with a bear feature, to slightly decrease), with falling volatility, and (ii) not to fall below (or, in case of "Barrier Reverse Convertibles" with a

bear feature, rise above) the specified barrier throughout the term of the "Barrier Reverse Convertibles".

"Barrier Reverse Convertibles" allow investors to benefit from an enhanced return by receiving a periodic coupon payment and provide for a conditional minimum redemption amount at the end of the term of the "Barrier Reverse Convertibles" (i.e., the redemption amount is at least equal to, generally, 100% of the nominal or par value of the "Barrier Reverse Convertibles" if the specified barrier is not breached during the term of the "Barrier Reverse Convertibles").

If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset did not fall below or, in case of "Barrier Reverse Convertibles" with a bear feature, rise above) the specified barrier throughout the term of the "Barrier Reverse Convertibles" or, if the barrier is breached, the value of the Underlying Assets at redemption is at or above (or, in case of "Barrier Reverse Convertibles" with a bear feature, below) the specified strike price (typically the initial value of the Underlying Asset)), the redemption amount will at least be equal to, generally, 100% of the nominal or par value of the "Barrier Reverse Convertibles".

In contrast to "Reverse Convertibles" (SSPA Category 1220), the probability of receiving the maximum redemption amount under "Barrier Reverse Convertibles" is higher due to the conditional protection provided by the barrier, although the periodic coupon payment and therefore the return on an investment in "Barrier Reverse Convertibles" is generally lower.

(e) Conditional Coupon Reverse Convertible (formerly known as: "Express Certificates without Barriers") (SSPA Category 1255)

"Conditional Coupon Reverse Convertible" are primarily targeted at investors that expect the value of the Underlying Asset to increase or to slightly increase (or, in the case of "Conditional Coupon Reverse Convertible" with a bear feature, to decrease or slightly decrease), with falling volatility.

"Conditional Coupon Reverse Convertible" typically provide for one or more coupon payments in respect of one or more observation dates on which the value of the Underlying Asset is observed. If the value of the Underlying Asset has increased (or in the case of "Conditional Coupon Reverse Convertible" with a bear feature, decreased) to a specified threshold, investors are entitled to a coupon payment in respect of such observation date.

If the value of the Underlying Asset has increased and it exceeds (or, in case of "Conditional Coupon Reverse Convertible" with a bear feature, has decreased and falls below) a specified threshold (autocall trigger), such "Conditional Coupon Reverse Convertible" are redeemed early on the relevant autocall trigger date and investors are entitled to an early redemption amount equal to, generally, 100% of the nominal or par value of the "Conditional Coupon Reverse Convertible" plus a coupon.

(f) Conditional Coupon Barrier Reverse Convertible (formerly known as: "Express Barrier Certificates") (SSPA Category 1260)

"Conditional Coupon Barrier Reverse Convertible" are primarily targeted at investors that expect (i) the value of the Underlying Asset to increase or to slightly increase (or, in the case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, to decrease or slightly decrease), with falling volatility, and (ii) not to fall below (or, in case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, rise above) the specified barrier throughout the term of the "Conditional Coupon Barrier Reverse Convertible".

"Conditional Coupon Barrier Reverse Convertible" typically provide for one or more coupon payments in respect of one or more observation dates on which the value of the Underlying Asset is observed. If the value of the Underlying Asset has increased (or in

the case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, decreased) to a specified threshold, investors are entitled to a coupon payment in respect of such observation date.

If the value of the Underlying Asset has increased and exceeds (or, in case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, has decreased and falls below) a specified threshold (autocall trigger), such "Conditional Coupon Barrier Reverse Convertible" are redeemed early on the relevant autocall trigger date and investors are entitled to an early redemption amount equal to, generally, 100% of the nominal or par value of the "Conditional Coupon Barrier Reverse Convertible" plus a coupon.

"Conditional Coupon Barrier Reverse Convertible" provide for a conditional minimum redemption amount at the end of the term of the "Conditional Coupon Barrier Reverse Convertible" (i.e., the redemption amount is at least equal to, generally, 100% of the nominal or par value of the "Conditional Coupon Barrier Reverse Convertible" if the specified barrier is not breached during the term of the "Express-Barrier Certificates").

If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset did not fall below (or, in case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, rise above) the specified barrier throughout the term of the "Conditional Coupon Barrier Reverse Convertible" or, if the barrier is breached, the value of the Underlying Assets at redemption is at or above (or, in case of "Conditional Coupon Barrier Reverse Convertible" with a bear feature, below) the specified strike price (typically the initial value of the Underlying Asset)), the redemption amount will at least be equal to, generally, 100% of the nominal or par value of the "Conditional Coupon Barrier Reverse Convertible".

3. **Participation Products (SSPA Category 13)**

"Participation Products" are primarily targeted at investors (i) that expect the value of the Underlying Asset to increase (or, in the case of "Participation Products" with a bear feature, to decrease), (ii) but are unwilling or unable to make an investment in the amount required for a direct investment achieving the desired participation in the development of the value of the Underlying Asset.

"Participation Products" generally track the performance of the Underlying Asset and enable investors to participate in the performance of the Underlying Asset. Depending on the structure of the "Participation Product", investors participate proportionately or disproportionately in the performance of the Underlying Asset. The profit an investor may achieve by investing in a "Participation Product" is theoretically unlimited, but there is the risk of total loss.

"Participation Products" can provide for a minimum redemption amount. The level of the minimal redemption amount representing the level of capital protection indicates the percentage of the nominal or par value of the "Participation Products" that the investor will be entitled to at the settlement date, provided the barrier is not reached, if applicable. If the barrier is reached or exceeded (either above or below), investors lose the minimum redemption amount (limited capital protection). The redemption in the case of "Participation Products", depending on the structure or the Underlying Asset, may be made by payment of a cash settlement amount or the physical delivery of the relevant Underlying Asset, adjusted in accordance with the ratio.

The product category "Participation Products" includes in particular the following product types:

(a) Tracker Certificates (SSPA Category 1300)

"Tracker Certificates" are primarily targeted at investors that expect the value of the Underlying Asset to increase (or, in the case of "Tracker Certificates" with a bear feature, to decrease). "Tracker Certificates" allow an investor to participate in the performance of one or more Underlying Assets, which can be equally or unequally weighted. The

profit and loss potential of the "Tracker Certificates" corresponds largely to that of the Underlying Assets and is not limited.

(b) Outperformance Certificates (SSPA Category 1310)

"Outperformance Certificates" are primarily targeted at investors that expect (i) the value of the Underlying Asset to increase (or, in the case of "Outperformance Certificates" with a bear feature, to decrease) and (ii) the volatility to increase.

"Outperformance Certificates" allow investors to participate in the performance of the Underlying Assets. If the defined strike price is reached, the participation of the investor is increased through a participation factor resulting in a disproportionate participation in the positive performance (or, in case of an "Outperformance Certificate" with a bear feature, in the negative performance) of the Underlying Asset. Such "Outperformance Certificates" may provide for a limit on the achievable profits (cap). The loss potential of the "Outperformance Certificates" corresponds largely to that of the Underlying Assets and there is the risk of total loss.

(c) Bonus Certificates (SSPA Category 1320)

"Bonus Certificates" are primarily targeted at investors that expect (i) the value of the Underlying Asset to move sideways or to increase (or, in the case of "Bonus Certificates" with a bear feature, to move sideaways or decrease) and (ii) the Underlying Asset not to reach or breach the defined barrier throughout the term of such "Bonus Certificates".

"Bonus Certificates" allow the investor to participate in the performance of the Underlying Asset and provide for a conditional minimum redemption amount at the end of the term of the "Bonus Certificates".

If the specified barrier is not reached or breached during the term of the "Bonus Certificate", the investor will receive at least the minimum redemption amount and the potential profit corresponds largely to that of the Underlying Assets and is not limited.

If the barrier is reached or breached, such "Bonus Certificates" change into "Tracker Certificates", with no capital protection. The loss potential then corresponds largely to that of the Underlying Assets and there is the risk of total loss.

(d) Bonus Outperformance Certificates (SSPA Category 1330)

"Bonus Outperformance Certificates" are primarily targeted at investors that expect (i) the value of the Underlying Asset to increase (or, in the case of "Bonus Outperformance Certificates" with a bear feature, to decrease) and (ii) the Underlying Asset not to reach or breach the specified barrier throughout the term of such "Bonus Outperformance Certificates".

"Bonus Outperformance Certificates" allow the investor to participate in the performance of the Underlying Asset and provide for a conditional minimum redemption amount at the end of the term of the "Bonus Outperformance Certificates".

If the specified barrier is not reached or breached during the term of the "Bonus Outperformance Certificate", investor will receive at least the minimum redemption amount.

Furthermore, if the defined strike price is reached, the participation of the investor is increased by a participation factor resulting in a disproportionate participation in the positive performance (or, in case of an "Bonus Outperformance Certificate" with a bear feature, in the negative performance) of the Underlying Asset and the potential profit is not limited.

If the specified barrier is reached or breached during the term of the "Bonus Outperformance Certificates", such "Bonus Outperformance Certificates" change into

"Outperformance Certificates", with no capital protection. The loss potential then corresponds largely to that of the Underlying Assets and there is the risk of total loss.

(e) Twin-Win Certificates (SSPA Category 1340)

"Twin-Win Certificates" are primarily targeted at investors that expect (i) the value of the Underlying Asset to increase or to slightly decrease (or, in the case of "Twin-Win Certificates" with a bear feature, to decrease or slightly increase) and (ii) the Underlying Asset not to breach the defined barrier throughout the term of such "Twin-Win Certificates".

"Twin-Win Certificates" allow the investor to participate in the performance of the Underlying Asset. Profits are possible with both an increasing and slightly decreasing value of the Underlying Asset (or, in the case of "Twin-Win Certificates" with a bear feature decreasing or slightly increasing value of the Underlying Asset).

If the value of the Underlying Asset increases above the strike price, the value of the "Twin-Win Certificates" and the profit corresponds largely to that of the Underlying Assets and the potential profit is not limited.

If the value of the Underlying Assets is below the strike price, but the value of the Underlying Asset did not touch or fall below the barrier throughout the term of such "Twin-Win Certificates", then the negative performance of the Underlying Asset is converted into corresponding profits for investors in the "Twin-Win Certificates".

"Twin-Win Certificates" provide for a conditional minimum redemption amount. The level of the minimum redemption amount representing the level of partial capital protection indicates the percentage of the nominal or par value of the "Twin-Win Certificates" that the investor will be entitled to at the settlement date, provided the barrier is not reached or breached.

If the barrier is reached or breached, such "Twin-Win Certificates" change into "Tracker Certificates" and the loss potential then corresponds largely to that of the Underlying Assets and there is the risk of total loss.

(f) Airbag Certificates

"Airbag Certificates" are primarily targeted at investors that expect the value of the Underlying Asset to increase (or, in the case of "Airbag Certificates" with a bear feature, the value of the Underlying Asset to decrease).

"Airbag Certificates" allow investors to participate in the performance of Underlying Asset with the potential profit not being limited (unless the "Airbag Certificate" contains a cap) and provide for a conditional minimum redemption amount at the end of the term of the "Airbag Certificate".

If the value of the Underlying Asset develops favourably (i.e., if the value of the Underlying Asset increases above the upper strike price (or, in the case of "Airbag Certificates" with a bear feature, decreases below the lower strike price), the redemption amount is linked to and investors will participate in the positive performance (or, in the case of "Airbag Certificates" with a bear feature, in the negative performance) of the Underlying Asset.

If the value of the Underlying Asset develops unfavourably and is below the upper strike price (or, in the case of "Airbag Certificates" with a bear feature, increases above the lower strike price) but above the lower strike price (or, in the case of "Airbag Certificates" with a bear feature, increases below the upper strike price), investors will receive the specified minimum redemption amount.

If the value of the Underlying Asset develops unfavourably and is below the lower strike price (or, in the case of "Airbag Certificates" with a bear feature, increases above the upper strike price), the redemption amount is linked to and investors will participate in

the negative performance (or, in the case of "Airbag Certificates" with a bear feature, in the positive performance) of the Underlying Asset.

Investors' participation in the performance of the Underlying Asset may be increased by a participation factor resulting in an over proportionate profit or loss participation in the performance of the Underlying Asset.

(g) Buy-the-Dip Certificates

"Buy-the-Dip Certificates" are primarily targeted at investors who expect short-term corrections in the Underlying Asset but expect the Underlying Asset to develop positively in the long term.

"Buy-the-Dip Certificates" allow investors to participate in the performance of the Underlying Asset and get a potential regular coupon or bonus payment under certain conditions.

Initially, "Buy-the-Dip Certificates" provide exposure to the Underlying Asset and a cash component, each of a certain weighting. The exposure to the Underlying Asset allows investors to participate in the performance of the Underlying Asset, while a coupon or bonus is paid on the cash component not invested in the Underlying Asset. If predefined trigger levels are reached, the "Buy-the-Dip Certificates" will shift the exposure from the cash component into the Underlying Asset by increasing the exposure to the Underlying Asset and decreasing the exposure to the cash component accordingly. This enables investors to take advantage of lower entry levels in a negative market environment provided that the Underlying Asset recovers until expiry of the "Buy-the-Dip Certificates".

At maturity the redemption amount will reflect the participation in the weighted performance of the Underlying Asset. The profit and loss potential of the "Buy-the-Dip Certificates" corresponds largely to that of the Underlying Asset. In case of a positive performance of the Underlying Asset the profit is (theoretically) unlimited, unless there is a cap specified and in case of a negative performance of the Underlying Asset there is the risk of a total loss of the investment, unless there is a minimum redemption amount specified.

4. **Investment Products with Additional Credit Risk (formerly known as: "Products with Reference Entities") (SSPA Category 14)**

"Investment Products with Additional Credit Risk" are affected by the occurrence of a defined credit event in respect of a reference entity or obligation. If a credit event occurs in respect of a reference entity or obligation during the term of the "Investment Products with Additional Credit Risk", they will be redeemed at a value which may be significantly below their initial value and as low as zero and investors will make a partial or total loss.

The product category "Investment Products with Additional Credit Risk" includes in particular the following product types:

(a) Credit Linked Notes (SSPA Category 1400)

"Credit Linked Notes" are primarily targeted at investors that expect that no credit event to occur with regard to a reference entity or reference obligation.

Generally, if during the term of a "Credit Linked Note" a credit event or a credit redemption event in respect of the relevant reference entity or reference entities occurs, further coupon payments and the repayment of the entire or part of the redemption amount are jeopardized as specified in the applicable terms and conditions of the respective "Credit Linked Note" (early redemption). In such case the amount investors receive may be significantly below its initial value and as low as zero and investors will make a partial or total loss. Therefore, in particular, the solvency of a specific reference entity is decisive.

Generally, if during the term of a "Credit Linked Note" no credit event or credit redemption event occurs in respect of the relevant reference entity resp. reference entities, "Credit Linked Notes" generally provide for a defined scheduled redemption amount equal to a certain percentage of the relevant outstanding principal amount specified in the applicable terms and conditions, which investors will receive on the defined scheduled maturity date, provided that the product is not redeemed prior to the scheduled maturity date.

(b) Conditional Capital Protection Notes with Additional Credit Risk (formerly known as: "Reference Entity Certificates with Conditional Capital Protection") (SSPA Category 1410)

"Conditional Capital Protection Notes with Additional Credit Risk" are primarily targeted at investors that (i) expect the value of the Underlying Asset to increase (or, in the case of "Conditional Capital Protection Notes with Additional Credit Risk" with a bear feature, to decrease), (ii) consider a sharp decrease of the value of the Underlying Asset to be possible (or, in the case of "Conditional Capital Protection Notes with Additional Credit Risk" with a bear feature, a sharp increase of the value of the Underlying Asset) and (iii) and expect no credit event to occur with regard to a reference entity or obligation.

"Conditional Capital Protection Notes with Additional Credit Risk" may have one or more underlying reference entities or obligations. If during the term of the "Conditional Capital Protection Notes with Additional Credit Risk" no credit event occurs in respect of the reference entity or obligation, investors will participate in the performance of the Underlying Asset. If the value of the Underlying Asset has developed favourably (i.e., if the value of the Underlying Asset has increased or, in case of "Conditional Capital Protection Notes with Additional Credit Risk" with a bear feature, decreased), the return will exceed the minimum redemption amount of the "Conditional Capital Protection Notes with Additional Credit Risk". Therefore, if no credit event occurs, "Conditional Capital Protection Notes with Additional Credit Risk" work in the same manner as the corresponding "Capital Protection Product" on which they are based.

If a credit event occurs in respect of the reference entity or obligation during the term of the "Conditional Capital Protection Notes with Additional Credit Risk", the investor loses the capital protection and the "Conditional Capital Protection Notes with Additional Credit Risk" will be redeemed at a value which may be significantly below their initial value and as low as zero and investors will make a partial or total loss.

(c) Yield Enhancement Certificates with Additional Credit Risk (formerly known as: "Reference Entity Certificates with Yield Enhancement") (SSPA Category 1420)

"Yield Enhancement Certificates with Additional Credit Risk" are primarily targeted at investors that expect (i) the value of the Underlying Asset to move sideways or to slightly increase (or, in the case of "Yield Enhancement Certificates with Additional Credit Risk" with a bear feature to move sideaways or to slightly decrease), with falling volatility, and (ii) no credit event to occur with regard to a reference entity or obligation.

"Yield Enhancement Certificates with Additional Credit Risk" may have one or more underlying reference entities or obligations. If during the term of the "Yield Enhancement Certificates with Additional Credit Risk" no credit event occurs in respect of the reference entity or obligation, investors will receive a coupon or a discount and the "Yield Enhancement Certificates with Additional Credit Risk" will work in the same manner as the corresponding "Yield Enhancement Product" on which they are based.

If a credit event occurs in respect of the reference entity or obligation during the term of the "Yield Enhancement Certificates with Additional Credit Risk", they will be redeemed at a value which may be significantly below their initial value and as low as zero and investors will make a partial or total loss.

(d) Participation Certificates with Additional Credit Risk (formerly known as: "Reference Entity Certificates with Participation") (SSPA Category 1430)

"Participation Certificates with Additional Credit Risk" are primarily targeted at investors that expect (i) the value of the Underlying Asset to increase (or, in the case of "Participation Certificates with Additional Credit Risk" with a bear feature, to decrease) and (ii) no credit event to occur with regard to a reference entity or obligation.

"Participation Certificates with Additional Credit Risk" may have one or more underlying reference entities or obligations. If during the term of the "Participation Certificates with Additional Credit Risk" no credit event occurs in respect of the reference entity or obligation, investors will participate in the performance of the Underlying Asset in the same manner as the corresponding "Participation Product" on which they are based.

If a credit event occurs in respect of the reference entity or obligation during the term of the "Participation Certificates with Additional Credit Risk", they will be redeemed at a value which may be significantly below their initial value and as low as zero and investors will make a partial or total loss.

5. **Leverage Products (SSPA Category 20)**

"Leverage Products" are subject to a leverage effect both in the direction of profits and losses, i.e., changes in the value of the Underlying Asset have a disproportionate effect on the value of "Leveraged Products" compared to a direct investment in the Underlying Asset. The leverage effect permits investors to use less capital compared to investing directly in the Underlying Asset.

The product category "Leverage Products" includes in particular the following product types:

(a) Warrants (SSPA Category 2100)

"Warrants" with a call feature are primarily targeted at investors that expect the value of the Underlying Asset and the volatility to increase. "Warrants" with a put feature are primarily targeted at investors that expect the value of the Underlying Asset to decrease and volatility to increase. "Warrants" are therefore suitable for hedging and speculating.

The essential attribute of "Warrants" is the leverage effect. The leverage effect causes the value of such "Warrants" to react proportionally more strongly to changes in the value of the Underlying Asset below or above the strike price, as applicable. The leverage is the result of the fact that the invested capital in such "Warrants" is smaller than for a direct investment in the Underlying Asset. Therefore, a smaller investment may generate a leveraged positive or negative performance relative to the Underlying Asset.

(b) Spread Warrants (SSPA Category 2110)

"Spread Warrants" with a bull feature are primarily targeted at investors that expect the value of the Underlying Asset to increase. "Spread Warrants" with a bear feature are primarily targeted at investors that expect the value of the Underlying Asset to decrease.

"Spread Warrants" provide for a leverage effect, meaning the value of such "Spread Warrants" will react proportionally more strongly to changes in the value of the Underlying Asset below or above the strike price, as applicable. The leverage is the result of the fact that the invested capital in such "Spread Warrants" is smaller than for a direct investment in the Underlying Asset. Therefore, a smaller investment may generate a leveraged performance relative to the Underlying Asset.

The potential yield of an investment in "Spread Warrants" is limited, namely by the upper cap in the case of "Spread Warrants" with a bull feature and by the lower cap in the case of "Spread Warrants" with a bear feature. This means that an investor may benefit from an increase (in the case of a bull feature) or a decrease (in the case of a bear feature) of

the value of the Underlying Asset up to a maximum value at the lower or upper cap, as applicable.

(c) Warrants with Knock-Out (SSPA Category 2200)

"Warrants with Knock-Out" and a call feature are primarily targeted at investors that expect the value of the Underlying Asset to increase. "Warrants with Knock-Out" and a put feature are primarily targeted at investors that expect the value of the Underlying Asset to decrease

"Warrants with Knock-Out" provide for a leverage effect, meaning the value of such "Warrants with Knock-Out" will react proportionally more strongly to changes in the value of the Underlying Asset below or above the knock out, as applicable. The leverage is the result of the fact that the invested capital in such "Warrants with Knock-Out" is smaller than for a direct investment in the Underlying Asset. Therefore, a smaller investment may generate a leveraged performance relative to the Underlying Asset. Volatility only has a minor effect on the value of "Warrants with Knock-Out" and also the loss of time value is marginal.

(d) Mini-Futures (SSPA Category 2210)

"Mini Futures" (long) are primarily targeted at investors that expect the value of the Underlying Asset to increase. "Mini Futures" (short) are primarily targeted at investors that expect the value of the Underlying Asset to decrease. "Mini Futures" are therefore suitable for hedging and speculating.

"Mini Futures" provide for a leverage effect, meaning the value of such "Mini Futures" will react proportionally more strongly to changes in the value of the Underlying Asset below or above the stop-loss barrier. The leverage effect is the result of the fact that the invested capital in such "Mini Futures" is smaller than for a direct investment in the Underlying Asset. Therefore, a smaller investment may generate a leveraged performance relative to the Underlying Asset.

(e) Constant-Leverage Certificates (SSPA Category 2300)

"Constant Leverage Certificates" (long) are primarily targeted at investors that expect the value of the Underlying Asset to increase. "Constant Leverage Certificates" (short) are primarily targeted at investors that expect the value of the Underlying Asset to decrease. "Constant Leverage Certificates" allow investors to make long term-leveraged investments in an Underlying Asset for which the risk and leverage effect are kept constant.

"Constant Leverage Certificates" provide for a leverage effect, meaning the value of such "Constant Leverage Certificates" will react proportionally more strongly to changes in the value of the Underlying Asset. The leverage effect is the result of the fact that the invested capital in such "Constant Leverage Certificates" is smaller than for a direct investment in the Underlying Asset. Therefore, a smaller investment may generate a leveraged performance relative to the Underlying Asset. Unlike other "Leverage Products", the leverage effect of "Constant Leverage Certificates" remains constant. A regular resetting mechanism under which the performance of the Underlying Asset is mirrored with a defined leverage factor (i.e., a constant leverage of, for example, 10), ensures that the leverage effect remains constant.

6. Other Products

Accumulator Securities

"Accumulator Securities" are characterised by the feature that the determination of how the Securities are settled, i.e. by way of payment of the redemption amount in the specified currency and/or physical delivery of the underlying in the relevant number as well as how the redemption amount is calculated, in particular, depends on whether or not a so-called knock-out event, as

specified in the relevant Pricing Supplement, has occurred. In case no knock-out event has occurred, the following applies:

(i) In respect of any accumulation period other than the final accumulation period which is a guaranteed accumulation period, investors are entitled to receive physical delivery of one (1) underlying multiplied by the respective maximum number of accumulation period observation days for such accumulation period.

(ii) In respect of any accumulation period other than the final accumulation period which is not a guaranteed accumulation period, investors are entitled to receive:

(1) (x) physical delivery of one (1) underlying and (y) payment of a redemption amount equal to the product of (xx) the strike and (yy) the gearing factor minus 1, in the case of each of (x) and (y), multiplied by number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or higher than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) higher than the strike;

(2) delivery of one (1) physical underlying multiplied by the gearing factor and then multiplied by the number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or lower than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) lower than the strike; and

(3) payment of a redemption amount equal to the product of (x) the strike, (y) the gearing factor and (z) the maximum number of accumulation period observation days minus the number of underlying calculation dates or exchange business days, as specified in the relevant Pricing Supplement, during the respective accumulation period on which a market disruption has occurred or is continuing.

(iii) In respect of the final accumulation period, investors are entitled to receive:

(1) delivery of one (1) physical underlying multiplied by number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or higher than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) higher than the strike;

(2) delivery of one (1) physical underlying multiplied by the gearing factor multiplied by the number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or lower than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) lower than the strike; and

(3) payment of a redemption amount equal to the issue price or such other amount specified in the relevant Pricing Supplement minus (I) the product of the strike and the aggregate number of physical underlying previously delivered to the investor minus (II) the sum of all redemption amounts previously paid to the investor.

In case of a knock-out event has occured, the Securities will expire early on the respective early expiration date and investors are entitled to receive the redemption amount in the specified currency and physical delivery of the underlying in the relevant number as follows:

(iv) If the knock-out event occurred during any accumulation period which is a guaranteed accumulation period, investors are entitled to receive:

(1) physical delivery of one (1) underlying multiplied by the respective maximum number of accumulation period observation days for any guaranteed accumulation period in relation to which no underlying has been physically delivered to the investor; and

(2) payment of a redemption amount equal to the issue price or such other amount specified in the relevant Pricing Supplement minus the product of the strike and the sum of the maximum number of accumulation period observation days for all guaranteed accumulation periods.

(v) If the knock-out event has occurred during any accumulation period which is not a guaranteed accumulation period, investors are entitled to receive:

(1) physical delivery of one (1) underlying multiplied by number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or higher than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) higher than the strike;

(2) physical delivery of one (1) underlying multiplied by number of days during the respective accumulation period on which no market disruption has occurred or is continuing and the official closing price of the underlying or the price of the underlying, as specified in the relevant Pricing Supplement, is (I) equal to or lower than or, as the case may be, and as specified in the relevant Pricing Supplement, (II) lower than the strike; and

(3) payment of a redemption amount equal to the issue price or such other amount specified in the relevant Pricing Supplement minus (I) the product of the strike and the aggregate number of underlying previously physically delivered to the investor minus (II) the sum of all redemption amounts previously paid to the investor.

During their term, the "Accumulator Securities" do not generate any regular income (e.g. dividends or interest). The loss potential corresponds largely to that of the Underlying Assets and there is a risk of total loss.

FORM OF PRICING SUPPLEMENT

The form of Pricing Supplement that will be issued in respect of each Tranche, subject to the deletion of non-applicable provisions, addition of any applicable provisions and disclosure and/or amendments to the General Conditions, is set out below:

[*Include if applicable*: MiFID II product governance / Professional investors and ECPs only target market – Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Securities has led to the conclusion that: (i) the target market for the Securities is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "**MiFID II**"); and (ii) all channels for distribution of the Securities to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Securities (a "**distributor**") should take into consideration the manufacturer's target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Securities (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.]

[*Include if applicable*: UK MiFIR product governance / Professional investors and ECPs only target market – Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Securities has led to the conclusion that: (i) the target market for the Securities is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("**COBS**"), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 (as amended, the "**EUWA**") (as amended, "**UK MiFIR**"); and (ii) all channels for distribution of the Securities to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Securities (a "**distributor**") should take into consideration the manufacturer's] target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Securities (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.]

[*Include if applicable*: **PROHIBITION OF SALES TO EEA RETAIL INVESTORS**: The Securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of [Directive 2014/65/EU (as amended, "**MiFID II**")]/[MiFID II]; (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the EU Prospectus Regulation (as defined below). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**EU PRIIPs Regulation**") for offering or selling the Securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the EEA may be unlawful under the EU PRIIPs Regulation. Notwithstanding the above, if the Dealer subsequently prepares and publishes a key information document under the EU PRIIPs Regulation in respect of the Securities, then the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the EEA as described above shall no longer apply.]

[*Include if applicable*: **PROHIBITION OF SALES TO UK RETAIL INVESTORS**: The Securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of UK domestic law by virtue of the [European Union (Withdrawal) Act 2018 (as amended, the "**EUWA**")]/[EUWA]; (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (as amended, the "**FSMA**") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in the UK Prospectus Regulation (as defined below). Consequently, no key information document required by Regulation (EU) No 1286/2014 as it forms part of UK domestic law by virtue of the EUWA (as amended, the "**UK PRIIPs Regulation**") for offering or selling the Securities or otherwise making

them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation. Notwithstanding the above, if the Dealer subsequently prepares and publishes a key information document under the UK PRIIPs Regulation in respect of the Securities, then the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the United Kingdom as described above shall no longer apply.]

[*Include if Singapore Selling Restrictions for Other Investors apply*: The Securities are capital markets products other than prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Specified Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).]

[*Include where applicable, amending as required for the appropriate language*: The Securities are not Green Bonds and/or Social Bonds as defined under the International Capital Market Association's Green Bond Principles and/or Social Bond Principles. In addition, the Securities do not take into account any of the European Union criteria for environmentally sustainable investments, including as set out under the Regulation of the European Parliament and of the Council on the Establishment of a Framework to Facilitate Sustainable Investment (Regulation (EU) 2020/852).]

Pricing Supplement dated [●]

[JPMorgan Chase Financial Company LLC /J.P. Morgan Structured Products B.V./

JPMorgan Chase Bank, N.A. /JPMorgan Chase & Co.]

Legal Entity Identifier (LEI): [549300NJFDJOFYVV6789][1] / [XZYUUT6IYN31D9K77X08][2] / [7H6GLXDRUGQFU57RNE97][3] / [8I5DZWZKVSZI1NUHU748[4]]

Structured Products Programme for the issuance of Notes, Warrants and Certificates

[Guaranteed by

[JPMorgan Chase Bank, N.A.[5]/JPMorgan Chase & Co.[6]]

[Aggregate Nominal Amount of Tranche (or, if booked in Units, the total number of Units)][7]

[Number of Warrants/Certificates (or, insert Aggregate Notional Amount, if booked in Notional)][8]

[Title of Securities] due [●] (the "Securities")

The offering circular dated 22 September 2022 [and the Supplement[s] to the offering circular listed in the Annex hereto] ([as so supplemented,] the "**Offering Circular**") (as completed and (if applicable) amended by this Pricing Supplement) has been prepared on the basis that:

(a) any offer of Securities in any Member State of the [European Economic Area]/[EEA] will be made pursuant to an exemption under the EU Prospectus Regulation from the requirement to publish a prospectus for offers of the Securities. The expression "**EU Prospectus Regulation**" means Regulation (EU) 2017/1129, as amended. Accordingly any person making or intending to make an offer in that Member State of the Securities may only do so in circumstances in which

[1] Include if JPMCFC issuance.

[2] Include if JPMSP issuance.

[3] Include if JPMorgan Chase Bank, N.A. issuance.

[4] Include if JPMorgan Chase & Co. issuance.

[5] Include if JPMSP issuance.

[6] Include if JPMCFC issuance.

[7] Include if issuance of Notes.

[8] Include if issuance of Warrants or Certificates.

no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the EU Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the EU Prospectus Regulation, in each case, in relation to such offer; and

(b) any offer of Securities in the United Kingdom will be made pursuant to an exemption under the UK Prospectus Regulation from the requirement to publish a prospectus for offers of the Securities. The expression "**UK Prospectus Regulation**" means Regulation (EU) 2017/1129 as it forms part of UK domestic law by virtue of the [EUWA]/[European Union (Withdrawal) Act 2018 (as amended, the "**EUWA**")]. Accordingly any person making or intending to make an offer in the United Kingdom of the Securities may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the [FSMA]/[Financial Services and Markets Act 2000 (as amended, the "**FSMA**")] or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation, in each case, in relation to such offer.

Neither the Issuer nor any Dealer has authorised, nor do they authorise, the making of any offer of Securities in any other circumstances.

[The Securities may only be offered and the Offering Circular and this Pricing Supplement as well as any other offering or marketing material relating to the Securities may only be offered to investors in Switzerland pursuant to an exception from the prospectus requirement under the Swiss Financial Services Act ("**FinSA**"), as such terms are defined under the FinSA. Neither this document nor the Offering Circular nor any other document related to the Securities constitute a prospectus within the meaning of the FinSA and no prospectus pursuant to the FinSA will be prepared in connection with such offering of the Securities.][9]

If you purchase the Securities described in this Pricing Supplement after the date hereof, you should review the most recent version (if any) of the Offering Circular and each supplement thereafter up to (and including) the date of purchase to ensure that you have the most up to date information on the Issuer and (if applicable) the Guarantor on which to base your investment decision (note that the terms and conditions of the Securities will remain as described in this Pricing Supplement and the version of the Offering Circular described above, subject to any amendments notified to Holders). Each supplement and replacement version (if any) to the Offering Circular can be found on (www.bourse.lu) and (https://www.euronext.com/en/markets/dublin).

RISK FACTORS

Purchase of these Securities involves substantial risks

Investors should ensure that they understand the nature of the risks posed by, and the extent of their exposure under, the Securities. Investors should make all pertinent inquiries they deem necessary without relying on the Issuer, [the Guarantor,] or the Dealer. Investors should consider the suitability of the Securities as an investment in light of their own circumstances, investment objectives, tax position and financial condition. Investors should consider carefully all the information set forth in this Pricing Supplement along with all the information set forth in the Offering Circular. Investors should pay particular attention to the section entitled "*Risk Factors*" in the Offering Circular (pages 35 to 134 inclusive).

[The Issuer may redeem the Securities prior to the Maturity Date [(and other than due to the occurrence of an Autocall Redemption Event in relation to the Preference Shares)][10] where, due to a change in law, a court ruling or some other administrative, regulatory or legal action which occurs on or after the Issue Date, the Issuer (or the relevant affiliate which has entered into hedging arrangements in respect of the Issuer's obligations under the Securities) has incurred (or there is a substantial likelihood that it will incur) a materially increased tax burden in relation to its hedging arrangements in respect of the Securities. In such case, the Issuer may (subject to certain conditions), on giving (generally) not less than 30 and not more than 60 days' notice, redeem the Securities at their Early Payment Amount (as described below). J.P. Morgan anticipates that the risk of such event occurring is remote, and further anticipates that in

[9] Include unless "Swiss Non-Exempt Public Offer" is specified as "Yes".

[10] Insert for Notes linked to autocallable Preference Shares issued by J.P. Morgan International Derivatives Ltd.

such unlikely event, it would not exercise its right to redeem the Securities unless the additional tax payable by it is or would be a substantially material amount. A pre-condition to the exercise of such right is the delivery by the Issuer to the Relevant Programme Agent of an opinion of independent legal advisers of recognised standing confirming that the terms described in the first sentence of this paragraph are met. If the Securities are redeemed in these circumstances, the Early Payment Amount you receive may be less than the original purchase price of the Securities, and could be as low as [*insert minimum redemption amount*]. You may not be able to reinvest the early redemption proceeds in an investment having a similar rate of return.

The Issuer may redeem the Securities in certain other extraordinary circumstances prior to the Maturity Date [(other than due to the occurrence of an Autocall Redemption Event in relation to the Preference Shares)][11] including [(i) any extraordinary circumstances leading to an early redemption of the Preference Shares;][12] [(i)]/[(ii)] certain circumstances where it has or will (or there is a substantial likelihood that it will) become obliged to pay withholding tax or additional amounts due to withholding tax being payable on the Securities; and [(ii)]/[(iii)] the occurrence of an Extraordinary Hedge Disruption Event (as described in the terms and conditions of the Securities). As described above, in such case, the Issuer may (subject to certain conditions), redeem the Securities at their Early Payment Amount. The Early Payment Amount may be less than the original purchase price of the Securities[, and could be as low as [*insert minimum amount payable*] per Security]. You may not be able to reinvest the early redemption proceeds in an investment having a similar rate of return.][13]

[Investors should also take note of the Index Disclaimer[s] set forth in the Schedule to this Pricing Supplement][14]

[Unregulated Securities: The Securities do not constitute a participation in a collective investment scheme within the meaning of the Swiss Federal Act on Collective Investment Schemes ("CISA) and are not subject to authorisation or supervision by the Swiss Financial Market Supervisory Authority FINMA ("FINMA"). Accordingly, investors do not have the benefit of the specific investor protection provided under the CISA and are exposed to the credit risk of the Issuer and Guarantor (if applicable).][15]

[**Suspension of trading: Securities listed on SIX Swiss Exchange may be suspended from trading**

Based on Article 57 of the Listing Rules of the SIX Swiss Exchange (*Suspension of Trading*) in combination with Articles 13 et seq. of the SIX Swiss Exchange's Additional Rules for the Listing of Derivatives, Securities based on equity securities, bonds and commodities may be listed on the SIX Swiss Exchange and hence traded on SIX Swiss Exchange only if the underlying equity securities, bonds and commodities are also listed on a recognised securities exchange or have been admitted to trading on such exchange. Consequently, if the underlying equity securities, bonds and commodities are delisted on such recognised exchange, SIX Swiss Exchange may suspend trading in these Securities.][16]

[**Tax Risks**

See also the section entitled "*Taxation – United States Federal Income Taxation*" in this Offering Circular.

[include additional tax risk factors for Bond Linked Securities as required]]

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[11] See footnote 10.

[12] Insert for Notes linked to Preference Shares issued by J.P. Morgan International Derivatives Ltd.

[13] Insert for Notes in respect of which "Early Redemption for Tax on Underlying Hedge Transactions" is specified to be applicable in the relevant Pricing Supplement.

[14] Include for Index Linked Securities.

[15] Insert for Swiss Offers (i.e., Securities offered in Switzerland or listed and/or admitted to trading on a Swiss trading venue).

[16] Include for Securities listed on the SIX Swiss Exchange.

PART A - CONTRACTUAL TERMS

[Terms used herein shall be deemed to be defined as such for the purposes of the General Conditions and the Specific Product Provisions (as may be amended and/or supplemented up to, and including, [*insert Issue Date*][17]) set forth in the Offering Circular. Full information on the Issuer[, the Guarantor] and the offer of the Securities is only available on the basis of the combination of this Pricing Supplement and the Offering Circular (including all documents incorporated by reference). The Offering Circular (including all documents incorporated by reference) is available from The Bank of New York Mellon S.A./N.V., Luxembourg Branch, at Vertigo Building, Polaris, 2-4 rue Eugène Ruppert, L-2453, Luxembourg, [BNP PARIBAS Securities Services S.C.A. Frankfurt Branch, Senckenberganlage 19, 60325 Frankfurt Am Main, Germany][18] and The Bank of New York Mellon S.A./N.V., Dublin Branch, at Riverside 2, Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland [, and in electronic form on the Luxembourg Stock Exchange's website (www.bourse.lu).][19] [, and the Offering Circular is available in electronic form on Euronext Dublin's website (https://www.euronext.com/en/markets/dublin).][20]]

The following alternative language applies if either the first tranche of an issue which is being increased was issued under a programme with an earlier date or in the case of a new documentation of Securities after expiry of the period of validity of the offering circular with an earlier date.

[Terms used herein shall be deemed to be defined as such for the purposes of the General Conditions and the Specific Product Provisions set forth in the [offering circular/base prospectus] dated [●] [and the supplements dated [●] to the [offering circular/base prospectus]] ([as so supplemented,] the "[**Original Offering Circular/Base Prospectus**]"). This document constitutes the Pricing Supplement of the Securities described herein and must be read in conjunction with the Offering Circular, save in respect of the General Conditions and the Specific Product Provisions which are extracted from the [Original Offering Circular/Base Prospectus] and which are incorporated by reference into the Offering Circular. Full information on the Issuer, the Guarantor (if applicable) and the offer of the Securities is only available on the basis of the combination of this Pricing Supplement, the Offering Circular and the [Original Offering Circular/Base Prospectus] incorporated by reference therein. The Offering Circular (including all documents incorporated by reference) is available from The Bank of New York Mellon S.A./N.V., Luxembourg Branch, at Vertigo Building, Polaris, 2-4 rue Eugène Ruppert, L-2453, Luxembourg[, BNP PARIBAS Securities Services S.C.A. Frankfurt Branch, Senckenberganlage 19, 60325 Frankfurt am Main, Germany][11] and The Bank of New York Mellon S.A./N.V., Dublin Branch, at Riverside 2, Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland [, and in electronic form on the Luxembourg Stock Exchange's website (www.bourse.lu).][12] [, and the Offering Circular is available in electronic form on Euronext Dublin's website (https://www.euronext.com/en/markets/dublin).][13]]

[*Insert in case of a public offering in Switzerland requiring a prospectus or a listing on the SIX Swiss Exchange*: This Pricing Supplement will also be deposited with the Prospectus Office of the SIX Exchange Regulation as reviewing body and published pursuant to article 64 FinSA.]

The following language applies in the case of a planned continuation of the public offering of the Securities in Switzerland after expiry of the period of validity of the Offering Circular:

[The Offering Circular, as amended by way of supplements from time to time, under which the Securities described herein [are issued] [are continued to be offered], will cease to be valid on [22] September 2023. From and including this date, this Pricing Supplement must be read in conjunction with the latest valid version of the offering circular for the Structured Products Programme for the issuance of Notes, Warrants and Certificates by J.P. Morgan Structured Products B.V., JPMorgan Chase Financial Company LLC, JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. which succeeds the Offering Circular.]

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17 In respect of fungible issuances, include Issue Date of the first Tranche.

18 Include if issuance of German Securities.

19 Include if listed on the Luxembourg Stock Exchange's Euro MTF.

20 Include if admitted to the Official List and to trading on the GEM.

[*Include whichever of the following apply or specify as "Not Applicable". Note that the numbering should either (i) remain as set out below, even if "Not Applicable" is indicated for individual paragraphs or sub-paragraphs, or (ii) be revised based on the deletion of all individual paragraphs that are "Not Applicable". Italics denote guidance for completing the Pricing Supplement.*]

1.	(i)	Issuer:	[JPMorgan Chase Financial Company LLC / J.P. Morgan Structured Products B.V./ JPMorgan Chase Bank, N.A. / JPMorgan Chase & Co.]
	[(ii)	Guarantor:	[JPMorgan Chase Bank, N.A.[21] / JPMorgan Chase & Co.[22]]
2.	[(i)	Series Number:	[●]]
	[(ii)	Tranche Number	[●]]
	[(If fungible with an existing Series, details of that Series, including the date on which the Securities become fungible.)		[●]]
3.	**Specified Currency or Currencies:**		[●]
4.	**Notes, Warrants or Certificates:**		[Notes/Warrants/Certificates] (*If the Issuer is JPMCFC, then Warrants are not permitted*)
5.	**[Aggregate Nominal Amount/Aggregate Notional Amount/ Number of [Warrants/Certificates]:]**		[Up to] [●]
	[(i)	Series:	[Up to] [●] [being the equivalent of [up to] [●] Units (*insert only if Trading in Units is specified as applicable below*)]]
	[(ii)	Tranche:	[Up to] [●]]
6.	**Issue Price:**		[[●] per cent. of the Aggregate Nominal Amount [plus accrued interest from [*insert date*] (*in the case of fungible issues of Notes only, if applicable*)]] [[*amount in specified currency*] per Unit (*for Notes booked in Units*)]/[●] per [Warrant/Certificate] [*specify percentage of Aggregate Notional Amount if booked in notional*] The Issue Price specified above may be more than the market value of the Securities as at the Issue Date, and the price, if any, at which the Dealer or any other person is willing to purchase the Securities in secondary market transactions is likely to be lower than the Issue Price. In particular, where permitted by applicable law and subject to any additional ex ante cost disclosure required by such, the Issue Price may take into account amounts with respect to commissions relating to the

[21] Include for Securities issued by JPMSP.

[22] Include for Securities issued by JPMCFC.

			issue and sale of the Securities as well as amounts relating to the hedging of the Issuer's obligations under the Securities and secondary market prices may exclude such amounts. If any commissions or fees relating to the issue and sale of the Securities have been paid or are payable by the Dealer to an intermediary, then such intermediary may be obliged to fully disclose to its clients the existence, nature and amount of any such commissions or fees (including, if applicable, by way of discount) as required in accordance with laws and regulations applicable to such intermediary, including any legislation, regulation and/or rule implementing the Markets in Financial Instruments Directive (Directive 2014/65/EU, as amended), or as otherwise may apply in any non-EEA jurisdictions Investors in the Securities intending to invest in Securities through an intermediary (including by way of introducing broker) should request details of any such commission or fee payment from such intermediary before making any purchase hereof
	(i)	Specified Denomination/ Notional Amount per [Warrant/Certificate] (*if Warrants or Certificates are trading in notional*):	[●](*In respect of French Notes which are obligations there shall be one denomination only*)
	(ii)	Trading in Units (Notes):	[Applicable: One Note (of the Specified Denomination) equals one Unit/ Not Applicable] If Trading in Units is specified to be Applicable then the Notes will be tradable by reference to the number of Notes being traded (each having the Specified Denomination) as opposed to the aggregate principal amount of Notes being traded [*Trading in Units may only be specified to be Applicable if the Notes have a single Specified Denomination*]
	[(iii)	Minimum trading size:	[●] [*Rule 144A Notes will have a minimum trading size equivalent to U.S.$ 100,000*]]
7.	**Issue Date:**		[●][23]
	[**Trade Date:**		[●]]

[23] In the case of Market Access Participation Notes insert "Settlement Date".

8.	**Maturity Date/Settlement Date/Settlement Date and Redemption Date:**[24]	[●][25]

PROVISIONS APPLICABLE TO NOTES

(*If Notes: retain paragraphs 9-21. If Warrants or Certificates: (i) insert "Paragraphs 9-21 are intentionally deleted"; (ii) delete paragraphs 9-21*)

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE[26]

9.	**Interest Commencement Date:**		[*Specify/Issue Date*]
10.	**Fixed Rate Note Provisions:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Rate [(s)] of Interest:	[●] per cent. per annum [payable [annually/semi-annually/quarterly/monthly] in arrear][(subject as provided in (iii) below)]
	(ii)	Interest Payment Date(s):	[●] [in each year]
	(iii)	Fixed Coupon Amount[(s)]:	[●] per [●] in nominal amount [(for the avoidance of doubt, the amount of interest payable on each Interest Payment Date shall be the Fixed Coupon Amount)]
	(iv)	Broken Amount(s):	[*Insert particulars of any initial or final broken interest amounts which do not correspond with the Fixed Coupon Amount [(s)] and the Interest Payment Date(s) to which they relate*]
	(v)	Day Count Fraction (General Condition 4.1):	[30/360 or Actual/Actual (ICMA) or specify other]
	(vi)	Interest Determination Date(s):	[●] in each year (*insert regular interest payment dates, ignoring Issue Date or Maturity Date in the case of a long or short first or last coupon. N.B., only relevant where Day Count Fraction is Actual/Actual (ICMA)*)]
	(vii)	Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Not Applicable/*give details*]
11.	**Floating Rate Note Provisions:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Interest Period(s):	[●]

[24] In the case of Securities which are (i) Notes, specify "Maturity Date", (ii) Certificates, specify "Settlement Date and Redemption Date", and (iii) Warrants, specify "Settlement Date".

[25] In the case of Market Access Participation Notes insert "Maturity Date – see Paragraph 1 (Redemption and Purchase) of the Market Access Participation Provisions".

[26] In the case of Market Access Participation Notes, items 9, 10, 11, 12, 14 and 15 shall be "Not Applicable".

(ii)	Interest Payment Dates:	[●]
(iii)	Business Day Convention:	[Floating Rate Business Day Convention/ Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/ other (*give details*)] [subject to adjustment for Unscheduled Holiday] (*ISDA 2021 Definitions (s. 2.3.6(i)(b)) (but not the ISDA 2006 Definitions) provide an option to make the above applicable where either the Modified Following Business Day Convention or Preceding Business Day Convention applies to Interest Period End Dates. Therefore, only specify as applicable if (i) the Modified Following Business Day Convention or Preceding Business Day Convention applies to Interest Period End Dates and (ii) the preference is to make the Business Day Convention subject to adjustment for Unscheduled Holiday*)
(iv)	Day Count Fraction:	[●]
(v)	Manner in which the Rate(s) of Interest is/are to be determined:	[Screen Rate Determination / ISDA Determination / SONIA Floating Rate Determination (Non-Index Determination) / SONIA Floating Rate Determination (Index Determination) / SOFR Floating Rate Determination / TONA Floating Rate Determination / €STR Floating Rate Determination / other (*give details*)]
(vi)	Screen Rate Determination (General Condition 4.2(b)(ii)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Page:	[●]
	- Benchmark:	[*Specify benchmark or other rate*]
	- Relevant Time:	[●]
	- Interest Determination Date:	[[●][TARGET Settlement] Business Days in [specify city] for [specify currency] prior to [the first day in each Interest Period/each Interest Payment Date]]
	- Reference Banks:	[*Specify five*]
	- Relevant Financial Centre:	[*The financial centre most closely connected to the Reference Rate - specify if not London*]
	- Effective Date:	[*Specify if quotations are not to be obtained with effect from commencement of Interest Period*]

(vii)	ISDA Determination (General Condition 4.2(b)(i)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- ISDA Definitions:	[2006 ISDA Definitions/2021 ISDA Definitions]
	- Floating Rate Option:	[●] (*Where the 2021 ISDA Definitions are applicable, ensure this is a Floating Rate Option included in the Floating Rate Matrix (as defined in the 2021 ISDA Definitions*)
	- Effective Date:	[Interest Commencement Date]/[●]
	- Termination Date:	[Maturity Date/Settlement Date/Redemption Date/Optional Redemption Date/[●]]
	- Designated Maturity:	[●]/[Not Applicable] (*A Designated Maturity period is not relevant where the relevant Floating Rate Option is a risk-free rate*)
	- Reset Date:	[●][subject to adjustment in accordance with the [Floating Rate/Following/Modified Following/Preceding] Business Day Convention] (*If following standard ISDA elections, insert same Business Day Convention as for Interest Period End Dates unless "No Adjustment" applies to such dates, in which case delete the reference to Business Day Convention so that relevant ISDA fallbacks relating to Business Day Conventions will apply*)
	- [Period End Date/Termination Date adjustment for Unscheduled Holiday:	[Applicable/Not Applicable]] (*ISDA 2021 Definitions (s. 2.3.6(i)(b)) (but not the ISDA 2006 Definitions) provide an option to make this applicable where either the Modified Following Business Day Convention or Preceding Business Day Convention applies to Interest Period End Dates. Therefore, only specify as applicable if (i) the 2021 Definitions are applicable, (ii) the Modified Following Business Day Convention or Preceding Business Day Convention applies to Interest Period End Dates and (iii) the preference is to make the Business Day Convention subject to adjustment for Unscheduled Holiday. Note that the ISDA 2021 Definitions (s. 2.3.6(i)(a)) provides that, where Modified Following Business Day Convention or Preceding Business Day Convention applies to Interest Period End Date, adjustment of the relevant Payment Date as a result of an Unscheduled*

Holiday is applicable by default (unless specified otherwise))

- Compounding/ Averaging: [Applicable/Not Applicable]

(*Specify as Applicable if an "Overnight Rate Compounding Method" or "Overnight Rate Averaging Method" is applicable. Otherwise, delete the remaining sub-paragraphs of this paragraph*)

[Overnight Rate Compounding Method: [OIS Compounding/Compounding with Lookback/Compounding with Observation Period Shift/Compounding with Lockout/Not Applicable]]

[Overnight Rate Averaging Method: [Overnight Averaging/Averaging with Lookback/Averaging with Observation Period Shift/Averaging with Lockout/Not Applicable]]

[Lookback: [[●] Applicable Business Days]/[As specified in the [2006][2021] Definitions]/[Not Applicable]

(*Applicable only for Compounding with Lookback or Averaging with Lookback*)]

[Observation Period Shift: [[●] Observation Period Shift Business Days] /[As specified in the [2006][2021] Definitions]/[Not Applicable]

[Set-in-Advance: [Applicable/Not Applicable] (*Specify Not Applicable unless the standard position under the ISDA Definitions is to be changed*)

[Observation Period Shift Additional Business Days: [●]/[Not Applicable]]

(*Applicable only for Compounding with Observation Period Shift or Averaging with Observation Period Shift*)]

[Lockout: [[●] Lockout Period Business Days]/[As specified in the [2006][2021] Definitions]/[Not Applicable] (*Applicable only for Compounding with Lockout or Averaging with Lockout*)

[Lockout Period Business Days: [●]/ [Applicable Business Days]] (*Specify Applicable Business Days unless the standard position under the ISDA Definitions is to be changed*)]

[Daily Capped Rate and/or Daily Floored Rate: [Applicable/Not Applicable]

(*Applicable only for Overnight Rate Compounding Method or Overnight Rate Averaging Method. If Not Applicable, delete*

			the Daily Capped Rate and Daily Floored Rate prompts below)
			[Daily Capped Rate: [●]%]
			[Daily Floored Rate: [●]%]]
		[[Day Count Basis:	[●]] (*If not included this will be the denominator of the Day Count Fraction*)]
	-	Index provisions:	[Applicable/Not Applicable]
			(*Applicable only if using Index Floating Rate Option and an Index Method. If not applicable, delete the remaining sub-paragraphs of this paragraph*)
		Index Method:	[Standard Index Method (*may only be selected if the 2021 Definitions are specified*)/Compounded Index Method/Compounded Index Method with Observation Period Shift]/[As specified in the [2006][2021] Definitions]
			(*Include the following only if using Compounded Index Method with Observation Period Shift*)
			[Set-in-Advance: [Applicable/Not Applicable]] (*Not Applicable should be specified unless the standard position under the ISDA Definitions is to be changed*)
			Observation Period Shift: [[●] Observation Period Shift Business Days]/[As specified in the [2006][2021] Definitions]
			[Observation Period Shift Additional Business Days: [●]]
		[Day Count Basis:	[●]] (*If not included this will be the denominator of the Day Count Fraction*)
(viii)	SONIA Floating Rate Determination (Non-Index Determination) (General Condition 4.2(b)(iii)(A)):		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	-	Compounded Daily SONIA (Shift):	[Applicable]/[Not Applicable]
	-	Compounded Daily SONIA (Lag):	[Applicable]/[Not Applicable]
	-	Page:	[●]/[SONIAOSR=]
	-	Interest Determination Date(s):	[Fifth day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in London prior to the Interest Period End Date of each Interest Period]/[●]

	- p:	[Five London Banking Days]/[[●] London Banking Days]
(ix)	SONIA Floating Rate Determination (Index Determination) (General Condition 4.2(b)(iii)(B)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Interest Determination Date(s):	[The day falling the Relevant Number of London Banking Days prior to the Interest Period End Date for the relevant Interest Period]/[●]
	- Relevant Number:	[●]
(x)	SOFR Floating Rate Determination (General Condition 4.2(b)(iv)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Observation Method:	[Not Applicable/Lag/Shift] *(Specify Lag or Shift for Compounded Daily SOFR, except where Index Determination is applicable*)
	- Observation Look-Back Period:	[Not Applicable]/[●] U.S. Government Securities Business Days (*Specify for Compounded Daily SOFR, except where Index Determination is applicable. N.B. must be at least two such relevant days to allow clearing system payments*)
	- Index Determination:	[Applicable/Not Applicable]
	- Interest Determination Date(s):	[*Insert for Compounded Daily SOFR – Non-Index Determination*: Second U.S. Government Securities Business Days prior to the relevant Interest Period End Date] [*Insert for Compounded Daily SOFR – Index Determination*: The day falling the Relevant Number of U.S. Government Securities Business Day prior to the relevant Interest Period End Date and Relevant Number means [*insert number being two or greater*]]
(xi)	TONA Floating Rate Determination (General Condition 4.2(b)(v)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- p:	[Ten]/[●]
(xii)	€STR Floating Rate Determination (General Condition 4.2(b)(vi)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Compounded Daily €STR (Shift):	[Applicable]/[Not Applicable]
	- Compounded Daily €STR (Lag):	[Applicable]/[Not Applicable]

		- Page:	[●]
		- Interest Determination Date(s):	[Fifth TARGET2 Settlement Day prior to the Interest Period End Date of each Interest Period]/[●]
		- p:	[Five TARGET2 Settlement Days]/[[●] TARGET2 Settlement Days]
	(xiii)	Margin(s):	[+/-][●] per cent. per annum
	(xiv)	Minimum Rate of Interest:	[[●] per cent. per annum/Not Applicable]
	(xv)	Maximum Rate of Interest:	[[●] per cent. per annum/Not Applicable]
	(xvi)	Fall back provisions, rounding provisions, denominator and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the General Conditions:	[●]
	(xvii)	[Recommended Fallback Rate:	[Compounded Daily SONIA Recommended Fallback Rate/Compounded Daily SOFR Recommended Fallback Rate/Compounded Daily €STR Recommended Fallback Rate/ISDA Fallback Rate/[●]]]
	(xviii)	[Generic Permanent Fallback:	[Applicable/Not Applicable]]
12.	**Zero Coupon Note Provisions:**		[Applicable/Not Applicable][27] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Amortisation Yield (General Condition 4.4):	[●] per cent. per annum
	(ii)	Day Count Fraction:	[●]
	(iii)	Any other formula/basis of determining amount payable:	[●]
13.	**Variable Linked Interest Provisions:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Type of Interest:	[Share Linked Interest/Index Linked Interest/Commodity Linked Interest/FX Linked Interest/Fund Linked Interest/Bond Linked Interest] (*delete non-applicable terms*) (*or specify other variable*)
	(ii)	Provisions for determining Rate of Interest or Interest Amount where calculated by reference to	(*Set out formula in full here, or refer to Part C and set out in full in Part C*)

[27] In the case of Market Access Participation Notes insert "Applicable – see also the Coupon Amount provisions in the Market Access Participation Provisions".

		Share/Index/Commodity/FX Rate/Fund/Bond:	
	(iii)	Interest Determination Date(s):	[●]
	(iv)	Interest Payment Dates:	[●]
	(v)	Provisions for determining Rate of Interest or Interest Amount where calculation by reference to Share/Index/ Commodity/FX Rate/Fund/Bond is impossible or impracticable or otherwise disrupted:	The [Share Linked Provisions/Index Linked Provisions/Commodity Linked Provisions/ FX Linked Provisions/Fund Linked Provisions/Bond Linked Provisions] are applicable
	(vi)	Day Count Fraction:	[●]
14.	**Dual Currency Note Provisions:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Rate of Exchange/Method of calculating Rate of Exchange:	[*Give details*]
	(ii)	Calculation Agent, if any, responsible for calculating the principal and/or interest due:	[●]
	(iii)	Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable:	[●]
	(iv)	Person at whose option Specified Currency(ies) is/are payable:	[●]
	(v)	Day Count Fraction:	[●]

PROVISIONS RELATING TO REDEMPTION OF NOTES[28]

15.	**Call Option:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[●]
	(ii)	Optional Redemption Amount(s) and method, if any, of calculation of such amount(s):	[●] per Note of [●] Specified Denomination
	(iii)	If redeemable in part:	[●]
		(a) Minimum nominal amount to be redeemed:	[●]
		(b) Maximum nominal amount to be redeemed:	[●]

[28] In the case of Market Access Participation Notes, items 15, 16, 19, 20 and 21 shall be "Not Applicable".

	(iv)	Description of any other Issuer's option:	[●]
	(v)	Notice period (if other than as set out in General Condition 5.1):	[As specified in General Condition 5.1 / *other* (*specify*)]
16.	**Put Option:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[●]
	(ii)	Optional Redemption Amount(s) and method, if any, of calculation of such amount(s):	[●] per Note of [●] Specified Denomination
	(iii)	Description of any other Holders' option:	[●]
	(iv)	Notice period (if other than as set out in General Condition 5.2):	[As specified in General Condition 5.2 / *other* (*specify*)]
17.	**Final Redemption Amount:**		[[●] per Note of [●] Specified Denomination (*or insert formula for calculation of Final Redemption Amount*)][29]
	In cases where the Final Redemption Amount is Share Linked, Index Linked, Commodity Linked, FX Linked, Fund Linked, Bond Linked or other variable linked:		
	(i)	Reference Asset(s):	[As specified below/Other (*specify*)]
	(ii)	Provisions for determining Final Redemption Amount where calculated by reference to Share and/or Index and/or Commodity and/or FX Rate and/or Fund and/or Bond and/or other variable:	[●]
	(iii)	Provisions for determining Final Redemption Amount where calculation by reference to Share and/or Index and/or Commodity and/or FX Rate and/or Fund and/or Bond and/or other variable is impossible or impracticable or otherwise disrupted:	[See paragraph[s] [43/44/45/46/47/51] (*or specify other*)]
18.	**Early Payment Amount:**		[[Early Payment Amount 1/Early Payment Amount 2] is applicable (*insert for Notes other than Zero Coupon Notes, New York Law Notes (TLAC Securities) and Market Access Participation Notes*)]/[Amortised Face Amount as set out in General Condition 5.5 (*insert for Zero Coupon Notes and New York Law Notes that are Zero Coupon Notes*)]/[Not Applicable − See the Market Access

[29] In the case of Market Access Participation Notes insert "In respect of each Note, the Redemption Value – see the Market Access Participation Provisions".

			Participation Provisions (*insert for Market Access Participation Notes*)]/[Early Payment Amount 3 is applicable] (*insert for New York Law Notes (TLAC Securities) that are not Zero Coupon Notes*)
19.	**Credit Linked Note Provisions:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Reference Entity (or Entities):	[●]
	(ii)	Credit Event(s):	[●]
	(iii)	Calculation Agent responsible for determining the occurrence of a Credit Event(s) and amount payable/deliverable in the event of redemption resulting from such Credit Event(s):	[specify]
	(iv)	Relevant provisions on the occurrence of a Credit Event(s):	[●] (*NB: Amendments will be required to the General Conditions (including General Conditions 3 and 5)*)
	(v)	Other terms or special conditions:	[●]
20.	**Details relating to Instalment Notes:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Instalment Amount(s):	[●]
	(ii)	Instalment Date(s):	[●]
	(iii)	Minimum Instalment Amount:	[●]
	(iv)	Maximum Instalment Amount:	[●]
21.	**Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences (if any) of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:**		[Not Applicable/*give details*]

PROVISIONS APPLICABLE TO WARRANTS

(*If Warrants: retain paragraphs 22-34. If Notes or Certificates: (i) insert "Paragraphs 22-34 are intentionally deleted"; (ii) delete paragraphs 22-34*)

22.	**European, American or Bermudan Style:**	[European/American/Bermudan] Style[30]

[30] Specify "American Style" in respect of all Low Exercise Price Warrants.

23.	**Automatic Exercise:**	[●]
24.	**Expiration Date:**	[●]
25.	**Expiration Date subject to Valuation Date adjustment:**	[Applicable / Not Applicable]
26.	**Potential Exercise Date(s):**	[[●] / Not Applicable] (*For Bermudan style Warrants only*)
27.	**Potential Exercise Date subject to Valuation Date adjustment:**	[Applicable / Not Applicable] (*For Bermudan style Warrants only*)
28.	**Exercise Amount:**	[●]
29.	**Exercise Date(s)/Period:**	[●]
30.	**Minimum Exercise Number:**	[●]
31.	**Maximum Exercise Number:**	[●]
32.	**Cash Settlement/ Issuer Physical Settlement/ Holder Physical Settlement:**	[Cash Settlement/Issuer Physical Settlement/Holder Physical Settlement/ other (*specify*)] is applicable
33.	**Settlement Amount:** In cases where the Settlement Amount is Share Linked, Index Linked, Commodity Linked, FX Linked, Fund Linked or other variable linked:	[[●]/See Part [C]/Not Applicable]
	(i) Reference Asset(s):	[As specified below/Other (*specify*)]
	(ii) Provisions for determining Settlement Amount where calculated by reference to Share and/or Index and/or Commodity and/or FX Rate and/or Fund and/or other variable:	[As specified below/Other (*specify*)]
	(iii) Provisions for determining Settlement Amount where calculation by reference to Share and/or Index and/or Commodity and/or FX Rate and/or Fund and/or other variable is impossible or impracticable or otherwise disrupted:	[See paragraph[s] [43/44/45/46/47] (*or specify other*)]
34.	**Early Payment Amount:**	[[Early Payment Amount 1/Early Payment Amount 2/Early Payment Amount 3] is applicable]

PROVISIONS APPLICABLE TO CERTIFICATES

(*If Certificates: retain paragraphs 35-42. If Notes or Warrants: (i) insert "Paragraphs 35-42 are intentionally deleted"; (ii) delete paragraphs 35-42*)

35.	**Cash Settlement/Physical Settlement:**	[Cash Settlement is applicable/Physical Settlement is applicable/Cash Settlement and/or Physical Settlement is applicable]

36.	**Call Option:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[●]
	(ii)	Optional Redemption Amount(s) and method, if any, of calculation of such amount(s):	[●] per Certificate
	(iii)	If redeemable in part:	[●]
		(a) Minimum notional amount to be redeemed:	[●]
		(b) Maximum notional amount to be redeemed:	[●]
	(iv)	Description of any other Issuer's option:	[●]
	(v)	Notice period (if other than as set out in General Condition 9.1):	[As specified in General Condition 9.1 / Other (*specify*)]
37.	**Put Option:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[●]
	(ii)	Optional Redemption Amount(s) and method, if any, of calculation of such amount(s):	[●] per Certificate
	(iii)	Description of any other Holders' option:	[●]
	(iv)	Notice period (if other than as set out in General Condition 9.2):	[As specified in General Condition 9.2 / Other (*specify*)]
38.	**Redemption Amount:** In cases where the Redemption Amount is Share Linked, Index Linked, Commodity Linked, FX Linked, Fund Linked or other variable linked:		[[●]/See Part C/Not Applicable]
	(i)	Reference Asset(s):	[As specified below in paragraph[s] [43/44/45/46/47]/Other (*specify*)]
	(ii)	Provisions for determining Redemption Amount where calculated by reference to Share and/or Index and/or Commodity and/or FX Rate and/or Fund and/or other variable:	[As specified below/Other (*specify*)]
	(iii)	Provisions for determining Redemption Amount where calculation by reference to Share and/or Index and/or Commodity	[See paragraph[s] [43/44/45/46/47] (*or specify other*)]

		and/or FX Rate and/or Fund and/or other variable is impossible or impracticable or otherwise disrupted:	
39.	**Early Payment Amount:**		[[Early Payment Amount 1/Early Payment Amount 2/Early Payment Amount 3/the Amortised Face Amount (as defined in General Condition 5.5 (*Early Redemption of Zero Coupon Notes*)] is applicable]
40.	**Exercise applicable to Certificates (General Condition 10):**		[Applicable/Not Applicable] (*In the case of Italian Certificates, insert "General Condition 10.2 Applicable*") (*If applicable, specify provisions*)

CERTIFICATE COUPON PROVISIONS

41.	**Certificate Coupon Provisions (General Condition 8):**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Notional Amount:	[●]
	(ii)	Coupon Period(s)/ Coupon Payment Dates:	[●]
	(iii)	Fixed Rate Coupon/ Coupon Amount:	[●] (*Insert rate or amount. If payment of the Coupon Amount is contingent, specify*)
	(iv)	Business Day Convention:	[Floating Rate Business Day Convention/ Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/ Other (*give details*)] [subject to adjustment for Unscheduled Holiday] (*ISDA 2021 Definitions (s. 2.3.6(i)(b)) (but not the ISDA 2006 Definitions) provide an option to make the above applicable where either the Modified Following Business Day Convention or Preceding Business Day Convention applies to the end of a Coupon Period. Therefore, only specify as applicable if (i) the Modified Following Business Day Convention or Preceding Business Day Convention applies to end of a Coupon Period and (ii) the preference is to make the Business Day Convention subject to adjustment for Unscheduled Holiday*)
	(v)	Day Count Fraction:	[[●] / Not Applicable]
42.	**Certificate Floating Rate Coupon Provisions (General Condition 8.3):**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Floating Rate Coupon Period(s):	[●]

(ii)	Floating Rate Coupon Payment Dates:	[●]
(iii)	Floating Rate Coupon Commencement Date:	[●]
(iv)	Business Day Convention:	[Floating Rate Business Day Convention/ Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/Other (*give details*)] [subject to adjustment for Unscheduled Holiday] (*ISDA 2021 Definitions (s. 2.3.6(i)(b)) (but not the ISDA 2006 Definitions) provide an option to make the above applicable where either the Modified Following Business Day Convention or Preceding Business Day Convention applies to Floating Rate Coupon Period End Dates. Therefore, only specify as applicable if (i) the Modified Following Business Day Convention or Preceding Business Day Convention applies to Floating Rate Coupon Period End Dates and (ii) the preference is to make the Business Day Convention subject to adjustment for Unscheduled Holiday*)
(v)	Day Count Fraction:	[●]
(vi)	Manner in which the Floating Rate Coupon is/are to be determined:	[Screen Rate Determination / ISDA Determination / SONIA Floating Rate Determination (Non-Index Determination) / SONIA Floating Rate Determination (Index Determination) / SOFR Floating Rate Determination / TONA Floating Rate Determination / €STR Floating Rate Determination / other (*give details*)]
(vii)	Screen Rate Determination for Floating Rate Coupon (General Condition 8.3(b)(ii)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Page:	[●]
	- Benchmark:	[*Specify benchmark or other rate*]
	- Relevant Time:	[●]
	- Floating Rate Coupon Determination Date:	[[●][TARGET Settlement] Business Days in [*specify city*] for [*specify currency*] prior to [the first day in each Floating Rate Coupon Period/each Floating Rate Coupon Payment Date]]
	- Reference Banks:	[*Specify five*]
	- Relevant Financial Centre:	[*The financial centre most closely connected to the Benchmark - specify if not London*]

	- Effective Date:	[*Specify if quotations are not to be obtained with effect from commencement of Floating Rate Coupon Period*]
(viii)	ISDA Determination for Floating Rate Coupon (General Condition 8.3(b)(i)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- ISDA Definitions:	[2006 ISDA Definitions/2021 ISDA Definitions]
	- Floating Rate Option:	[●] (*Where the 2021 ISDA Definitions are applicable, ensure this is a Floating Rate Option included in the Floating Rate Matrix (as defined in the 2021 ISDA Definitions*)
	- Effective Date:	[Floating Rate Coupon Commencement Date]/[●]
	- Termination Date:	[Maturity Date/Settlement Date/Redemption Date/Optional Redemption Date/[●]]
	- Designated Maturity:	[●]/[Not Applicable] (*A Designated Maturity period is not relevant where the relevant Floating Rate Option is a risk-free rate*)
	- Reset Date:	[●][subject to adjustment in accordance with the [Floating Rate/Following/Modified Following/Preceding] Business Day Convention] (*If following standard ISDA elections, insert same Business Day Convention as for Floating Rate Coupon Period End Dates unless "No Adjustment" applies to such dates, in which case delete the reference to Business Day Convention so that relevant ISDA fallbacks relating to Business Day Conventions will apply*)
	- [Period End Date/Termination Date adjustment for Unscheduled Holiday:	[Applicable/Not Applicable]] (*ISDA 2021 Definitions (s. 2.3.6(i)(b)) (but not the ISDA 2006 Definitions) provide an option to make this applicable where either the Modified Following Business Day Convention or Preceding Business Day Convention applies to Floating Rate Coupon Period End Dates. Therefore, only specify as applicable if (i) the 2021 Definitions are applicable, (ii) the Modified Following Business Day Convention or Preceding Business Day Convention applies to Floating Rate Coupon Period End Dates and (iii) the preference is to make the Business Day Convention subject to adjustment for Unscheduled Holiday. Note that the ISDA 2021 Definitions (s. 2.3.6(i)(a)) provides that,*

where Modified Following Business Day Convention or Preceding Business Day Convention applies to Floating Rate Coupon Period End Date, adjustment of the relevant Payment Date as a result of an Unscheduled Holiday is applicable by default (unless specified otherwise))

- Compounding/ Averaging: [Applicable/Not Applicable]

(*Specify as Applicable if an "Overnight Rate Compounding Method" or "Overnight Rate Averaging Method" is applicable. Otherwise, delete the remaining sub-paragraphs of this paragraph*)

[Overnight Rate Compounding Method: [OIS Compounding/Compounding with Lookback/Compounding with Observation Period Shift/Compounding with Lockout/Not Applicable]]

[Overnight Rate Averaging Method: [Overnight Averaging/Averaging with Lookback/Averaging with Observation Period Shift/Averaging with Lockout/Not Applicable]]

[Lookback: [[●] Applicable Business Days]/[As specified in the [2006][2021] Definitions]/[Not Applicable]

(*Applicable only for Compounding with Lookback or Averaging with Lookback*)]

[Observation Period Shift: [[●] Observation Period Shift Business Days] /[As specified in the [2006][2021] Definitions]/[Not Applicable]

[Set-in-Advance: [Applicable/Not Applicable] (*Specify Not Applicable unless the standard position under the ISDA Definitions is to be changed*)

[Observation Period Shift Additional Business Days: [●]/[Not Applicable]]

(*Applicable only for Compounding with Observation Period Shift or Averaging with Observation Period Shift*)]

[Lockout: [[●] Lockout Period Business Days]/[As specified in the [2006][2021] Definitions]/[Not Applicable] (*Applicable only for Compounding with Lockout or Averaging with Lockout*)

[Lockout Period Business Days: [●]/ [Applicable Business Days]] (*Specify Applicable Business Days unless the standard position under the ISDA Definitions is to be changed*)]

[Daily Capped Rate and/or Daily Floored Rate: [Applicable/Not Applicable]

(*Applicable only for Overnight Rate Compounding Method or Overnight Rate Averaging Method. If Not Applicable, delete the Daily Capped Rate and Daily Floored Rate prompts below*)

[Daily Capped Rate: [●]%]

[Daily Floored Rate: [●]%]]

[[Day Count Basis: [●]] (*If not included this will be the denominator of the Day Count Fraction*)]

- Index provisions: [Applicable/Not Applicable]

(*Applicable only if using Index Floating Rate Option and an Index Method. If not applicable, delete the remaining sub-paragraphs of this paragraph*)

Index Method: [Standard Index Method (*may only be selected if the 2021 Definitions are specified*)/Compounded Index Method/Compounded Index Method with Observation Period Shift]/[As specified in the [2006][2021] Definitions]

(*Include the following only if using Compounded Index Method with Observation Period Shift*)

[Set-in-Advance: [Applicable/Not Applicable]] (*Not Applicable should be specified unless the standard position under the ISDA Definitions is to be changed*)

Observation Period Shift: [[●] Observation Period Shift Business Days]/[As specified in the [2006][2021] Definitions]

[Observation Period Shift Additional Business Days: [●]]

[Day Count Basis: [●]] (*If not included this will be the denominator of the Day Count Fraction*)

(ix) SONIA Floating Rate Determination (Non-Index Determination) (General Condition 8.3(b)(iii)(A)): [Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)

- Compounded Daily SONIA (Shift): [Applicable]/[Not Applicable]

- Compounded Daily SONIA (Lag): [Applicable]/[Not Applicable]

- Page: [●]/[SONIAOSR=]

- Floating Rate Coupon Determination Date(s): [Fifth day on which commercial banks are open for business (including dealings in

		foreign exchange and foreign currency deposits) in London prior to the Floating Rate Coupon Period End Date of each Floating Rate Coupon Period]/[●]
	- p:	[Five London Banking Days]/[[●] London Banking Days]
(x)	SONIA Floating Rate Determination (Index Determination) (General Condition 8.3(b)(iii)(B)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Floating Rate Coupon Determination Date(s):	[The day falling the Relevant Number of London Banking Days prior to the Floating Rate Coupon Period End Date for the relevant Floating Rate Coupon Period]/[●]
	- Relevant Number:	[●]
(xi)	SOFR Floating Rate Determination (General Condition 8.3(b)(iv)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- Observation Method:	[Not Applicable/Lag/Shift] (*Specify Lag or Shift for Compounded Daily SOFR, except where Index Determination is applicable*)
	- Observation Look-Back Period:	[Not Applicable]/[●] U.S. Government Securities Business Days (*Specify for Compounded Daily SOFR, except where Index Determination is applicable. N.B. must be at least two such relevant days to allow clearing system payments*)
	- Index Determination:	[Applicable/Not Applicable]
	- Floating Rate Coupon Determination Date(s):	[*Insert for Compounded Daily SOFR – Non-Index Determination*: Second U.S. Government Securities Business Days prior to the relevant Floating Rate Coupon Period End Date] [*Insert for Compounded Daily SOFR – Index Determination*: The day falling the Relevant Number of U.S. Government Securities Business Day prior to the relevant Floating Rate Coupon Period End Date and Relevant Number means [*insert number being two or greater*]]
(xii)	TONA Floating Rate Determination (General Condition 8.3(b)(v)):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	- p:	[Ten]/[●]

(xiii)	€STR Floating Rate Determination (General Condition 8.3(b)(vi)):		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	-	Compounded Daily €STR (Shift):	[Applicable]/[Not Applicable]
	-	Compounded Daily €STR (Lag):	[Applicable]/[Not Applicable]
	-	Page:	[●]
	-	Floating Rate Coupon Determination Date(s):	[Fifth TARGET2 Settlement Day prior to the Floating Rate Coupon Period End Date of each Floating Rate Coupon Period]/[●]
	-	p:	[Five TARGET2 Settlement Days]/[[●] TARGET2 Settlement Days]
(xiv)	Margin(s):		[+/-][●] per cent. per annum
(xv)	Minimum Rate of Floating Rate Coupon:		[[●] per cent. per annum/Not Applicable]
(xvi)	Maximum Rate of Floating Rate Coupon:		[[●] per cent. per annum/Not Applicable]
(xvii)	Fall back provisions, rounding provisions, denominator and any other terms relating to the method of calculating the Floating Rate Coupon on Certificates, if different from those set out in the General Conditions:		[●]
(xviii)	[Recommended Fallback Rate:		[Compounded Daily SONIA Recommended Fallback Rate/Compounded Daily SOFR Recommended Fallback Rate/Compounded Daily €STR Recommended Fallback Rate/ISDA Fallback Rate/[●]]]
(xix)	[Generic Permanent Fallback:		[Applicable/Not Applicable]]

SPECIFIC PRODUCT PROVISIONS APPLICABLE TO THE SECURITIES

SHARE LINKED PROVISIONS

43.	**Share Linked Provisions:**	[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
(i)	Single Share or basket of Shares:	[Single Share / Basket of Shares] (*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each Share in the relevant line item or in a table below*)

(ii)	Share(s):	[*Name of Share/Share(s) (Bloomberg Code(s): [●]; ISIN(s): [●])*/ [and] Share of Exchange Traded Fund(s)]
(iii)	Exchange Traded Fund(s):	[*Name of Exchange Traded Fund(s) (Bloomberg Code(s): [●]; ISIN(s): [●])*/Not Applicable]
(iv)	Exchange(s):	[●]
(v)	Related Exchange(s):	[[●] / All Exchanges]
(vi)	Share Price:	[Applicable / Not Applicable]
(vii)	Initial Valuation Date(s):	[Not Applicable /[●]]
(viii)	Interest Valuation Date(s):	[Not Applicable / [●]]
(ix)	Coupon Valuation Date(s):	[Not Applicable/ [●]]
(x)	Periodic Valuation Date(s):	[Not Applicable/ [●]]
(xi)	Valuation Date(s):	[Not Applicable / [●]]
(xii)	Initial Averaging Date(s):	[Not Applicable /[●]]
(xiii)	Averaging Date(s):	[Not Applicable / [●]]
(xiv)	Valuation Time:	[As specified in Share Linked Provision 10 (*Definitions*)/ Other (*specify*)]
(xv)	Maximum Days of Disruption:	[Eight Scheduled Trading Days as specified in Share Linked Provision 10 (*Definitions*)/ Zero / None / Other (*specify*)]
(xvi)	Averaging Reference Dates (Disrupted Day consequences):	[Applicable / Not Applicable]. [*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*]
	(a) Omission:	[Applicable / Not Applicable]
	(b) Postponement:	[Applicable / Not Applicable]
	(c) Modified Postponement:	[Applicable / Not Applicable]
(xvii)	Fallback Valuation Date:	[Applicable: *specify date(s)* / second Business Day prior to payment date as specified in Share Linked Provision 10 (*Definitions*)/ Not Applicable]
(xviii)	Observation Period:	[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
	(a) Observation Period Start Date:	[●], [Including / Excluding]
	(b) Observation Period End Date:	[●], [Including / Excluding]

	(c)	Observation Date (Closing Valuation):	[Applicable / Not Applicable]
	(d)	Observation Date (Intra-Day Valuation):	[Applicable / Not Applicable]
(xix)	Share Substitution:		[Applicable / Not Applicable]
(xx)	Hedging Disruption:		[Applicable / Not Applicable]
(xxi)	Change in Law – Increased Cost:		[Applicable / Not Applicable]
(xxii)	Insolvency Filing:		[Applicable / Not Applicable]
(xxiii)	Partial Lookthrough Depositary Receipts Provisions:		[Applicable to [*insert name of Share(s)*]/ Not Applicable]
(xxiv)	Full Lookthrough Depositary Receipts Provisions:		[Applicable to [*insert name of Share(s)*]/ Not Applicable]
(xxv)	Market Disruption Event – NAV Temporary Publication Suspension (ETF):		[Applicable / Not Applicable]
(xxvi)	Extraordinary Events – NAV Publication Suspension (ETF):		[Applicable / Not Applicable]
(xxvii)	Extraordinary Events – Underlying Index Cancellation (ETF):		[Applicable / Not Applicable]
(xxviii)	Extraordinary Events – Underlying Index Modification (ETF):		[Applicable / Not Applicable]
(xxix)	ETF – Successor Index Event Provision:		[Applicable / Not Applicable]

INDEX LINKED PROVISIONS

44.	**Index Linked Provisions:**		[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Single Index or basket of Indices:	[Single Index / Basket of Indices] (*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each Index in the relevant line item or in a table below*)
	(ii)	Index/Indices:	[*Name of Index/Indices (Bloomberg Code(s): [●])*]
	(iii)	Type of Index:	[Unitary Index / Multi-Exchange Index / Proprietary Index]
	(iv)	Exchange(s):	[●]
	(v)	Related Exchange(s):	[[●] / All Exchanges]

(vi)	Index Sponsor:	[[●] / As specified in Index Linked Provision 9 (*Definitions*)]
(vii)	Index Level:	[Applicable / Not Applicable]
(viii)	Initial Valuation Date(s):	[Not Applicable / [●]]
(ix)	Interest Valuation Date(s):	[Not Applicable / [●]]
(x)	Coupon Valuation Date(s):	[Not Applicable / [●]]
(xi)	Periodic Valuation Date(s):	[Not Applicable / [●]]
(xii)	Valuation Date(s):	[Not Applicable / [●]]
(xiii)	Initial Averaging Date(s):	[Not Applicable / [●]]
(xiv)	Averaging Date(s):	[Not Applicable / [●]]
(xv)	Valuation Time:	[As specified in Index Linked Provision 9 (*Definitions*)/ Other (*specify*)]
(xvi)	Maximum Days of Disruption:	[Eight Scheduled Trading Days as specified in Index Linked Provision 9 (*Definitions*)/ Zero / None / Other (*specify*)]
(xvii)	Averaging Reference Dates (Disrupted Day consequences):	[Applicable / Not Applicable] [*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*]
	(a) Omission:	[Applicable / Not Applicable]
	(b) Postponement:	[Applicable / Not Applicable]
	(c) Modified Postponement:	[Applicable / Not Applicable]
(xviii)	Fallback Valuation Date:	[Applicable: *specify date(s)* / second Business Day prior to payment date as specified in Index Linked Provision 9 (*Definitions*)/ Not Applicable]
(xix)	Observation Period:	[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
	(a) Observation Period Start Date:	[●], [Including / Excluding]
	(b) Observation Period End Date:	[●], [Including / Excluding]
	(c) Observation Date (Closing Valuation):	[Applicable / Not Applicable]
	(d) Observation Date (Intra-Day Valuation):	[Applicable / Not Applicable]
(xx)	Change in Law – Increased Cost:	[Applicable / Not Applicable]
(xxi)	Hedging Disruption:	[Applicable / Not Applicable]

(xxii)	Consequences of the occurrence of a Market Disruption Event (VWC) (Index Linked Provision 7):	[Applicable / Not Applicable]

COMMODITY LINKED PROVISIONS

45.	**Commodity Linked Provisions:**		[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
(i)	Commodity/ies or Commodity Index/ices:		[Commodity/ies / Commodity Index/ices] (*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each Commodity/Commodity Index in the relevant line item or in a table below*)
(ii)	Securities are linked to one or more Commodities:		[Yes / No] [*If No, delete the sub-paragraphs below*]
	(a)	Name of Commodity(ies):	[Name of Commodity(ies)]
	(b)	Commodity Reference Price(s):	[[●] / Commodity – Reference Dealers: [●]]
	(c)	Futures Contract:	[[●] / Not Applicable]
		– Futures Contract – Expiry Date Roll:	[Applicable / Not Applicable]
		– Futures Contract – Delivery Date Roll:	[Applicable / Not Applicable]
	(d)	Exchange(s):	[●]
	(e)	Specified Price(s):	[high price / low price / average of high price and low price / closing price / opening price / bid price / asked price / average of bid price and asked price / settlement price / official settlement price / official price / morning fixing / afternoon fixing / spot price / other price (*specify*)]
	(f)	Unit(s):	[Not Applicable / Other (*specify if Commodity Reference Dealer is specified under Commodity Reference Price*)]
	(g)	Delivery Date(s):	[●]
	(h)	Price Source(s):	[●]
	(i)	Screen Page:	[[●] / Not Applicable]
	(j)	Commodity Business Day Convention/ Bullion Business Day Convention:	[Following / Modified Following / Nearest / Preceding / No Adjustment]

(iii)	Initial Pricing Date(s):		[●]
(iv)	Pricing Date(s):		[●][, subject to adjustment in accordance with the [Commodity Business Day Convention/Bullion Business Day Convention/Trading Day Convention]]
(v)	Market Disruption Events for Securities linked to one or more Commodities:		
	(a)	Disappearance of Commodity Reference Price:	[Applicable / Not Applicable]
	(b)	Material Change in Content:	[Applicable / Not Applicable]
	(c)	Material Change in Formula:	[Applicable / Not Applicable]
	(d)	Price Source Disruption:	[Applicable / Not Applicable]
	(e)	Price Materiality Percentage:	[Not Applicable / Applicable - [●]]
	(f)	Trading Disruption:	[Applicable / Not Applicable]
	(g)	Tax Disruption:	[Applicable: Initial Pricing Date / Issue Date / Not Applicable]
	(h)	Other:	[Not Applicable / Applicable – (*specify*)]
(vi)	Disruption Fallbacks for Securities linked to one or more Commodities:		
	(a)	Fallback Reference Price:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth: alternate Commodity Reference Price(s) - [●]]
	(b)	Delayed Publication or Announcement:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth]]
	(c)	Postponement:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth]: Maximum Days of Disruption - [Five [Commodity/Bullion] Business Days as specified in Commodity Linked Provision 14 (*Definitions*)/ [●]]
	(d)	Fallback Reference Dealers:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth: [Bullion] Reference Dealers - [●]]
	(e)	Calculation Agent Determination:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth]]
	(f)	Other:	[Not Applicable / Applicable – to be applied [first / second /third / fourth / fifth / sixth]: specify]

(vii)	Common Pricing:		[Applicable / Not Applicable]
(viii)	Fallback Pricing Date:		[Applicable: *specify date(s)* / second Business Day prior to payment date as specified in Commodity Linked Provision 6 / Not Applicable]
(ix)	Commodity Hedging Disruption:		[Applicable: Trade Date/Issue Date/ Not Applicable] [The Trade Date is [●]]
	(a)	Early redemption following Commodity Hedging Disruption - Redemption Period:	[Applicable/Not Applicable]
	(b)	Commodity Hedging Disruption – Hedging Entity:	[Applicable/Not Applicable]
(x)	Change in Law – Increased Cost:		[Applicable / Not Applicable]
(xi)	Hedging Disruption:		[Applicable / Not Applicable]
(xii)	Securities are linked to one or more Commodity Indices:		[Applicable / Not Applicable] [*If Not Applicable, delete the sub-paragraphs of this paragraph*]
	(a)	Name of Commodity Index / Indices:	[●]
	(b)	Commodity Index Sponsor(s):	[[●] / As specified in Commodity Linked Provision 14 (*Definitions*)]
	(c)	Commodity Index Sponsor Business Centre(s):	[●]
	(d)	Trading Day Convention:	[Following / Modified Following / Nearest / Preceding / No Adjustment]

FX LINKED PROVISIONS

46.	**FX Linked Provisions:**		[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
(i)	Single FX Rate or basket of FX Rates:		[Single FX Rate / Basket of FX Rates] (*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each FX Rate in the relevant line item or in a table below*)
(ii)	FX Rate(s):		[*Definition of applicable FX Rate(s)*]
(iii)	Reference Currency:		[●]
(iv)	Base Currency:		[●]

(v)	FX Price Source:	[●]
(vi)	FX Rate Sponsor:	[Not Applicable / [●]][31]
(vii)	Number of FX Settlement Days:	[Not Applicable / [●]][32]
(viii)	Initial Valuation Date(s):	[Not Applicable / [●]]
(ix)	Interest Valuation Date(s):	[Not Applicable / [●]]
(x)	Coupon Valuation Date(s):	[Not Applicable / [●]]
(xi)	Valuation Date(s):	[Not Applicable / [●]]
(xii)	Reference Date(s):	[Not Applicable / [●]]
(xiii)	Initial Averaging Date:	[Not Applicable / [●]]
(xiv)	Averaging Date(s):	[Not Applicable / [●]]
(xv)	FX Financial Centres:	[●]
(xvi)	FX Business Day Convention:	[Following / Modified Following / Nearest / Preceding / No Adjustment]
(xvii)	Valuation Time:	[Not Applicable / [●]]
(xviii)	FX Disruption Events:	
	(a) Price Source Disruption:	[Not Applicable / Applicable]
	(b) Inconvertibility Event:	[Not Applicable / Applicable]
	(c) Administrator/Benchmark Event:	[Not Applicable / Applicable]
	(d) FX Inconvertibility Event:	[Not Applicable / Applicable][33]
	(e) Market Disruption Event:	[Not Applicable / Applicable][34]
	(f) Reference Market Dealer Event:	[Not Applicable / Applicable[35] Minimum Number of Quotations: [●]]
	(g) Other:	[Not Applicable / Applicable – *specify*]
(xix)	EMTA Provisions:	[Not Applicable / Applicable] [*If Not Applicable, delete the sub-paragraphs of this paragraph*][36]
	(a) Cumulative Postponement:	[Not Applicable / [●] calendar days / (*specify*)]

[31] Usually applicable in respect of emerging market currencies.

[32] Usually applicable in respect of emerging market currencies.

[33] Usually applicable in respect of emerging market currencies.

[34] Usually applicable in respect of emerging market currencies.

[35] Usually applicable in respect of emerging market currencies.

[36] Usually applicable in respect of emerging market currencies.

	(b)	Last Deferred Day:	[Not Applicable / [●] calendar days / (*specify*)]
	(c)	Last Postponement Date:	[Not Applicable / [●] calendar days / (*specify*)]
	(d)	Local Time:	[Not Applicable / (*specify financial centre(s)*)]
	(e)	Postponement Override:	[Not Applicable / Applicable]
(xx)	Disruption Fallbacks:		
	(a)	Calculation Agent Determination:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh]]
	(b)	Currency-Reference Dealers:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh] Reference Dealers – as specified in FX Linked Provision 10 (*Definitions*) / Other (*specify*)]
	(c)	Dealer Poll:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh] Reference Market Dealers – as specified in FX Linked Provision 10 (*Definitions*) / (*specify*) Minimum Number of Quotations: [●]]
	(d)	Fallback Reference Price:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh] Fallback Price Source: [Published / Survey]] [Survey Rate: *specify*]
	(e)	Fallback Survey Valuation Postponement:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh] Fallback Maximum Days of Postponement: [●] [Scheduled FX Business Day[s]] / (*specify*)]
	(f)	Valuation Postponement:	[Not Applicable / Applicable – to be applied [first / second / third / fourth / fifth / sixth / seventh] Maximum Days of Postponement: [●] [calendar day[s]] / (*specify*)]
	(g)	Other:	[Not Applicable / Applicable – s*pecify* – to be applied [first / second / third / fourth / fifth / sixth / seventh]]

(xxi)	Averaging Reference Dates – Omission:	[Not Applicable / Applicable]
(xxii)	Fallback Valuation Date:	[Applicable: *specify date(s)* / second Business Day prior to payment date as specified in FX Linked Provision 10 (*Definitions*)/ Not Applicable]
(xxiii)	Successor Currency:	[Not Applicable / Applicable] [Successor Currency Cut-off Date: [Trade Date / Issue Date / (*specify*)]] [Trade Date: [●]]
(xxiv)	Rebasing:	[Not Applicable / Applicable]
(xxv)	Change in Law – Increased Cost:	[Not Applicable / Applicable]
(xxvi)	Hedging Disruption:	[Not Applicable / Applicable]

FUND LINKED PROVISIONS

47.	**Fund Linked Provisions:**		[Applicable [in respect of [each/the] Fund]/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Single Fund or basket of Funds:	[Single Fund/Basket of Funds] (*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each Fund in the relevant line item or in a table below*)
	(ii)	Original Fund(s):	[●] (*specify name of the Original Fund(s)*)
	(iii)	Fund Shares (or units of a Fund):	[Name/Class of Fund Share (*Bloomberg Code(s)*: [●])]
	(iv)	Management Company:	[●]
	(v)	Trade Date:	[●]
	(vi)	Initial Valuation Date(s):	[Not Applicable/[●]]
	(vii)	Interest Valuation Date:	[Not Applicable/[●]]
	(viii)	Coupon Valuation Date(s):	[Not Applicable/[●]]
	(ix)	Periodic Valuation Date(s):	[Not Applicable/[●]]
	(x)	Valuation Date(s):	[Not Applicable/[●]]
	(xi)	Initial Averaging Date:	[Not Applicable/[●]]
	(xii)	Averaging Dates:	[Not Applicable/[●]]

(xiii)	Maximum Days of Disruption:	[Eight Scheduled Trading Days as specified in Fund Linked Provision 10 (*Definitions*)/ Zero / None / [●] (*specify number of days*)]
(xiv)	Averaging Reference Dates (Disrupted Day Consequences):	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(a) Omission:	[Applicable/Not Applicable]
	(b) Postponement:	[Applicable/Not Applicable]
	(c) Modified Postponement:	[Applicable/Not Applicable]
(xv)	Fallback Valuation Date:	[Applicable: [●] (specify date(s)) / second Business Day prior to payment date as specified in Fund Linked Provision 10 (*Definitions*)/Not Applicable]
(xvi)	Observation Period:	[Applicable / Not Applicable] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
	(a) Observation Period Start Date:	[●], [Including / Excluding]
	(b) Observation Period End Date:	[●], [Including / Excluding]
	(c) Observation Date (Closing Valuation):	[Applicable / Not Applicable]
(xvii)	Pre-selected Replacement Fund:	[Applicable: [●]/Not Applicable]
(xviii)	Cash Index	[Applicable: [*Name of Cash Index* (*Bloomberg Code(s): [●]*)]/Not Applicable]
(xix)	Change in Law – Increased Cost:	[Applicable/Not Applicable]
(xx)	Hedging Disruption:	[Applicable/Not Applicable]
(xxi)	Fund Event:	[Applicable/Not Applicable]
(xxii)	AUM Threshold:	[●]/[Not Applicable]
(xxiii)	AUM Threshold Percentage:	[Applicable: As specified in Fund Linked Provision 10 (*Definitions*)/[●]]
(xxiv)	Volatility Threshold:	[As specified in Fund Linked Provision 10 (*Definitions*)/[●]]
(xxv)	Change in Manager – Hedging:	[Applicable/Not Applicable]
(xxvi)	Hedging Entity:	[As specified in Fund Linked Provision 10 (*Definitions*)/[●]]

MARKET ACCESS PARTICIPATION PROVISIONS

48.	**Market Access Participation Provisions:**	[Applicable / Not Applicable]

(*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)

[If Applicable, choose either of the following options:

(i) specify: "Applicable, and the following terms as set forth in Participation Note Provision 4 (Definitions) shall have the following meanings: (definitions should be included for each of: "Coupon Exchange Rate", "Coupon Payment Date", "Coupon Period", "Exchange Rate", "Handling Charge", "Investment Regulations", "Minimum Redemption Number", "Redemption Charge", "Redemption Date", "Relevant Country", "Relevant Exchange", "Settlement Date", "Trade Date", "Underlying Company" and "Underlying Shares"); or

(ii) specify: "Applicable, provided that the Market Access Participation Provisions as set forth in Annex 5 of the General Conditions are replaced [in their entirety] [in part (as applicable)] by the applicable terms set forth in Part C hereof".

LOW EXERCISE PRICE WARRANT PROVISIONS

49. **Low Exercise Price Warrant Provisions:** [Applicable/Not Applicable]

(*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)

[If Applicable, choose either option (i) or (ii), and choose "Applicable" or "Not Applicable" under option (iii):

(i) specify: "Applicable, and the following terms as set forth in LEPW Provision 7 (Definitions) shall have the following meanings: (definitions should be included for each of: "Exchange", "Share"; and "Trade Date" and for "Settlement Amount", "Settlement Date" and "Strike Price" (where different from the default in LEPW Provision 7); or

(ii) specify: "Applicable, provided that the LEPW Provisions as set forth in Annex 6 of the General Conditions are replaced [in their entirety] [in part (as applicable)] by the

applicable terms set forth in Part C hereof"]; and

(iii) *specify: "Applicable, provided that for the purposes of LEPW Provision 4.2, QFII Events shall be [applicable/not applicable].*

[Saudi Arabia LEPW Provisions: [Not Applicable/Applicable]

(*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)

Saudi Arabia LEPW Investor Agreement Letter: [Not Applicable/Applicable]]

RATE LINKED PROVISIONS

50. **Rate Linked Provisions:** [Applicable/Not Applicable]

(*specify "Applicable" for Other Variable Linked Interest Notes where Annex 8 applies*)

[Original Rate: [●]] (*specify each Original Rate in respect of which the Rate Linked Provisions apply*)

[Recommended Fallback Rate: [Compounded Daily SONIA Recommended Fallback Rate/Compounded Daily SOFR Recommended Fallback Rate/Compounded Daily €STR Recommended Fallback Rate/ISDA Fallback Rate/[●]]]

[Generic Permanent Fallback: [Applicable/Not Applicable]]

BOND LINKED PROVISIONS

51. **Bond Linked Provisions:** [Applicable [in respect of [each/the] Bond]/Not Applicable]

(*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)

(i) Single Bond or basket of Bonds: [Single Bond/Basket of Bonds]

(*For Securities admitted to (i) the Official List and to trading on the GEM or (ii) the Official List and to trading on the Euro MTF and if basket performance feature, must include weighting of each Bond in the relevant line item or in a table below*)

(ii) Bond(s): [*Name of Bond/Bond(s)* (*[CUSIP/ISIN][FIGI]: [●]*)]

(iii) Reference Entity: [●]

(iv) Bond Maturity Date: [Not Applicable/[●]]

(v) Exchange(s): [Not Applicable/[●]]

(vi)	Bond Principal Amount:		[As specified in Bond Linked Provision 7 (*Definitions*)/[●]]
(vii)	Early Redemption Event(s):		
	(a)	Failure to Pay:	[Applicable / Not Applicable]
	(b)	Bond Redemption:	[Applicable / Not Applicable]
	(c)	Obligation Acceleration:	[Applicable / Not Applicable]
	(d)	Repudiation/Moratorium:	[Applicable / Not Applicable]
	(e)	Restructuring:	[Applicable / Not Applicable]
	(f)	Inconvertibility Event:	[Applicable / Not Applicable]
	(g)	Sovereign Event:	[Applicable / Not Applicable]
	(h)	Expropriation/Hedge Event:	[Applicable / Not Applicable]
	(i)	Bond Tax Event:	[Applicable / Not Applicable]
	(j)	Bankruptcy:	[Applicable / Not Applicable]
	(k)	Sanction Event:	[Applicable / Not Applicable]
			[Sanctions: As specified in Bond Linked Provision 7 (*Definitions*) / (*specify*)]
	(l)	Governmental Intervention:	[Applicable / Not Applicable]
	(m)	Other:	[Not Applicable / Applicable – (*specify*)]
(viii)	Adjustment Event Start Date:		[Not Applicable/[●]]
(ix)	Adjustment Event End Date:		[Not Applicable/[●]]
(x)	Change in Law (Hedge):		[Applicable / Not Applicable]
(xi)	Hedging Disruption:		[Applicable / Not Applicable]
(xii)	Trade Date:		[●]

GENERAL PROVISIONS APPLICABLE TO THE SECURITIES

52.	**New Safekeeping Structure (in respect of Registered Notes) or New Global Note (in respect of Bearer Notes):**	[Applicable: [New Safekeeping Structure/New Global Note]/Not Applicable][37]
53.	**Form of Securities:**	[Bearer Securities / Registered Securities / German Securities / Finnish Securities / Norwegian Securities / Swedish Securities / Danish Notes/ Swiss Securities / Swiss Certificates (UBS-cleared) / French Bearer Securities (*au porteur*) / French Registered Securities in a registered dematerialised form

[37] If the Notes are intended to be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem, Registered Notes shall be held under the New Safekeeping Structure or Bearer Notes shall be issued in New Global Note form.

		(*au nominatif*) / Italian Certificates] [*Delete as appropriate*] [*If Swiss Securities in uncertificated form*] [Swiss Securities in uncertificated form as uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) exchangeable for Registered Securities in definitive form at the option of the Swiss Programme Agent in accordance with the General Conditions] [*If Swiss Securities represented by a Global Security*] [Swiss Global Security exchangeable for Registered Securities in definitive form at the option of the Swiss Programme Agent in accordance with the General Conditions] [*If Swiss Certificates (UBS-cleared)*] [Swiss Certificates (UBS-cleared) in uncertificated form as uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) which are not exchangeable for Registered Securities in definitive form in any circumstances]
(i)	Temporary or Permanent Bearer Global Security / Registered Global Security:	[*If bearer, and not French Bearer Securities*] [[Temporary Bearer Global Security exchangeable for a] Permanent Bearer Global Security[, [each of] which is exchangeable for Registered Definitive Securities (i) automatically in the limited circumstances specified in the relevant [Permanent] Bearer Global Security or (ii)[, in the case of a Permanent Bearer Global Security only,] at any time at the option of the Issuer by giving notice to the Holders and the Relevant Programme Agent of its intention to effect such exchange on the terms as set forth in the relevant Permanent Bearer Global Security]][38] [*If registered, and not French Registered Securities/ Swedish / Finnish / Norwegian / Rule 144A Securities / Danish Notes / CREST CDI Securities*] [[Temporary Registered Global Security which is exchangeable for a] Permanent Registered Global Security[, each of] which is exchangeable for Registered Definitive Securities (i) automatically in the limited circumstances specified in the relevant [Permanent] Registered Global Security or (ii) [in the case of a Permanent Registered Global Security only,] at any time at the option of the Issuer by giving notice to the Holders and the Registrar of its intention

[38] Warrants may not be initially represented by a Permanent Bearer Global Security.

		to effect such exchange on the terms as set forth in the relevant Permanent Registered Global Security][39] [*If Rule 144A Securities*] [Registered Global Security which is exchangeable for Registered Definitive Securities in the limited circumstances specified in the Registered Global Security] [*If Regulation S/Rule 144A Warrants*] [Regulation S/Rule 144A Global Warrants which shall be exchangeable for Registered Warrants in definitive form in the circumstances specified in General Condition 1.1(c)(iv)(B) (*Permanent Registered Global Securities*) for which purpose the Regulation S/Rule 144A Global Warrant shall be deemed to be a Permanent Registered Global Security][40] [Not Applicable] (*include for Swedish / Finnish / Norwegian / French / Swiss Securities / Swiss Certificates (UBS-cleared) / Danish Notes*) [*If CREST CDI Securities*] [Permanent Registered Global Security. However, Investors will hold interests in dematerialised CREST Depository Interests issued by CREST Depository Limited (or successor)]
(ii)	Are the Notes to be issued in the form of obligations under French law?	[Yes / No][41]
(iii)	Name of French Registration Agent (*only if French Securities are in registered form (au nominatif) and if the Notes are not inscribed with the Issuer*)	[[●]/Not Applicable]
(iv)	Representation of Holders of Notes[42] / Masse:	[Full Masse / Contractual Masse / No Masse / Not Applicable]

[39] Warrants may not be initially represented by a Permanent Registered Global Security.

[40] Include for Low Exercise Price Warrants.

[41] Please select "Yes" only if the Notes are French Notes, the Series comprises at least five Notes, the holders of the relevant Notes are grouped in a Masse in accordance with General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*) and all Notes confer the same rights against the Issuer at any time.

[42] The provisions of the French *Code de commerce* relating to the Masse of Holders of Notes are applicable in full to French domestic issues of Notes. However, pursuant to Article L.213-6-3 of the French *Code monétaire et financier*, the Masse provisions contained in the French *Code de commerce* are NOT applicable to issues of French Notes with a Specified Denomination of at least 100,000 Euros or issues of French Notes for which the minimum purchase amount per investor and per transaction is at least 100,000 Euros; accordingly such issues may have no Masse provisions at all or the Masse provisions contained in the French *Code de commerce* may be varied along the lines of the provisions of General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*). Pursuant to Article L.228-90 of the French *Code de commerce*, the Masse provisions contained in the French *Code de commerce* are NOT applicable to international issues (*emprunt émis à l'étranger*); accordingly, international issues may have no Masse provisions at all or the Masse provisions contained in the French *Code de commerce* may be varied along the lines of the provisions of General Condition 24.3 (*Meetings of Holders of French Notes (Masse)*).

			(*If General Condition 24.3 applies or if the full provisions of French Code de commerce apply, insert details of Representative and alternative Representative and remuneration, if any*)
	(v)	Regulation S/Rule 144A Securities:	[Not Applicable/Applicable: Regulation S/Rule 144A Notes/Certificates/Warrants]
54.	**Record Date:**		[As set out in the General Conditions] [The Record Date for the Registered Global Securities is close of business of the [●] Business Day before the relevant Payment Date] [Not Applicable] (*Only applicable to Registered Securities*)
55.	**Additional Financial Centre(s) (General Condition 12.2) or other special provisions relating to payment dates:**		[Not Applicable/*Give details. Note that this item relates to the place of payment*]
56.	**Payment Disruption Event (General Condition 13):**		
	Relevant Currency:		[●]
57.	**Extraordinary Hedge Disruption Event (General Condition 17):**		[Not Applicable/Applicable] *(If Not Applicable, delete the remaining sub-paragraphs of this paragraph)*
	(i)	Extraordinary Hedge Sanctions Event:	[Not Applicable/Applicable]
	(ii)	Extraordinary Hedge Bail-in Event:	[Not Applicable/Applicable]
	(iii)	Extraordinary Hedge Currency Disruption Event:	[Not Applicable/Applicable]
58.	**Early Redemption for Tax on Underlying Hedge Transactions (General Condition 18.4(b)):**		[Applicable/Not Applicable]
59.	**Disruption Event (General Condition 19):**		[Not Applicable/Applicable[43]] (*If Not Applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Change in Law (Hedge):	[Not Applicable/Applicable]
	(ii)	Hedging Disruption:	[Not Applicable/Applicable]
60.	**Physical Settlement:**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*) (*If the Issuer is JPMCFC, then physical settlement is not permitted*)

[43] Disruption Event should only be specified as "Applicable" if the Specific Product Provisions are "Not Applicable".

	(i)	Reference Asset(s):	[●]
	(ii)	Reference Asset Amount:	[*Express per lowest specified denomination in the case of Notes*]
	(iii)	Residual Cash Amount:	[●]
	(iv)	Physical Settlement Cut-off Date:	[●]
	(v)	Relevant Clearing System:	[●]
	(vi)	Delivery Agent if other than as set out in the General Conditions:	[●]
	(vii)	Disruption Cash Settlement Price:	[●]
	(viii)	Reference Asset Transfer Notice[44]:	[Applicable/Not Applicable]
	(ix)	Non-U.S. Certification:	[Applicable/Not Applicable]
	(x)	Eligible Investor Certification:	[Applicable/Not Applicable]
	(xi)	Equity Certification:	[Applicable/Not Applicable]
	(xii)	Other terms or special conditions:	[●]
61.	**Calculation Agent:**		[J.P. Morgan Securities plc / J.P. Morgan Securities LLC / J.P. Morgan SE]
62.	**Redenomination, renominalisation and reconventioning provisions:**		[Not Applicable / General Condition 22 is applicable]
63.	**Gross Up (General Condition 18):**		Not Applicable / Applicable – as specified in General Condition 18.1/ Other (specify). (*If Not Applicable, delete sub-paragraph (i) and re-number sub-paragraph (ii) accordingly*)
	[(i)	Exclude Section 871(m) Taxes from Gross Up (General Condition 18):	[Not Applicable / Applicable – as specified in General Condition 18.1/ Other (*specify*)]]
	(ii)	871(m) Securities:	Section 871(m) and the regulations promulgated thereunder [will] [will not] apply to the Securities
64.	**Rounding:**		[General Condition 23 applies / Other (*specify*)]
65.	**Other terms or special conditions:**		[Not Applicable/Applicable - see Part C /*give details. In the case of Norwegian Notes specify if investors have to provide Form W-8*]

DISTRIBUTION

66.	**If non-syndicated, name and address of Dealer:**	[J.P. Morgan Securities plc of 25 Bank Street, Canary Wharf, London E14 5JP]/[J.P. Morgan SE of TaunusTurm, Taunustor 1, 60310 Frankfurt am Main, Germany]/[J.P. Morgan Securities (Asia Pacific) Limited of

[44] Reference Asset Transfer Notice is not required for Swiss Offers.

25/F Chater House, 8 Connaught Road Central, Hong Kong]/[J.P. Morgan Securities LLC of 383 Madison Avenue, 5th Floor, New York, New York 10179, United States of America]/[J.P. Morgan Securities Australia Limited of Level 18, 85 Castlereagh Street, Sydney NSW 2000, Australia]/[JPMorgan Securities Japan Co., Ltd. of Tokyo Building, 7-3 Marunouchi 2-Chome, Chiyoda-ku, Tokyo 100-6432, Japan] (*include JPMS plc for Rule 144A Securities*)

[J.P. Morgan Securities plc will only act as Dealer, under the Structured Products Programme for the issuance of Notes, Warrants and Certificates, in relation to jurisdictions where it is permitted to carry out such activity.

J.P. Morgan Securities plc will not act as Dealer, under the Structured Products Programme for the issuance of Notes, Warrants and Certificates, for EEA-based investors (save for where J.P. Morgan Securities plc has separately agreed with the investor(s) to do so).] (*insert where JPMS plc is the Dealer and where applicable*)

67. **Stabilising Manager(s) (if any):** [Not Applicable] [*give name*]

68. **Total commission and concession:** [[●] per cent. of the Aggregate Nominal Amount / See paragraph 6 / Not Applicable]

69. **U.S. selling restrictions:** [Regulation S / Regulation S with respect to CREST CDI Securities / Rule 144A][45]

[Regulation S/Rule 144A Securities issued by JPMSP may be sold to certain investors outside the United States in "offshore transactions" (as defined in Regulation S) in reliance on Regulation S and to certain qualified investors in the United States in reliance on Rule 144A of the Securities Act.

ERISA Restrictions for all Securities (including Rule 144A Securities and Securities subject to Regulation S)

[*If Securities are issued by JPMCFC or JPMSP follow paragraph (i).*]

[*If Securities are issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., follow paragraph (ii)*]

[*(i) If Securities are being issued by JPMCFC or JPMSP, insert either subparagraphs (A) or (B) below (as applicable):*]

[45] Include the appropriate option in respect of all Securities other than Regulation S/Rule 144A Securities.

[*(A) If the Securities are being issued by JPMCFC or JPMSP, then, unless subparagraph (B) immediately below applies, insert the following (which is the standard default position for JPMCFC or JPMSP)*:] [[JPMCFC]/[JPMSP] Standard Restrictions apply: The Securities may not be acquired by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code of 1986, as amended, other than certain insurance company general accounts. See "Subscription and Sale – United States" and "Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions – (b) JPMCFC/JPMSP Standard Restrictions" in the Offering Circular.]

[*(B) If the Securities are being issued by JPMCFC or JPMSP, then, only if the Issuer has satisfied itself that the Securities do not constitute equity interests for purposes of ERISA, insert the following*:] [[JPMCFC]/[JPMSP] Special Restrictions apply: The Securities may not be acquired except subject to certain restrictions by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code of 1986, as amended. See "Subscription and Sale – United States" and "Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions – (c) JPMCFC/JPMSP Special Restrictions" in the Offering Circular.]

[*(ii)* [*If Securities are being issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., use the following:*

The Securities may not be acquired except subject to certain restrictions by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code, as amended, subject to certain restrictions. See "Subscription and Sale – United States" and "Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions – (a) JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. issued Securities" in the Offering Circular.]/

[*If Securities are being issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. and the Securities may not be acquired, by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code, use the following*:

The Securities may not be acquired by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code, as amended.]]

ERISA Restrictions for Regulation S/Rule 144A Securities

[*(A) Insert the following (which is the standard default position) unless paragraph B immediately below applies*:] [Standard Restrictions apply: The Securities may not be acquired by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code of 1986, as amended, other than certain insurance company general accounts. See "Subscription and Sale – United States", "Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions – (b) JPMCFC/JPMSP Standard Restrictions" in the Offering Circular.]

[*(B) Insert the following only if the Issuer has satisfied itself that the Securities do not constitute equity interests for purposes of ERISA*:] [Special Restrictions apply: The Securities may not be acquired except subject to certain restrictions by, on behalf of, or with the assets of any plans subject to ERISA or Section 4975 of the U.S. Internal Revenue Code of 1986, as amended. See "Subscription and Sale – United States", "Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions – (c) JPMCFC/JPMSP Special Restrictions" in the Offering Circular.]"

70. **ECI Holder Restrictions:** [Applicable]/[Not Applicable]

[*Should be "Applicable" if Notes or Certificates (i) are being issued by JPMCFC, JPMSP or JPMorgan Chase Bank, N.A., (ii) are being offered and sold pursuant to Regulation S exemption and (iii) a holder or person acting on its behalf has the discretion to change the referenced assets or trading algorithm underlying an index*.]

71. **Additional Selling Restrictions:** [*Specify if different from those set out in the Offering Circular under "Subscription and Sale"/Not applicable*]/[Singapore Selling Restrictions for Other Investors apply]

72. **Swiss Non-Exempt Public Offer:** [Yes. If an obligation to prepare a supplement to the Offering Circular pursuant to article 56 para 1 of the Swiss Financial Services Act (FinSA) is triggered during the [Swiss Offer Period][subscription period], subscriptions may be withdrawn within two days of publication of the supplement. [An offer of

	the Securities may be made in Switzerland during the period from [(and including)][●] (*specify date*) to [(and including)] [●] (*specify date*) (the "**Swiss Offer Period**")]. The Issuer gives specific consent to use the Offering Circular and this Pricing Supplement [during the Swiss Offer Period] to the financial intermediary that is responsible for the primary offer of the Securities in Switzerland and with whom J.P. Morgan Securities plc has a contractual relationship in respect of such offer in Switzerland/No. Neither this Pricing Supplement nor the Offering Circular constitutes a prospectus within the meaning of the Swiss Financial Services Act and no such prospectus will be prepared./No][46] (*If no, delete the remaining sub-paragraph of this paragraph*)
Additional Information Relating to the Reference Asset(s):	[Applicable. [Information relating to the [Share(s)][Index/Indices] including the performance [and the method of calculating] [of] the [Share(s)][Index/Indices] can be found on the website of the relevant [Issuer or Exchange(s)][Index Sponsor(s)][●] [Information relating to the Reference Asset(s): [●]]]]/[Not Applicable] [*For Securities linked to Reference Assets that are actively managed during the term of the Security ("**Actively Managed Certificates**"), add the following additional information with respect to each Reference Asset contained in the basket:* • *key information on the investment strategy, such as securities universe, criteria for selecting securities and information on how earnings on the Reference Assets are handled;* • *name or company name and place of residence or registered office of the manager of the investment strategy as well as information on the supervisory authority or, if applicable, a declaration that the manager is not prudentially supervised;* • *details of all compensation paid for the Security, such as, in particular, management fees for the manager of the investment strategy;*.

[46] Insert "Yes" in the case of Securities publicly offered in Switzerland to any type of investors or Securities listed on the SIX Swiss Exchange. Insert "No" in the case of Securities offered under an exemption from the Swiss prospectus requirement (e.g., private placement, profession investors, issue size below CHF 8 mio.) and without listing on the SIX Swiss Exchange.

- *indication on where the information on the investment strategy can be obtained free of charge; and*
- *information on where the monthly updated and percentage-weighted composition of the Reference Asset is accessible.*]

73.	**Prohibition of Sales to EEA Retail Investors:**	[Applicable/Not Applicable]
74.	**Prohibition of Sales to UK Retail Investors:**	[Applicable/Not Applicable]

GENERAL

75.	The aggregate principal amount of Notes issued has been translated into U.S. dollars at the rate of [●] 1 = U.S.$ [●], producing a sum of (for Notes not denominated in U.S. dollars):	[Not Applicable/U.S.$[●]]

PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the pricing supplement required for the issue [[, and admission to the Official List of Euronext Dublin and to trading on its Global Exchange Market,][, and listing and admission to trading on the Luxembourg Stock Exchange's Euro MTF,][, and admission to trading on the multilateral trading facility [EuroTLX (managed by EuroTLX SIM S.p.A)][SeDeX (managed by Borsa Italiana S.p.A.)],][, and listing and admission to trading on the [Open Market (Freiverkehr) of the Frankfurt Stock Exchange (Börse Frankfurt Zertifikate AG)][and the][regulated unofficial market (Freiverkehr) of the Stuttgart Stock Exchange (EUWAX)][, and listing on the SIX Swiss Exchange and admission to trading on SIX Swiss Exchange,]][47] of the Securities described herein pursuant to the Structured Products Programme for the issuance of Notes, Warrants and Certificates of JPMorgan Chase Financial Company LLC, J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co.

GOVERNING LAW AND JURISDICTION

Securities:	[English Law / Courts of England] [State of New York / Courts located in the Borough of Manhattan in the State of New York] [●]
[**Guarantee:**	[English Law/Courts of England] [State of New York / Courts located in the Borough of Manhattan in the State of New York]]

RESPONSIBILITY

[Each of the] [The] Issuer [and the Guarantor] accepts responsibility for the information contained in this Pricing Supplement. [Information on the Reference Asset[s] has been extracted from [*specify information source(s)*]. [Each of the] [The] Issuer [and the Guarantor] confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from the relevant information, no facts have been omitted which would render the reproduced information inaccurate or misleading.][48]

[[Each of the] [The] Issuer [and the Guarantor] confirms that the information contained in this Pricing Supplement is to the best of its knowledge correct and that no material facts or circumstances have been

[47] Delete all references to listing and admission to trading on the applicable exchanges where a listing prospectus will subsequently be prepared.

[48] Insert in respect of all Securities (including Swiss Securities) other than Securities for which "Swiss Non-Exempt Public Offer" is specified as "Yes".

omitted from the prospectus consisting of this Pricing Supplement and the Offering Circular as supplemented as of the date hereof][49]

An investor intending to acquire or acquiring any Securities from an offeror will do so, and offers and sales of the Securities to an investor by an offeror will be made, in accordance with any terms and other arrangements in place between such offeror and such investor including as to price, allocations and settlement arrangements. The Issuer will not be a party to any such arrangements with investors (other than the Dealer(s)), in connection with the offer or sale of the Securities and, accordingly, this Pricing Supplement will not contain such information. The investor must look to the offeror at the time of such offer for the provision of such information. The Issuer has no responsibility to an investor in respect of such information.

Signed on behalf of the Issuer:

By: _____

Duly authorised

[**Signed on behalf of the Guarantor:**

By: _____

Duly authorised]

[49] Insert in respect of Securities for which "Swiss Non-Exempt Public Offer" is specified as "Yes".

PART B – OTHER INFORMATION

LISTING AND ADMISSION TO TRADING

[Application [will be/has been] made for the Securities to be [listed and] admitted to trading on the [Luxembourg Stock Exchange's Euro MTF/Open Market (Freiverkehr) of the Frankfurt Stock Exchange (Börse Frankfurt Zertifikate AG)/regulated unofficial market (Freiverkehr) of the Stuttgart Stock Exchange (EUWAX)/multilateral trading facility EuroTLX (managed by EuroTLX SIM S.p.A/ multilateral trading facility SeDeX (managed by Borsa Italiana S.p.A)/other (*specify*)] [Application [will be/has been] made for the Securities to be admitted to the Official List of Euronext Dublin and to trading on its Global Exchange Market] with effect from, at the earliest, the Issue Date. No assurances can be given that such application for [listing and] admission to trading will be granted (or, if granted, will be granted by the Issue Date).] [Application will be made to trade and list the Securities on SIX Swiss Exchange, provided that no assurance can be given that the Securities will be admitted to trading on SIX Swiss Exchange or listed on the SIX Swiss Exchange on the Issue Date or any specific date thereafter].

The Issuer has no duty to maintain the [listing and/or admission to trading] (if any) of the Securities on the relevant [stock exchange/multilateral trading facility](s) over their entire lifetime. Securities may be suspended from trading and/or de-listed at any time in accordance with applicable rules and regulations of the [relevant stock exchange(s)/multilateral trading facility(ies)] [,provided, however, that, in the case of a Series that is listed on the SIX Swiss Exchange, the Securities of such Series shall be de-listed with respect to the SIX Swiss Exchange, without any further action, if (i) the Issuer or any of its affiliates has prepaid, repaid, repurchased, redeemed or otherwise acquired or holds all the Securities of such Series and (ii) the Issuer has published or caused to be published a notice stating that such Securities have been de-listed with respect to the SIX Swiss Exchange in accordance with General Condition 27.7][50].

Securities admitted to trading on SIX Swiss Exchange and listed on the SIX Swiss Exchange only:		
(i)	First SIX Swiss Exchange Trading Day:	[●] / [Anticipated to be the Issue Date]
(ii)	Last SIX Swiss Exchange Trading Day:	[●], [trading on SIX Swiss Exchange until official close of trading on SIX Swiss Exchange on that day]
(iii)	Swiss Paying Agent:	[●]
(iv)	Type of quoting:	[The Securities are traded or quoted including accrued interest (dirty trading) / The accrued interest in respect of the Securities is shown separately]

[**ADDITIONAL INFORMATION FOR SWISS OFFERS**[51]

Publications: Any notices or publications to be made to Holders will be made [(i) by means of electronic publication on the internet website of the SIX Swiss Exchange (www.six-swiss-exchange.com., where notices are currently published under the address (www.six-group.com/en/home.html., where notices are currently published under the address [https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/official-notices.html#/ / [●]]) or (ii) otherwise in accordance with the rules of the SIX Swiss Exchange][52] [by publishing the relevant notice, publication or, in case of amendments or corrections in accordance with General Condition 24, the amended or corrected Pricing Supplement [on the following website] / [in the following newspaper]: [●]][53] [For Global Securities representing the Securities that are held in their entirety on behalf of Euroclear and/or Clearstream Luxembourg, any notices or publications to be made to Holders will be made by publishing the relevant

[50] Include for Securities listed on the SIX Swiss Exchange.

[51] Include for Swiss Non-Exempt Public Offers.

[52] Include for Securities listed on the SIX Swiss Exchange.

[53] Include for unlisted Swiss Securities.

notice, publication or, in case of amendments or corrections in accordance with General Condition 24, the amended or corrected Pricing Supplement in accordance with General Condition 27.2 (*Notices to Holders of interests in Global Securities*).][54]

[**Representatives (for purposes of article 58a of the Listing Rules of the SIX Swiss Exchange)**: [Homburger AG, Prime Tower, Hardstrasse 201, 8005 Zurich, Switzerland (for purposes of documentation)] [●] and Credit Suisse AG, attn. Transaction Advisory Group, ZUGG 3, P.O. Box, 8070 Zürich, Switzerland (for purposes of clearing and settlement).][55]

[No Material Change: There has been no material change, nor any event involving a prospective material change, in the assets and liabilities, financial position or profits and losses of the Issuer [or the Guarantor] since [*insert date of the most recently published annual or interim balance sheet*].][56]

RATINGS	[Not Applicable/The Securities to be issued have been rated: [S&P: [●]] [Moody's: [●]] [[*Other*]: [●]]/ The Securities will not be rated]

INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE [ISSUE/OFFER]

Need to include a description of any interest, including conflicting ones, that is material to the issue/offer, detailing the persons involved and the nature of the interest. May be satisfied by the inclusion of the following statement:

"Save as discussed in the section of the Offering Circular entitled "Subscription and Sale", so far as the Issuer is aware, no person involved in the [issue/offer] of the Securities has an interest material to the [issue/offer]."

REASONS FOR THE ISSUE, ESTIMATED NET PROCEEDS AND TOTAL EXPENSES

[(i)	Reasons for the issue:	[Not Applicable]/[●] (*See "Use of Proceeds"- For Securities issued by any Issuer, if reasons for issue different from making profit and/or hedging certain risks, to include those reasons here. In addition, for Securities issued by JPMorgan Chase & Co., if the use of proceeds differs from "Use of Proceeds", include information on the principal intended uses and the order of priority in which such uses are ranked*)]
[(ii)	Estimated net proceeds:	[Not Applicable/[●]] (*If proceeds are intended for more than one use will need to split out and present in order of priority. If proceeds insufficient to fund all proposed uses state amount and sources of other funding. Include if reasons for issue are set out above*)]
[(iii)	Estimated total expenses:	[Not Applicable/[●]][57] (*Include breakdown of expenses*)

[54] Include for Swiss unlisted offers cleared through Euroclear and/or Clearstream Luxembourg.

[55] Include for Swiss Securities listed on the SIX Swiss Exchange.

[56] Include for Swiss Non-Exempt Public Offers.

[57] Include for Securities admitted to the Official List of Euronext Dublin and to trading on its Global Exchange Market.

[**PERFORMANCE OF REFERENCE ASSET(S) AND OTHER INFORMATION CONCERNING THE REFERENCE ASSET(S)**

[*Need to include details of where past and future performance and volatility of the Reference Asset(s) can be obtained*.]

[*Where the Reference Asset is an index need to include the name of the index and details of where the information about the index can be obtained. Where the underlying is not an index need to include equivalent information, including information on where the net asset value ("NAV") is to be published*.]][58]

[**Fixed Rate Notes only – YIELD** Indication of yield:	[●] [Calculated as [*include details of method of calculation in summary form*] on the Issue Date] As set out above, the yield is calculated at the Issue Date on the basis of the Issue Price. It is not an indication of future yield.][59]

POST-ISSUANCE INFORMATION

[The Issuer will not provide any post-issuance information with respect to the Reference Asset[s], unless required to do so by applicable law or regulation.]

OPERATIONAL INFORMATION

Intended to be held in a manner which would allow Eurosystem eligibility:	[Yes][No] [Note that the designation "yes" simply means that the Securities are intended upon issue to be deposited with one of the ICSDs as common safekeeper and does not necessarily mean that the Securities will be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon satisfaction of the Eurosystem eligibility criteria] (*include this text if "Yes" selected in which case the Notes in global registered form must be held under the NSS or the Notes in global bearer form must be issued in NGN form*) [Whilst the designation is specified as "no" at the date of this Pricing Supplement, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them, the Notes may then be deposited with one of the ICSDs as common safekeeper [(and registered in the name of a nominee of one of the ICSDs acting as common safekeeper,](*include this text for registered notes*). Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the ECB being

[58] Include for Securities admitted to the Official List of Euronext Dublin and to trading on its Global Exchange Market.

[59] Include for Fixed Rate Notes admitted to the Official List of Euronext Dublin and to trading on its Global Exchange Market.

	satisfied that Eurosystem eligibility criteria have been met.] (*include this text if "no" selected*)
ISIN:	[●]
[RIC:	[●]][60]
Common Code:	[●]
[CUSIP:	[●]][61]
[WKN:	[●]][62]
[Swiss Securities Number (Valorennummer):	[●]][63]
[Ticker Symbol (SIX):	[●]][64]
Relevant Clearing System(s) [and the relevant identification number(s)]:	[Euroclear/Clearstream, Luxembourg / Clearstream Frankfurt/DTC/SIX SIS/Euroclear France/Euroclear Sweden/VP/VPS/Euroclear Finland/*other/give number(s)*] [*For CREST CDI Securities, insert the following language*: The Securities will be deposited with a common depository for Euroclear and Clearstream, Luxembourg and will be accepted for settlement in Euroclear UK & Ireland Limited ("**CREST**") via the CREST Depository Interest ("**CDI**") mechanism.] [*For Swiss Certificates (UBS-cleared)*: Not Applicable. The Securities will be held with, and cleared and settled through, UBS Switzerland AG (and not SIX SIS). No external clearing of the Securities is possible through any international or domestic clearing system.]
Delivery:	Delivery [against/free of] payment
[Payment:	Issue Date][65]
The Agents appointed in respect of the Securities are:	[*Specify*] / [As set out in the Agency Agreement] / [*Insert for Swiss Certificates (UBS-cleared) only*: UBS Switzerland AG will act as issuing and paying agent in respect of the Securities]
Registrar:	[*Specify*] / [Not Applicable]

[60] Only applicable to Swiss Offers.

[61] Insert for Rule 144A Securities.

[62] Only applicable for German Securities.

[63] Only applicable to Swiss Offers.

[64] Only applicable to Swiss Securities listed on the SIX Swiss Exchange.

[65] Only applicable to Swiss Securities listed on the SIX Swiss Exchange.

PART C – OTHER APPLICABLE TERMS

[*insert if applicable*]

SCHEDULE

INDEX DISCLAIMER[S]

[*Insert Index Disclaimer[s]*]

ANNEX

This Annex shall be included after publication of any supplement to the Offering Circular dated 22 September 2022.

The Offering Circular dated 22 September 2022 has been supplemented by the following Supplement[s]:

Supplement	**Description**	**Date**
Supplement No. [●]	in respect of [*insert short description of content*]	[●]

[insert only for Swiss Non-Exempt Public Offers]

SUMMARY

INTRODUCTION AND WARNINGS
This Summary should be read as an introduction to this Pricing Supplement. Any decision to invest in the Securities (as defined below) should be based on consideration of the Offering Circular (which includes the documents incorporated by reference therein) and the Pricing Supplement as a whole by the investor. Any liability for information contained in this Summary is limited to cases where this Summary is misleading, inaccurate or inconsistent when read together with the other parts of the Pricing Supplement and the Offering Circular. The Securities do not constitute a participation in a collective investment scheme in the meaning of the Swiss Collective Investment Schemes Act and are not licensed by the Swiss Financial Market Supervisory Authority ("**FINMA**") thereunder. Accordingly, neither the Securities nor holders of the Securities benefit from protection under the Swiss Collective Investment Schemes Act or supervision by FINMA and investors are exposed to the credit risk of the Issuer and Guarantor (if applicable). This Summary has been prepared and is being provided solely for the purpose of an offer of the Securities in Switzerland pursuant to the Swiss Financial Services Act ("**FinSA**") and it must not be used for any other purpose or in any other context than for which it is prepared and provided. This Summary must not be used for, or in connection with, and does not constitute any offer to, or solicitation by, any person in a jurisdiction other than Switzerland. **You are about to purchase a product that is not simple and may be difficult to understand.**
KEY INFORMATION ON THE SECURITIES
The Issuer: [JPMorgan Chase Financial Company LLC ("**JPMCFC**") is a limited liability company incorporated under the Limited Liability Company Act of the State of Delaware U.S.A. on 30 September 2015 with file number 5838642.The principal executive office of JPMCFC is located at 383 Madison Avenue, New York, New York 10179, United States of America. JPMCFC's LEI is 549300NJFDJOFYVV6789.]/ [J.P. Morgan Structured Products B.V. ("**JPMSP**"). JPMSP's registered office is at Luna ArenA, Herikerbergweg 238, 1101 CM Amsterdam, The Netherlands. JPMSP was incorporated as a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) under the laws of the Netherlands on 6 November 2006 for an unlimited duration. JPMSP is registered at the Chamber of Commerce of Amsterdam under registered number 34259454. JPMSP's LEI is XZYUUT6IYN31D9K77X08.]/ [JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. is a national banking association organised under U.S. federal law on 13 November 2004. JPMorgan Chase Bank, N.A. is a member of the U.S. Federal Reserve System and its U.S. Federal Reserve Bank Identification Number is 852218. JPMorgan Chase Bank, N.A.'s LEI is 7H6GLXDRUGQFU57RNE97.]/ [JPMorgan Chase & Co. was incorporated as a corporation under the General Corporation Law of the State of Delaware, U.S.A. on 28 October 1968 with file number 0691011. JPMorgan Chase & Co.'s LEI is 8I5DZWZKVSZI1NUHU748.]
[*Insert for securities issued by JPMSP*] [***The Guarantor:*** JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. is a national banking association organised under U.S. federal law on 13 November 2004. JPMorgan Chase Bank, N.A. is a member of the U.S. Federal Reserve System and its U.S. Federal Reserve Bank Identification Number is 852218. JPMorgan Chase Bank, N.A.'s LEI is 7H6GLXDRUGQFU57RNE97.]

[*Insert for securities issued by JPMCFC*] [***The Guarantor***: JPMorgan Chase & Co. was incorporated as a corporation under the General Corporation Law of the State of Delaware, U.S.A. on 28 October 1968 with file number 0691011. JPMorgan Chase & Co.'s LEI is 8I5DZWZKVSZI1NUHU748.]

Product name: [Up to] [*insert aggregate nominal/notional amount or number of Securities*] [*insert name of Securities*] under the Structured Products Programme for the issuance of Notes, Warrants and Certificates (the "**Securities**")

Product identifiers

ISIN: [*insert*]

Valor: [*insert*]

SSPA Product Type: [*insert*] *with additional feature(s):* [*insert*]

(Further information is available at https://www.sspa.ch)

Issue Date: [*insert*]

[Maturity Date][Redemption Date and Settlement Date][Settlement Date]: [*insert*]

Underlying(s)

Underlying(s)	***[Exchange]/[Index Sponsor]/[Price source]***	***[Bloomberg Ticker]/[Reuters page]***
[*insert*]	[*insert*]	[*insert*]

Settlement Currency: [*insert*]

Settlement: [Cash][Cash and/or Physical]

KEY INFORMATION ON THE OFFER OF SECURITIES TO THE PUBLIC AND/OR THE ADMISSION TO TRADING

Issue Price:

[*Insert if trading in nominal*] [*insert*]% of the aggregate nominal amount]

[*Insert if trading in units*] [*insert currency*][*insert*] per Security]

[*Insert if applicable*][**Subscription** ***Period:*** From and including [*insert*] to and including [*insert*]]

Public Offer Jurisdiction: Switzerland

Admission to trading/listing: [The Securities have not been and will not be listed on the SIX Swiss Exchange or any other exchange and no application for trading on SIX Swiss Exchange has been or will be made.] [An application will be made to list the Securities on the SIX Swiss Exchange on or after the Issue Date. No assurances can be given that such application for listing and admission to trading will be granted (or, if granted, will be granted by the Issue Date).]

First trading day: [Issue Date][*insert*]

Selling Restrictions

US selling restrictions: The offering of the Securities has not been registered under the U.S. Securities Act of 1933. These Securities may not be offered or sold, directly or indirectly, in the United States of America or to U.S. persons. The term "U.S. person" is defined in Regulation S under the U.S. Securities Act of 1933, as amended.

EEA selling restrictions: Applicable

UK selling restrictions: Applicable

[The Securities may not be offered, sold or otherwise made available to any retail investors in the European Economic Area.]

[The Securities may not be offered, sold or otherwise made available to any retail investors in the United Kingdom.]

Other: [*insert*]

USE OF PROCEEDS

For Securities issued by JPMorgan Chase & Co., JPMorgan Chase & Co. will contribute the net proceeds that it receives from the issue of the Securities to its "intermediate holding company" subsidiary, JPMorgan Chase Holdings LLC, which will use such net proceeds for general corporate purposes. General corporate purposes may include investments in JPMorgan Chase & Co.'s subsidiaries, payments of dividends to JPMorgan Chase & Co., extensions of credit to JPMorgan Chase & Co. or its subsidiaries or the financing of possible acquisitions or business expansion. Interest on JPMorgan Chase & Co.'s debt securities (including interest on Securities issued by JPMorgan Chase & Co.) and dividends on its equity securities, as well as redemptions or repurchases of its outstanding securities, will be made using amounts JPMorgan Chase & Co. receives as dividends or extensions of credit from JPMorgan Chase Holdings LLC or as dividends from JPMorgan Chase Bank, N.A. To the extent that the net proceeds of an issue of Securities by JPMorgan Chase & Co. are not applied for general corporate purposes, the relevant Pricing Supplement shall contain further information including the principal intended uses and the order of priority in which such uses are ranked.

For Securities issued by JPMSP and JPMorgan Chase Bank, N.A., the net proceeds from each issue of Securities will be used by the relevant Issuer for its general corporate purposes (including hedging arrangements). To the extent that the net proceeds of an issue of Securities are not applied for the purposes of making profit and/or hedging certain risks, the relevant Pricing Supplement shall contain further information including the principal intended uses and the order of priority in which such uses are ranked.

For Securities issued by JPMCFC, JPMCFC intends to lend the net proceeds from the sale of the Securities it issues to JPMorgan Chase & Co. and/or its affiliates. JPMorgan Chase & Co. expects that it and/or its affiliates will use the proceeds from these loans to provide additional funds for its and/or their operations and for other general corporate purposes. The Securities will be offered to meet investor needs for products that reflect the risk-return profile and market exposure provided by the Securities as set forth in the relevant Pricing Supplement.

Net proceeds may be temporarily invested pending application for their stated purpose.

LIMITATIONS OF THE JPMORGAN CHASE BANK, N.A. GUARANTEE AND FORM OF JPMORGAN CHASE BANK, N.A. GUARANTEE

The JPMorgan Chase Bank, N.A. Guarantee is limited to a guarantee of the payment, delivery and other obligations which JPMSP has under the terms and conditions of the Securities, and JPMorgan Chase Bank, N.A. may therefore apply all exclusions, exceptions and defences available to JPMSP under the terms and conditions of the Securities and at law. Accordingly, where JPMSP has failed to perform an obligation under the Securities but its failure to do so is excused under the terms and conditions of the Securities, then JPMorgan Chase Bank, N.A. will not be obliged under the terms of the Guarantee to satisfy such failed obligation of JPMSP. For example, if JPMSP is prohibited, unable, or otherwise fails to make any payment, or any portion thereof or to perform any other obligation, because or arising out of an act of war, insurrection or civil strife, an action by any government or governmental authority or instrumentality thereof (whether de jure or de facto), legal constraint, terrorism, riots, or catastrophe, and the Calculation Agent therefore determines that a "Payment Disruption Event" has occurred (under General Condition 13.1 (*Occurrence of a Payment Disruption Event*) above), then JPMorgan Chase Bank, N.A. will be under no obligation under the terms of the Guarantee to satisfy JPMSP's payment obligation for so long as JPMSP has postponed the making of such payment or ultimately written the obligation down to zero as a consequence of such "Payment Disruption Event".

The following is the form of guarantee given by JPMorgan Chase Bank, N.A. in respect of Securities issued by J.P. Morgan Structured Products B.V.

JPMORGAN CHASE BANK, N.A. GUARANTEE

THIS GUARANTEE is made by way of deed on 22 September 2022 by JPMorgan Chase Bank, N.A., a national banking association organised under the federal laws of the United States of America (the "**Guarantor**"), in favour of the Beneficiaries (as defined below).

WHEREAS:

(A) J.P. Morgan Structured Products B.V., a private company with limited liability (besloten vennootschap met beperkte aansprakelijkheid) incorporated under the laws of The Netherlands (the "**Obligor**"), may from time to time issue Notes (up to a programme limit of U.S.$50,000,000,000), Warrants and Certificates (each as defined in the Agency Agreement described below) under the Structured Products Programme for the issuance of Notes, Warrants and Certificates (the "**Programme**"and such Notes, Warrants and Certificates, together, the "**Non-South African Securities**"). The Non-South African Securities shall be issued pursuant to an amended and restated agency agreement dated 22 September 2022 among the Obligor, the Guarantor, JPMorgan Chase & Co., The Bank of New York Mellon, London Branch, The Bank of New York Mellon S.A./N.V., Luxembourg Branch, J.P. Morgan Securities plc ("**JPMS plc**"), Skandinaviska Enskilda Banken AB (publ), BNP Paribas Securities Services and Credit Suisse AG as may be amended and/or restated and/or replaced from time to time (the "**Programme Agency Agreement**").

(B) In addition to the Non-South African Securities issued by the Obligor under the Programme pursuant to the Programme Agency Agreement, the Obligor may also issue Notes and Certificates (but not Warrants) under the Programme from time to time which are specified in the relevant Pricing Supplement as "South African Notes" ("**South African Notes**") or "South African Certificates" ("**South African Certificates**" and, together with South African Notes, "**South African Securities**" and, together with the Non-South African Securities, the "**Securities**" and each a "**Security**"). South African Securities shall be issued pursuant to an agency agreement dated 8 February 2018 among the Obligor, the Guarantor, JPMS plc, J.P. Morgan Securities LLC and The Standard Bank of South Africa Limited, as may be amended and/or restated and/or replaced from time to time (the "**South African Agency Agreement**" and, together with the Programme Agency Agreement, the "**Agency Agreements**" and each an "**Agency Agreement**");

(C) The Securities shall:

(i) have the benefit of:

(a) (to the extent such Securities are governed by English law) a deed of covenant dated 22 September 2022 executed by the Obligor as may be amended and/or restated and/or replaced from time to time (the "**Deed of Covenant**") and

(b) this guarantee (the "**Guarantee**");

(ii) be issued under the Conditions (as defined in the relevant Agency Agreement);

(iii) (unless otherwise agreed) be subscribed by Dealers in accordance with an amended and restated programme agreement dated 22 September 2022 between, amongst others, the Obligor and JPMS plc as may be amended and/or restated and/or replaced from time to time (the "**Programme Agreement**").

(The Agency Agreements, the Deed of Covenant, the Guarantee, the Conditions and the Programme Agreement are together the "**Programme Documents**".)

(D) For the purpose of this Guarantee, the Holders (as defined in the Conditions) of Securities issued by the Obligor shall be the "**Beneficiaries**" (and each, a "**Beneficiary**").

NOW THIS DEED WITNESSES as follows:

1. **Guarantee**

Subject as provided below, the Guarantor unconditionally and irrevocably guarantees by way of deed poll to each Beneficiary that, if for any reason the Obligor does not pay any sum payable by it or perform any other obligation in respect of any Security issued by it on or after the date hereof (subject as provided in clause 8 (*Deposit of Guarantee and Application*)) on the date such payment or performance is due in accordance with the Conditions applicable to such Security (and for the avoidance of doubt, after any applicable delay or extinguishment due to any event or condition set out in the Conditions providing or allowing for delay or extinguishment in respect of the payment or performance of such obligation) the Guarantor will, subject to and in accordance with the Conditions, pay that sum in the currency in which such payment is due in immediately available funds or, as the case may be, perform or procure the performance of the relevant obligations on the due date for such performance. In case of the failure of the Obligor to satisfy such obligations as and when the same become due under the Conditions, the Guarantor hereby undertakes to make or cause to be made such payment or satisfy or cause to be satisfied such obligations as though the Guarantor were the principal obligor in respect of such obligations after a demand has been made on the Guarantor pursuant to clause 9 (*Demand on Guarantor*).

2. **Guarantor as Principal Obligor**

As between the Guarantor and each Beneficiary but without affecting the Obligor's obligations, the Guarantor will be liable under this Guarantee as if it were the sole principal obligor and not merely a surety, subject as provided below. Accordingly, subject as provided below, the Guarantor will not be discharged, nor will its liability be affected, by (a) any change in the amount, time, manner or place of payment of, or in any other term of, any such obligations, or any other amendment or waiver of or any consent to departure from any of the terms of the Conditions or any such obligations; (b) any release, surrender or amendment or waiver of, or consent to departure from, any other guaranty or support document, or any exchange, release or non-perfection of any security, collateral or other credit support, for all or any of the Conditions or any such obligations; (c) the status of the Obligor as the debtor or subject of a bankruptcy or insolvency proceeding; (d) the absence of any action to enforce any of the Obligor's obligations or any collateral therefor; (e) the rendering of any judgment against the Obligor or any action to enforce the same; and (f) any admission by the Obligor in writing of its inability to pay or meet its debts as they may mature or if proceedings are initiated against the Obligor under any applicable insolvency or bankruptcy laws or the Obligor convenes a meeting of its creditors or makes or proposes to make any arrangements or compositions with or any assignment for the benefit of its creditors, save that, for the avoidance of doubt, the Guarantor shall not be liable under this Guarantee where, pursuant to the Conditions, the payment or performance by the Obligor in respect of its obligations is not due. In addition to and not in limitation of the preceding proviso, any defences or counterclaims of the Obligor (other than any resulting solely from, or available to the Guarantor solely on account of, the insolvency of the Obligor or the status of the Obligor as the debtor or subject of a bankruptcy or insolvency

proceeding) shall also be available to the Guarantor to the same extent as such defences or counterclaims are available to the Obligor and may be asserted as defences or counterclaims by the Guarantor to its obligations hereunder with respect to such obligations of the Obligor, in each case whether or **not** asserted by the Obligor.

3. **Guarantor's Obligations Continuing**

The Guarantor's obligations under this Guarantee are and will remain in full force and effect by way of continuing security until no sum remains payable and no other obligation remains to be performed under any Security issued by the Obligor on or after the date hereof (in the case where the relevant Security is a Warrant (as defined in the applicable Programme Documents), subject to its exercise). Furthermore, those obligations of the Guarantor are additional to, and not instead of, any security or other guarantee or indemnity at any time existing in favour of any person, whether from the Guarantor or otherwise.

4. **Discharge by Obligor**

If any payment received by, or other obligation discharged to or to the order of, any Beneficiary is, on the subsequent bankruptcy or insolvency of the Obligor, avoided under any laws relating to bankruptcy or insolvency, such payment or obligation will not be considered as having discharged or diminished the liability of the Guarantor and this Guarantee will continue to apply as if such payment or obligation had at all times remained owing due by the Obligor.

5. **Subrogation**

The Guarantor (1) shall have the right, upon receipt of a demand under this Guarantee by a Beneficiary, to assume the rights and payment obligations of the Obligor to such Beneficiary, together with any right of the Obligor to cure any event of default by or relating to the Obligor, notwithstanding any notice of default/termination previously sent by such Beneficiary to the Obligor, and thereby rescind any notice of default/termination given by such Beneficiary, and (2) shall be subrogated to all rights of the Beneficiaries against the Obligor in respect of any amounts paid by the Guarantor pursuant to the provisions of this Guarantee; provided, however, that the Guarantor shall not be entitled to enforce or to receive any payments arising out of, or based upon, such right of subrogation until all amounts due and payable by the Obligor to the Beneficiaries in respect of the obligations subject to the aforesaid demand for payment, up to the time of such subrogation, have been paid in full.

6. **No Set-off**

By acceptance of this Guarantee, each of the Beneficiaries hereby waives any right it or any of its affiliates may have now or in the future (and irrespective of any future agreements among the Guarantor, the Obligor, the Beneficiaries or any of their respective affiliates) to set-off, combine, consolidate, or otherwise appropriate and apply (i) any assets of the Guarantor or any of its affiliates at any time held by any of them or (ii) any indebtedness or other liabilities at any time owing by any of them to the Guarantor or any of its affiliates, as the case may be, on account of the obligations or liabilities owed by the Guarantor to such party under this Guarantee.

7. **Incorporation of Terms**

The Guarantor agrees that it shall comply with and be bound by those provisions contained in the Programme Documents which relate to it.

8. **Deposit of Guarantee and Application**

This Guarantee shall be deposited with and held by The Bank of New York Mellon, London Branch for the benefit of the Beneficiaries.

(a) Subject to clause 8(b) and 8(c) below, this Guarantee:

(i) applies in respect of each Security issued by the Obligor under the Programme on or after the date hereof (the "**Effective Date**"); and

(ii) amends, supplants and replaces in its entirety the guarantee for the Programme deemed effective as of 21 April 2022 (the "**21 April 2022 Guarantee**"). For the avoidance of

doubt, the 21 April 2022 Guarantee (and each guarantee of Securities by the Guarantor under the Programme preceding the 21 April 2022 Guarantee, as applicable) shall continue to apply to Securities issued under the Programme before the Effective Date in accordance with their terms, as applicable.

(b) Securities issued on or after the Effective Date which are expressed to be consolidated and form a single series with Securities the first tranche of which was issued prior to the Effective Date, shall not have the benefit of this Guarantee but shall instead have the benefit of the same guarantee of the Guarantor under the Programme granted in respect of such first tranche of Securities.

(c) This Guarantee shall not apply in respect of any Securities issued on or after the date on which the Guarantor has granted a subsequent guarantee of Securities issued by the Obligor under the Programme and which subsequent guarantee is expressed to replace this Guarantee in relation to such Securities (unless expressly so provided in the terms of such subsequent guarantee, including in the circumstance of clause 8(b) above where such Securities are to be consolidated and form a single series with Securities the first tranche of which was issued on or after the Effective Date but before the date on which the Guarantor has granted a subsequent guarantee).

9. **Demand on Guarantor**

Any demand hereunder shall be given in writing, addressed to the Guarantor and served at its office at 4 Metrotech, Brooklyn, New York 11245, United States of America, Attn: Finance Controllers, Interentity Analysis Group - Peter W Smith, Fax: 917-746-2267. A demand so made shall be deemed to have been duly made five New York Business Days (as used herein, "**New York Business Day**" means a day (other than a Saturday or Sunday) on which banks are open for business in New York) after the day it was served or if it was served on a day that was not a New York Business Day or after 5.30 p.m. (New York time) on any day, the demand shall be deemed to be duly made five New York Business Days after the New York Business Day immediately following such day.

10. **Not Insured**

This Guarantee is not insured by the Federal Deposit Insurance Corporation of the United States of America.

11. **Governing Law**

This Guarantee and any non-contractual obligations arising out of or in connection herewith shall be governed by and construed in accordance with English law.

12. **QFC Stay Rules**

Notwithstanding herein to the contrary:

(a) to the extent required under a U.S. Special Resolution Regime, this Guarantee and any interest or obligation in or under this Guarantee, or any property securing this Guarantee may be transferred to a transferee required under such U.S. Special Resolution Regime upon or following the Guarantor becoming subject to a receivership, insolvency, liquidation, resolution or similar proceeding unless the result of the transfer would result in a Beneficiary being the beneficiary of this Guarantee in violation of any law applicable to such Beneficiary;

(b) in the event the Guarantor becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of this Guarantee (and any interest and obligation in or under, and any property securing, this Guarantee) from the Guarantor will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Guarantee (and any interest and obligation in or under, and any property securing, this Guarantee) were governed by the laws of the United States or a state of the United States;

(c) in the event the Guarantor or an Affiliate of the Guarantor becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights with respect to this Guarantee that may be exercised against the Guarantor are permitted to be exercised to no greater extent than the

Default Rights could be exercised under the U.S. Special Resolution Regime if this Guarantee were governed by the laws of the United States or a state of the United States; and

(d) if, after the date of this Guarantee, both parties hereto shall have become adhering parties to the ISDA 2018 U.S. Resolution Stay Protocol, as published by the International Swaps and Derivatives Association, Inc. as of 31 July 2018 (the "**ISDA U.S. QFC Protocol**"), the terms of the ISDA U.S. QFC Protocol will supersede and replace this clause 12.

For purposes of this clause 12, the following terms have the following meanings:

"**Affiliate**" has the meaning given in section 2(k) of the Bank Holding Company Act (12 U.S.C. 1841(k)) and section 225.2(a) of the Board's Regulation Y (12 CFR 225.2(a)).

"**Default Right**" means any: (i) right of a party, whether contractual or otherwise (including, without limitation, rights incorporated by reference to any other contract, agreement, or document, and rights afforded by statute, civil code, regulation, and common law), to liquidate, terminate, cancel, rescind, or accelerate such agreement or transactions thereunder, set off or net amounts owing in respect thereto (except rights related to same day payment netting), exercise remedies in respect of collateral or other credit support or property related thereto (including the purchase and sale of property), demand payment or delivery thereunder or in respect thereof (other than a right or operation of a contractual provision arising solely from a change in the value of collateral or margin or a change in the amount of an economic exposure), suspend, delay, or defer payment or performance thereunder, or modify the obligations of a party thereunder, or any similar rights; and (ii) right or contractual provision that alters the amount of collateral or margin that must be provided with respect to an exposure thereunder, including by altering any initial amount, threshold amount, variation margin, minimum transfer amount, the margin value of collateral, or any similar amount, that entitles a party to demand the return of any collateral or margin transferred by it to the other party or a custodian or that modifies a transferee's right to reuse collateral or margin (if such right previously existed), or any similar rights, in each case, other than a right or operation of a contractual provision arising solely from a change in the value of collateral or margin or a change in the amount of an economic exposure.

"**U.S. Special Resolution Regime**" means the Federal Deposit Insurance Act (12 U.S.C. 1811–1835a) and regulations promulgated thereunder and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (12 U.S.C. 5381–5394) and regulations promulgated thereunder.

13. **Jurisdiction**

This clause 13 is for the benefit of the Beneficiaries only. Subject as provided below, the courts of England shall have exclusive jurisdiction to settle any disputes which may, directly or indirectly, arise out of or in connection with this Guarantee including a dispute relating to any non-contractual obligations arising out of or in connection herewith and accordingly the Guarantor submits to the exclusive jurisdiction of the English courts to hear all suits, actions or proceedings (together hereinafter termed the "**Proceedings**") relating to any such dispute. The Guarantor waives any objection to the courts of England on the grounds that they are an inconvenient or inappropriate forum. Nothing in this clause 13 shall limit the rights of the Beneficiaries to take any Proceedings against the Guarantor in any other court of competent jurisdiction and concurrent Proceedings in any number of jurisdictions.

14. **Service of Process**

The Guarantor agrees that service of process in England may be made on it at its London Branch. Nothing in this Guarantee shall affect the right to serve process in any other manner permitted by law.

15. **Contracts (Rights of Third Parties) Act 1999**

No rights are conferred on any person under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Guarantee, but this does not affect any right or remedy of any person which exists or is available apart from that Act.

LIMITATIONS OF THE JPMORGAN CHASE & CO. GUARANTEE AND FORM OF JPMORGAN CHASE & CO. GUARANTEE

The JPMorgan Chase & Co. Guarantee is a full and unconditional guarantee of the full and punctual payment of the principal of, interest on, and all other amounts payable under the Securities when the same becomes due and payable by JPMCFC, whether at maturity, upon redemption or upon acceleration. JPMorgan Chase & Co.'s obligations under the JPMorgan Chase & Co. Guarantee are unconditional and absolute. However, JPMorgan Chase & Co. will not be liable for any amount of payment that JPMCFC is excused from making or any amount in excess of the amount actually due and owing by JPMCFC, and any defence or counterclaims available to JPMCFC (except those resulting solely from, or on account of, the insolvency of JPMCFC or its status as debtor or subject of a bankruptcy or insolvency proceeding) will also be available to JPMorgan Chase & Co. to the same extent as these defence or counterclaims are available to JPMCFC, whether or not asserted by JPMCFC.

The following is the form of guarantee given by JPMorgan Chase & Co. in respect of Securities issued by JPMorgan Chase Financial Company LLC.

JPMORGAN CHASE & CO. GUARANTEE

To: The Holders of all Securities issued by JPMorgan Chase Financial Company LLC under the Programme Documents (as defined below) on or after the date hereof

JPMorgan Chase Financial Company LLC, a limited liability company incorporated under the laws of the State of Delaware, U.S.A. (the "**Obligor**"), may from time to time issue Notes (up to a programme limit of U.S.$8,000,000,000) and Certificates (each as defined in the Agency Agreement described below) in each case under the Structured Products Programme for the issuance of Notes, Warrants and Certificates (the "**Programme**" and such Notes and Certificates, the "**Securities**" and each a "**Security**") (each Holder (as defined in the Conditions) of Securities issued by the Obligor, a "**Beneficiary**" and together, the "**Beneficiaries**"), pursuant to (a) (i) (except in the case of Swiss Certificates (UBS-cleared)) an amended and restated agency agreement dated 22 September 2022 among the Obligor, the Guarantor, J.P. Morgan Structured Products B.V., JPMorgan Chase Bank, N.A., The Bank of New York Mellon, London Branch (the "**Principal Programme Agent**"), The Bank of New York Mellon S.A./N.V., Luxembourg Branch, J.P. Morgan Securities plc ("**JPMS plc**"), Skandinaviska Enskilda Banken AB (publ), BNP Paribas Securities Services and Credit Suisse AG as may be amended and/or restated and/or replaced from time to time (the "**Agency Agreement**") and (ii) in the case of Swiss Certificates (UBS-cleared) only, the SPI Agreement between JPMS plc and UBS Switzerland AG (as described in "*Terms and Conditions of the Securities*"), with the benefit of (b) (to the extent such Securities are governed by English law and except in the case of Swiss Certificates (UBS-cleared)) a deed of covenant dated 22 September 2022 executed by the Obligor as may be amended and/or restated and/or replaced from time to time and (c) this guarantee (the "**Guarantee**"), under the Conditions (as defined in the Agency Agreement) and such Securities may be subscribed by Dealers in accordance with (d) an amended and restated programme agreement dated 22 September 2022 between, amongst others, the Obligor and JPMS plc as may be amended and/or restated and/or replaced from time to time (the foregoing, together, the "**Programme Documents**").

Now, therefore, for good value and consideration, the receipt and sufficiency of which are hereby acknowledged, the Guarantor hereby agrees as follows:

1. **Guarantee**

JPMorgan Chase & Co. (the "**Guarantor**"), subject to the terms hereof, hereby irrevocably, fully and unconditionally guarantees, on an unsecured basis, the full and punctual payment (whether at the stated maturity or upon redemption or acceleration) of the principal of, interest on, and all other amounts payable in respect of any Security issued by the Obligor on or after the date hereof (subject as provided in clause 12 (*Deposit of Guarantee and Application*)) on the date such payment or performance is due in accordance with the Conditions applicable to such Security. Upon failure by the Obligor to pay punctually any such amount, the Guarantor shall forthwith on demand pay the amount not so paid at the same place and in the same manner that applies to payments made by the Obligor under the Conditions. This Guarantee is a guarantee of payment and not of collection.

2. **Guarantee Unconditional**

The obligations of the Guarantor hereunder are unconditional and absolute and, without limiting the generality of the foregoing, will not be released, discharged or otherwise affected by:

(a) any extension, renewal, settlement, compromise, waiver or release in respect of any obligation of the Obligor under the Conditions applicable to any Security, by operation of law or otherwise;

(b) any modification or amendment of, or supplement to the Conditions applicable to any Security;

(c) any change in the corporate existence, structure or ownership of the Obligor, or any insolvency, bankruptcy, reorganisation or other similar proceeding affecting the Obligor or its assets or any resulting release or discharge of any obligation of the Obligor contained in the Conditions applicable to any Security;

(d) the existence of any claim, set-off or other rights that the Guarantor may have at any time against the Obligor or any other individual, corporation, partnership, joint venture, association, limited liability company, joint stock company, trust, unincorporated organisation or government or any agency or political subdivision thereof (a "**Person**"), whether in connection with the Conditions applicable to any Security or any unrelated transactions, provided that nothing herein prevents the assertion of any such claim by separate suit or compulsory counterclaim;

(e) any invalidity or unenforceability relating to or against the Obligor for any reason of the Conditions applicable to any Security, or any provision of applicable law or regulation purporting to prohibit the payment by the Obligor of the principal of, interest on or other amounts on any Security; or

(f) subject to clause (b) of the proviso below, any other act or omission to act or delay of any kind by the Obligor or any other Person or any other circumstance whatsoever which might, but for the provisions of this paragraph, constitute a legal or equitable discharge of or defence to the Guarantor's obligations hereunder;

provided, however, that:

(a) under no circumstances will the Guarantor be liable at any time or place to any Beneficiary under this Guarantee:

  (i) for any amount of any payment that the Obligor is excused from making under the Conditions applicable to any Security, for so long as the Obligor shall be excused under such terms; or

  (ii) for any amount in excess of the amount actually due and owing by the Obligor to such Beneficiary at such time and place, including but not limited to any set-off to which the Obligor would be entitled; and

(b) in addition but not in limitation of (a) above, any defence or counterclaim of the Obligor (other than any resulting solely from, or available to the Guarantor solely on account of, the insolvency of the Obligor or the status of the Obligor as the debtor or subject of a bankruptcy or insolvency proceeding) shall also be available to the Guarantor to the same extent that such defence or counterclaim is available to the Obligor and may be asserted as a defence or counterclaim by the Guarantor, in each case whether or not asserted by the Obligor.

3. **Discharge; Reinstatement**

The Guarantor's obligations under this Guarantee will remain in full force and effect until the principal of, interest on and other amounts on the Securities have been paid in full. If at any time any payment of the principal of, interest on, or other amounts on any Security is rescinded or must be otherwise restored or returned upon the insolvency, bankruptcy or reorganisation of the Obligor or otherwise, the Guarantor's obligations hereunder with respect to such payment will be reinstated as though such payment had been due but not made at such time.

4. **Waiver by the Guarantor**

The Guarantor irrevocably waives acceptance hereof, presentment, demand, protest and any notice not provided for herein, as well as any requirement that at any time any action be taken by any Person against the Obligor or any other Person. The Guarantor hereby agrees that, in the event of a default in payment of the principal of, interest on, and all other amounts payable under any Security, whether at its stated maturity, by declaration of acceleration, call for redemption or otherwise, legal proceedings may be instituted by the Beneficiary of such Security, subject to the terms and conditions set forth in the Programme Documents, directly against the Guarantor to enforce this Guarantee without first proceeding against the Obligor.

5. **Subrogation**

Upon making any payment with respect to any obligation of the Obligor under this Guarantee, the Guarantor shall be subrogated to the rights of the payee against the Obligor with respect to such obligation, provided that the Guarantor may not enforce any right of subrogation with respect to such payment so long as any amount payable by the Obligor hereunder or under the Securities remains unpaid.

6. **No Set-off**

By acceptance of this Guarantee, each of the Beneficiaries hereby waives any right it or any of its affiliates may have now or in the future (and irrespective of any future agreements among the Guarantor, the Obligor, the Beneficiaries or any of their respective affiliates) to set-off, combine, consolidate, or otherwise appropriate and apply (i) any assets of the Guarantor or any of its affiliates at any time held by any of them or (ii) any indebtedness or other liabilities at any time owing by any of them to the Guarantor or any of its affiliates, as the case may be, on account of the obligations or liabilities owed by the Guarantor to such party under this Guarantee.

7. **Stay of Acceleration**

If acceleration of the time for payment of any amount payable by the Obligor under the Conditions applicable to the Securities is stayed upon the insolvency, bankruptcy or reorganisation of the Obligor, all such amounts otherwise subject to acceleration under the Conditions are nonetheless payable by the Guarantor hereunder forthwith on demand by the Beneficiaries.

8. **Savings Clause**

Notwithstanding anything to the contrary in this Guarantee, the Guarantor, and by its acceptance of Securities, each Beneficiary, hereby confirms that it is the intention of all such parties that the Guarantee not constitute a fraudulent conveyance under applicable fraudulent conveyance provisions of the United States Bankruptcy Code or any comparable provision of state law. To effectuate that intention, the Beneficiaries and the Guarantor hereby irrevocably agree that the obligations of the Guarantor under the Guarantee are limited to the maximum amount that would not render the Guarantor's obligations subject to avoidance under applicable fraudulent conveyance provisions of the United States Bankruptcy Code or any comparable provision of state law.

9. **Demand on Guarantor**

Any demand hereunder shall be given in writing, addressed to the Guarantor and served at its office at 4 Metrotech, Brooklyn, New York 11245, United States of America, Attn: Finance Controllers, Interentity Analysis Group - Peter W Smith, Fax: 917-746-2267. A demand so made shall be deemed to have been duly made five New York Business Days (as used herein, "**New York Business Day**" means a day (other than a Saturday or Sunday) on which banks are open for business in New York) after the day it was served or if it was served on a day that was not a New York Business Day or after 5.30 p.m. (New York time) on any day, the demand shall be deemed to be duly made five New York Business Days after the New York Business Day immediately following such day.

10. **Execution and Delivery of Guarantee**

The execution by the Guarantor of this Guarantee evidences the Guarantee, whether or not the person signing as an officer of the Guarantor still holds that office at the time of authentication of any Security.

The delivery of any Security by the Principal Programme Agent (as defined in the Agency Agreement) after authentication constitutes due delivery of the Guarantee on behalf of the Guarantor.

11. **Incorporation of Terms**

The Guarantor agrees that it shall comply with and be bound by those provisions contained in the Programme Documents which relate to it.

12. **Deposit of Guarantee and Application**

This Guarantee shall be deposited with and held by The Bank of New York Mellon for the benefit of the Beneficiaries.

(a) Subject to (b) and (c) below, this Guarantee (i) applies in respect of each Security issued by the Obligor under the Programme on or after the date hereof (the "**Effective Date**") and (ii) amends, supplants and replaces in its entirety, for all such Securities referred to in (i), the guarantee for the Programme deemed effective as of 21 April 2022 (the "**21 April 2022 Guarantee**"). For the avoidance of doubt, the 21 April 2022 Guarantee (and each guarantee of Securities by the Guarantor under the Programme preceding the 21 April 2022 Guarantee, as applicable) shall continue to apply to all Securities issued under the Programme before the Effective Date in accordance with their terms, as applicable.

(b) Securities issued on or after the Effective Date which are expressed to be consolidated and form a single series with Securities the first tranche of which was issued prior to the Effective Date, shall not have the benefit of this Guarantee but shall instead have the benefit of the same guarantee of the Guarantor under the Programme granted in respect of such first tranche of Securities.

(c) This Guarantee shall not apply in respect of any Securities issued on or after the date on which the Guarantor has granted a subsequent guarantee of Securities issued by the Obligor under the Programme and which subsequent guarantee is expressed to replace this Guarantee in relation to such Securities (unless expressly so provided in the terms of such subsequent guarantee, including in the circumstance of (b) above where such Securities are to be consolidated and form a single series with Securities the first tranche of which was issued on or after the Effective Date but before the date on which the Guarantor has granted a subsequent guarantee).

13. **Not Insured**

This Guarantee is not insured by the Federal Deposit Insurance Corporation of the United States of America.

14. **Governing Law**

This Guarantee and the rights and obligations of the parties hereunder shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York.

15. **QFC Stay Rules**

Notwithstanding herein to the contrary:

(a) to the extent required under a U.S. Special Resolution Regime, this Guarantee and any interest or obligation in or under this Guarantee, or any property securing this Guarantee may be transferred to a transferee required under such U.S. Special Resolution Regime upon or following the Guarantor becoming subject to a receivership, insolvency, liquidation, resolution or similar proceeding unless the result of the transfer would result in a Beneficiary being the beneficiary of this Guarantee in violation of any law applicable to such Beneficiary;

(b) in the event the Guarantor becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of this Guarantee (and any interest and obligation in or under, and any property securing, this Guarantee) from the Guarantor will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Guarantee (and any

interest and obligation in or under, and any property securing, this Guarantee) were governed by the laws of the United States or a state of the United States;

(c) in the event the Guarantor or an Affiliate of the Guarantor becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights with respect to this Guarantee that may be exercised against the Guarantor are permitted to be exercised to no greater extent than the Default Rights could be exercised under the U.S. Special Resolution Regime if this Guarantee were governed by the laws of the United States or a state of the United States; and

(d) if, after the date of this Guarantee, both parties hereto shall have become adhering parties to the ISDA 2018 U.S. Resolution Stay Protocol, as published by the International Swaps and Derivatives Association, Inc. as of 31 July 2018 (the "**ISDA U.S. QFC Protocol**"), the terms of the ISDA U.S. QFC Protocol will supersede and replace this clause 15.

For purposes of this clause 15, the following terms have the following meanings:

"**Affiliate**" has the meaning given in section 2(k) of the Bank Holding Company Act (12 U.S.C. 1841(k)) and section 225.2(a) of the Board's Regulation Y (12 CFR 225.2(a)).

"**Default Right**" means any: (i) right of a party, whether contractual or otherwise (including, without limitation, rights incorporated by reference to any other contract, agreement, or document, and rights afforded by statute, civil code, regulation, and common law), to liquidate, terminate, cancel, rescind, or accelerate such agreement or transactions thereunder, set off or net amounts owing in respect thereto (except rights related to same day payment netting), exercise remedies in respect of collateral or other credit support or property related thereto (including the purchase and sale of property), demand payment or delivery thereunder or in respect thereof (other than a right or operation of a contractual provision arising solely from a change in the value of collateral or margin or a change in the amount of an economic exposure), suspend, delay, or defer payment or performance thereunder, or modify the obligations of a party thereunder, or any similar rights; and (ii) right or contractual provision that alters the amount of collateral or margin that must be provided with respect to an exposure thereunder, including by altering any initial amount, threshold amount, variation margin, minimum transfer amount, the margin value of collateral, or any similar amount, that entitles a party to demand the return of any collateral or margin transferred by it to the other party or a custodian or that modifies a transferee's right to reuse collateral or margin (if such right previously existed), or any similar rights, in each case, other than a right or operation of a contractual provision arising solely from a change in the value of collateral or margin or a change in the amount of an economic exposure.

"**U.S. Special Resolution Regime**" means the Federal Deposit Insurance Act (12 U.S.C. 1811–1835a) and regulations promulgated thereunder and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (12 U.S.C. 5381–5394) and regulations promulgated thereunder.

16. **Jurisdiction**

The Guarantor agrees to the exclusive jurisdiction of courts located in the State of New York, United States of America, over any disputes arising under or relating to this Guarantee.

JPMORGAN CHASE FINANCIAL COMPANY LLC

History, Development and Organisational Structure

JPMCFC was formed as a limited liability company in Delaware, United States of America on 30 September 2015 pursuant to and in accordance with the Delaware Limited Liability Company Act with file number 5838642. The principal executive office of JPMCFC is located at 383 Madison Avenue, New York, New York 10179, U.S.A. and its telephone number is +1 212 270-6000.

Under Article Four of its Amended and Restated Limited Liability Company Agreement dated 31 May 2022 (as may be further amended, restated, supplemented and/or replaced from time to time), JPMCFC may engage in any lawful act or activity for which limited liability companies may be formed under the Delaware Limited Liability Company Act.

JPMCFC is an indirect, wholly-owned finance subsidiary of JPMorgan Chase & Co., a company incorporated in the State of Delaware in the United States of America.

Principal Activities

As a finance subsidiary of JPMorgan Chase & Co., JPMCFC has no independent operations beyond the issuance and administration of its securities. Aside from the initial capital contribution from JPMorgan Chase & Co., substantially all of the assets of JPMCFC are expected to relate to obligations of one or more of its affiliates to make payments under loans made by JPMCFC or under other intercompany agreements with JPMCFC. As a result, JPMCFC's ability to make payments in respect of the Securities is limited. JPMCFC is dependent upon payments from one or more of its affiliates under intercompany loans and other intercompany agreements to meet its obligations under the Securities it issues.

JPMCFC intends to lend the net proceeds from the sale of the Securities it issues to JPMorgan Chase & Co. and/or its affiliates. JPMorgan Chase & Co. expects that it and/or its affiliates will use the proceeds from these loans to provide additional funds for its and/or their operations and for other general corporate purposes.

Principal Markets

During the financial year ended 31 December 2021, JPMCFC issued Securities primarily in the United States of America.

Trend Information

Securities issued by JPMCFC will be offered to meet investor needs for products that reflect the risk-return profile and market exposure provided by the Securities as set forth in the relevant Pricing Supplement.

Directors and Officers

The administrative, management and supervisory bodies of JPMCFC comprise its Board of Directors. Set forth below are the names and positions of JPMCFC's Directors:

Name	Function	Business Address
Brandon P. Igyarto	President (Principal Executive Officer) and Manager	383 Madison Avenue, 5th Floor, New York, New York 10179, U.S.A.
Bin Yu	Manager	383 Madison Avenue, 7th Floor, New York, New York 10179, U.S.A.

Name	Function	Business Address
Patrick Dempsey	Treasurer (Principal Financial Officer and Principal Accounting Officer) and Manager	4 Chase Metrotech Center, 4th Floor, New York, New York 11245, U.S.A.
Michael O. Kurd	Manager	383 Madison Avenue, 5th Floor, New York, New York 10179, U.S.A.
Daniel T. Roose	Manager	25 Bank Street, Canary Wharf, 4th Floor, London, E14 5JP, United Kingdom

The principal outside activity of each Director of JPMCFC is serving as Managing Director of the Corporate & Investment Bank division at JPMorgan Chase & Co. There are no material potential conflicts of interest between any duties owed to JPMCFC by the Directors of JPMCFC identified above and their private interests and/or outside duties.

Corporate Governance

JPMCFC conducts itself in accordance with the Delaware Limited Liability Company Act. The Board of Directors has established a borrowings committee to authorise the issuance, offerings and sale of certain securities of JPMCFC. No other committees made up for specific purposes or to perform specific functions have been established.

Financial Information

JPMCFC is an indirect, wholly-owned subsidiary of JPMorgan Chase & Co. JPMCFC is exempt under Section 3-10(b) of Regulation S-X from publishing financial statements, and is currently included in the consolidated statements of JPMorgan Chase & Co.

Capital Structure

JPMCFC is a wholly-owned subsidiary of JPMorgan Chase Holdings LLC ("**JPMCHL**"). JPMCHL is a wholly-owned subsidiary of JPMorgan Chase & Co. An affiliate of JPMCFC initially, has contributed USD 250,000,000 in cash and no other property to JPMCFC. JPMCHL may, but is not, obligated to, make any additional capital contributions to JPMCFC.

Aside from the initial capital contribution, substantially all of the assets of JPMCFC are expected to relate to obligations of one or more of its affiliates to make payments under loans made by JPMCFC or under other intercompany agreements with JPMCFC.

BOOK-ENTRY CLEARING SYSTEMS

The information appearing below is based on the Issuers' understanding of the rules and procedures of the relevant Clearing System as derived from public sources. These rules and procedures are subject to change.

Securities held through a Relevant Clearing System

See "*Book-entry systems*" below. Transfers of Securities which are held in a Relevant Clearing System may be effected only through the Relevant Clearing System(s) in which the Securities to be transferred are held. Title will pass upon registration of the transfer in the books of the Relevant Clearing System(s) and in accordance with the local laws, regulations and/or rules governing such Relevant Clearing Systems.

Beneficial interests in the Global Securities will be shown on, and transfers thereof will be effected through, records maintained by the Relevant Clearing System(s) and its respective participants.

Book-entry systems

DTC, Euroclear, Clearstream, Luxembourg and Clearstream Frankfurt have each published rules and operating procedures designed to facilitate transfers of beneficial interests in Global Securities among participants and accountholders of DTC, Euroclear, Clearstream, Luxembourg and Clearstream Frankfurt. However, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or changed at any time. None of the Issuers, the Guarantors, the Relevant Programme Agents or any Dealer will be responsible for any performance by DTC, Euroclear, Clearstream, Luxembourg or Clearstream Frankfurt or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Securities represented by Global Securities or for maintaining, supervising or reviewing any records relating to such beneficial interests.

Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland

Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland each hold securities for their customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other. Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear, Clearstream, Luxembourg, Clearstream Frankfurt, Euroclear France and Euroclear Finland is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

DTC

DTC is a limited-purpose trust company organised under the New York Banking Law, a "banking organisation" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("**Direct Participants**") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerised book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-

U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organisations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("**DTCC**"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("**Indirect Participants**"). DTC has a Standard & Poor's rating of AA+. The rules applicable to its Participants are on file with the SEC. More information about DTC can be found at http://www.dtcc.com/.

SIX SIS AG

SIX SIS AG has been part of SIX Group since January 2008. SIX Group was formed at the beginning of 2008 through the merger of SWX Group, SIS Group and Telekurs Group.

As both a central securities depository and an international central securities depository, SIX SIS AG offers banks and other financial market participants the safe custody of securities, a full range of custody services and the settlement of securities transactions. SIX SIS AG settles securities transactions worldwide, including transactions in uncertificated securities.

In the Swiss market, SIX SIS AG is part of the so-called Swiss value chain. The links to the SIX Swiss Exchange AG and the payment systems SIC/euroSIC, ensure fully automated settlement in central bank money.

Euroclear Sweden

Euroclear Sweden is a subsidiary within the Euroclear group of companies. Euroclear Sweden is a limited liability company. It is authorised and regulated by the Swedish Financial Supervisory Authority as a central securities depository within the meaning of the Swedish Central Securities Depositories and Financial Instruments Accounts Act (1998:1479 (as amended)) and as a clearing organisation within the meaning of the Swedish Securities Markets Act (2007:528 (as amended)). Swedish Securities will be issued in registered, uncertificated and dematerialised book-entry form with Euroclear Sweden in accordance with the Swedish CSD Rules. No physical notes, certificates or other physical instruments (whether in global, temporary or definitive form) will be issued in respect of the Swedish Securities other than as specifically allowed in the General Conditions. All transactions relating to the Swedish Securities (such as issuance, sale and transfer, pledge arrangements and other dispositions and redemptions) are executed as computerised book-entry registrations. Consequently, in order to effect such entries Holders must establish a book-entry account through a credit institution or a securities firm acting as an account operator with Euroclear Sweden. More information regarding Euroclear Sweden and its rules and operating procedures can be found at its internet web site at http://www.euroclear.eu.

VPS

The VPS is the Norwegian paperless centralised securities registry. It is a computerised bookkeeping system in which the ownership of and transactions relating to securities that are registered with the VPS are recorded. The VPS also facilitates the clearance and settlement of securities transactions. All transactions relating to securities registered with the VPS are made through computerised book entries. The VPS confirms each entry by sending a transcript to the registered holder irrespective of any beneficial ownership. To effect such entries, the individual holder must establish a VPS account with an authorised VPS account agent. Amongst others banks and investment firms authorised to conduct services in or into Norway can become authorised VPS account agents. Indirect access to the VPS is available to authorised institutions that offer custodial/nominee services in securities registered with the VPS. The entry of a transaction in the VPS is pursuant to Norwegian law prima facie evidence in determining the legal rights of parties as against the issuer or a third party claiming an interest in the relevant security. The VPS is generally liable for any loss resulting from an error in connection with registering, altering or cancelling a right, except in the event of contributory negligence, in which event compensation owed by the VPS may be reduced or withdrawn.

VP

VP operates the Danish depository and clearing centre. VP undertakes the electronic issue of securities, registering book-entry of ownership and rights, and undertakes clearing and settlement of transactions. VP offers a direct and automated link to the international securities market through Euroclear Bank, which permits customers in Euroclear to trade in Danish securities with settlement in Euroclear without loss of value days. VP operates with seven clearing and settlement blocks every 24 hours, with netting of customers' positions in both cash and securities. Delivery and payment on a net basis are simultaneous. During daytime trading hours, there is also the possibility of real-time gross settlement (RTGS). Entities wishing to issue securities through VP must enter into an agreement with VP and an issue administrator, which may be Danish or foreign banks, securities brokers etc. Securities are held on custody accounts operated by account holding institutions. VP's customers are Danish and international banks, brokers, dealers and financial institutions.

CDIs settling through CREST

General information

If specified in the relevant Pricing Supplement, investors will hold indirect interests in the Securities through CREST (being the system for the paperless settlement of trades and the holding of uncertificated securities operated by Euroclear UK & Ireland Limited or any successor thereto in accordance with the United Kingdom Uncertificated Securities Regulations 2001) by holding dematerialised depository interests ("**CREST Depository Interests**" or "**CDIs**").

CDIs are independent securities constituted under English law issued, held, settled and transferred through CREST. CDIs are issued by CREST Depository Limited or any successor thereto (the "**CREST Depository**") pursuant to the global deed poll dated 25 June 2001 (in the form contained in Chapter 3 of the CREST International Manual (which forms part of the CREST Manual)) (as subsequently modified, supplemented and/or restated) (the "**CREST Deed Poll**"). CDIs are held through CREST in dematerialised uncertificated form in accordance with the CREST Deed Poll. CDIs in respect of Securities will be constituted, issued to investors and transferred pursuant to the terms of the CREST Deed Poll.

CDIs represent indirect interests in the Securities to which they relate and holders of CDIs will not be the legal owners of the Securities. The Issuer will issue Securities with the intention that indirect interests in such Securities be held through CDIs. In order to enable the settlement of indirect interest in the relevant Securities within CREST, investors will need to hold such indirect interests via CDIs.

Following the delivery of the Securities into a Relevant Clearing System permitted in the CREST Manual, indirect interests in Securities may be delivered, held and settled in CREST by means of the creation of dematerialised CDIs representing indirect interests in the relevant Securities. Interests in the Securities will be credited to the CREST nominee's account with Euroclear and the CREST nominee will hold such interests as nominee for the CREST Depository which will issue CDIs to the relevant CREST participants. The CDIs will therefore consist of indirect rights of a CDI holder in, or relating to, the Securities which are held (through the CREST nominee) on trust for the benefit of the CDI holder by the CREST Depository and will constitute a record acknowledging that the CREST nominee holds the Securities as nominee on behalf of the CREST Depository. The CDIs will be issued once the relevant Securities are credited to the CREST nominee's account. It is intended that CDIs will be issued to the relevant CREST participants on or around the Issue Date of the relevant Securities. However, CDIs may be created at any time following the credit of relevant Securities to the CREST nominee's account with Euroclear.

Each CDI will be treated as one Security represented by such CDI, for the purposes of determining all rights and obligations and all amounts payable in respect thereof. The CREST Depository will pass on to holders of CDIs any interest or other amounts received by it as holder of the Securities on trust for such CDI holder. Therefore, the holders of CDIs are entitled to the proceeds from the Securities. If a matter arises that requires a vote of the Holders, J.P.Morgan may make arrangements to permit the holders of CDIs to instruct the CREST Depository to exercise the voting rights of the CREST nominee in respect of the Securities. However, there is no guarantee that it will be possible to put such voting arrangements in place for holders of CDIs.

Transfers of interests in Securities by the CREST nominee to a participant of the Relevant Clearing System will be effected by cancellation of the CDIs and transfer of an interest in such Securities represented by the CDIs to the account of the relevant participant with the Relevant Clearing System. It is expected that the CDIs will have the same securities identification number as the ISIN of the Securities and will not require a separate listing on a recognised stock exchange.

Investment considerations in respect of holding CDIs

The rights of the holders of CDIs will be governed by the arrangements between CREST and the Relevant Clearing System, including the CREST Deed Poll executed by the CREST Depository. These rights may be different from those of holders of Securities which are not represented by CDIs.

Rights in respect of the Securities cannot be enforced by holders of CDIs except indirectly through the CREST Depository and CREST nominee who in turn can enforce rights indirectly through the intermediary depositories and custodians described above. The enforcement of rights in respect of the Securities will therefore be subject to the local law of the relevant intermediary.

These arrangements could result in an elimination or reduction in the payments that otherwise would have been made in respect of the Securities in the event of any insolvency or liquidation of the relevant intermediary, in particular where the Securities held in clearing systems are not held in special purpose accounts and are fungible with other securities held in the same accounts on behalf of other customers of the relevant intermediaries.

Holders of CDIs will be bound by all provisions of the CREST Deed Poll and by all provisions of or prescribed pursuant to the CREST International Manual (November 2014) issued by Euroclear UK & Ireland Limited and as amended, modified, varied or supplemented from time to time (the "**CREST Manual**") and the CREST Rules (contained in the CREST Manual) (the "**CREST Rules**") applicable to the CREST International Settlement Links Service. Holders of CDIs must comply in full with all obligations imposed on them by such provisions.

Investors in CDIs should note that the provisions of the CREST Deed Poll, the CREST Manual and the CREST Rules contain indemnities, warranties, representations and undertakings to be given by holders of CDIs and limitations on the liability of the CREST Depository as issuer of the CDIs. Holders of CDIs may incur liabilities resulting from a breach of any such indemnities, warranties, representations and undertakings in excess of the money invested by them.

Investors in CDIs should note that holders of CDIs may be required to pay fees, charges, costs and expenses to the CREST Depository in connection with the use of the CREST International Settlement Links Service. These will include the fees and expenses charged by the CREST Depository in respect of the provision of services by it under the CREST Deed Poll and any taxes, duties, charges, costs or expenses which may be or become payable in connection with the holding of the Securities through the CREST International Settlement Links Service.

Investors in CDIs should note that none of the Issuer, the Guarantor (if applicable), the Dealers and the Arranger will have any responsibility for the performance by any intermediaries or their respective direct or indirect participants or accountholders acting in connection with CDIs or for the respective obligations of such intermediaries, participants or accountholders under the rules and procedures governing their operations.

None of the Issuer, the Guarantor (if applicable), the Dealers and the Arranger makes any representation or warranty as to the tax consequences of an investment in CDIs and/or the tax consequences of the acquisition, holding, transfer or disposal of CDIs by any investor (including, without limitation, whether any stamp duty, stamp duty reserve tax, excise, severance, sales, use, transfer, documentary or any other similar tax, duty or charge may be imposed, levied, collected, withheld or assessed by any government, applicable tax authority or jurisdiction on the acquisition, holding, transfer or disposal of CDIs by any investor). The tax consequences for each investor in CDIs can be different. For example, while not certain, an investor that holds CDIs could be treated, for U.S. federal income tax purposes, as if it held the underlying security. Therefore, investors and counterparties should consider consulting with their tax advisers as to their specific consequences.

The attention of Investors in CDIs is drawn to the terms of the CREST Deed Poll, the CREST Manual and the CREST Rules, copies of which are available from Euroclear UK & Ireland Limited at 33 Cannon Street, London EC4M 5SB or by calling +44 (0)20 7849 0000 or from the Euroclear UK & Ireland Limited website at www.euroclear.com/site/public/EUI.

Swiss Certificates (UBS-cleared) cleared through UBS

Swiss Certificates (UBS-cleared) are Securities which are cleared and settled through UBS Switzerland AG (and not SIX SIS) and no external clearing of such Securities is possible through any international or domestic clearing system. The clearing and settlement arrangements in relation to Swiss Certificates (UBS-cleared) are governed under the SPI Agreement between J.P. Morgan Securities plc and UBS Switzerland AG (as described in "*Terms and Conditions of the Securities*") and UBS Switzerland AG provides related custody services under the Custody Services Agreement between JPMS plc and UBS Switzerland AG (as described in "*Terms and Conditions of the Securities*").

Each Holder of Swiss Certificates (UBS-cleared) is subject to the internal rules and procedures of UBS Switzerland AG with regard to the clearing of the Swiss Certificates (UBS-cleared) including with regard to effecting transfers, payments, redemptions, notices and modifications, and each prospective investor should satisfy itself before purchasing any Swiss Certificates (UBS-cleared) that such investor understands such rules and procedures and how they may differ if the Swiss Certificates (UBS-cleared) were cleared through a recognised clearing agency. None of the relevant Issuer, Guarantor, Dealer, Product Provider or any of their respective affiliates will be responsible for the performance by UBS Switzerland AG of its obligations under such arrangement and none of them will have any liability for any aspect of payments made (or not made or delayed) or transfers effected (or not effected or delayed) or other clearance transaction on account of the Holders.

Swiss Certificates (UBS-cleared) shall only be issued in the form of uncertificated securities (*einfache Wertrechte*) pursuant to article 973c of the Swiss Code of Obligations (*Obligationenrecht*) and entered into the main register (*Hauptregister*) of UBS Switzerland AG as custodian (*Verwahrungsstelle*). J.P. Morgan Securities plc (as Product Provider under the SPI Agreement) shall maintain the register of uncertificated securities (*Wertrechtebuch*) for the relevant Issuer and shall register the Swiss Certificates (UBS-cleared) in the register of uncertificated securities (*Wertrechtebuch*). UBS Switzerland AG as custodian (*Verwahrungsstelle*) shall operate and maintain the main register (*Hauptregister*) in respect of the Swiss Certificates (UBS-cleared) and shall enter the relevant uncertificated securities (*einfache Wertrechte*) into the main register (*Hauptregister*) in accordance with article 6c of the Swiss Federal Intermediated Securities Act (*Bucheffektengesetz*) as of the Issue Date and following instruction by the Product Provider. UBS Switzerland AG has the right but not the obligation at any time to transfer the main register (*Hauptregister*) to another UBS group entity licensed as a Swiss bank or securities firm, subject to the prior written consent of the Product Provider, such consent not to be unreasonably withheld.

The obligation of the Issuer to make payments due under the Swiss Certificates (UBS-cleared) shall be discharged in full upon payment of the due amount to UBS Switzerland AG as Swiss Certificates (UBS-cleared) Agent. Following such payment by the Issuer to UBS Switzerland AG as Swiss Certificates (UBS-cleared) Agent, Holders must look to UBS Switzerland AG in the case of non-receipt or delay of payment to such Holder; none of the relevant Issuer, Guarantor, or any Dealer, Product Provider or any affiliate thereof shall have any liability for the failure of UBS Switzerland AG to make payment of any amount paid to it by the Issuer to the Holder.

References to UBS Switzerland AG include any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable. References to the Product Provider mean J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

General information about UBS Switzerland AG

UBS Switzerland AG is a corporation limited by shares and with a registered office in Zurich. It is licensed to operate as a bank, securities dealer and custodian bank in Switzerland and may engage in a full range of financial, advisory, trading and services activities in Switzerland and abroad, including personal banking, commercial banking, investment banking and asset management. UBS Switzerland AG belongs to the companies controlled by the group parent company UBS Group AG.

The address and telephone number of UBS Switzerland AG's registered office and principal place of business is: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, telephone +41 44 234 1111.

SUBSCRIPTION AND SALE

Subject to the terms and on the conditions contained in a programme agreement dated 22 September 2022, as amended and/or supplemented and/or restated from time to time (the "**Programme Agreement**"), between the Issuers, the Guarantors, the Permanent Dealers and the Arranger, the Securities will be offered on a continuous basis by the relevant Issuer to the Permanent Dealers. However, each Issuer has reserved the right to sell Securities directly on its own behalf to Dealers that it may appoint for such purpose from time to time. The price and amount of Securities to be issued under the Programme will be determined by the relevant Issuer and Dealer(s) at the time of issue in accordance with prevailing market conditions. The Securities may be resold at prevailing market prices, or at prices related thereto, at the time of such resale, as determined by the relevant Dealer. The Securities may also be sold by the relevant Issuer through the Dealers, acting as agents of the relevant Issuer. The Programme Agreement also provides for Securities to be issued in syndicated Tranches that are jointly and severally underwritten by two or more Dealers. If a Tranche of Securities is syndicated, the details of such syndication will be specified in the relevant Pricing Supplement. The application procedures to be followed by the Issuer and the Dealers in relation to an issue of Securities are set out in the procedures memorandum dated 22 September 2022.

The relevant Issuer will pay each relevant Dealer a commission as agreed between them in respect of Securities subscribed by it. The commissions in respect of an issue of Securities on a syndicated basis will be stated in the relevant Pricing Supplement.

The Programme Agreement entitles the Dealers to terminate any agreement that they make to subscribe Securities in certain circumstances prior to payment for such Securities being made to the relevant Issuer.

Any person who purchases Securities at any time is deemed to have acknowledged, understood and agreed to comply with the selling restrictions set out below.

Selling Restrictions

General

The Securities, the Guarantees and, in certain instances, the securities to be delivered upon redemption or exercise of the Securities, if any, have not been and will not be registered under the Securities Act, or the laws of any state or other jurisdiction of the United States. Trading in the Securities and the Guarantees has not been approved by the CFTC under the U.S. Commodity Exchange Act. The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee have not been and will not be registered under the rules of the OCC.

The Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered and sold pursuant to Rule 144A) are being offered and sold pursuant to the exemption from registration under the Securities Act contained in Regulation S and, with respect to CREST CDI Securities, also subject to the persons to whom such Securities are offered and sold having entered into, and remaining in compliance with, an Investor Letter of Representations.

The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee may also be offered or sold in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 3(a)(2) thereof and will be offered and sold pursuant to an exemption from the registration requirements of the OCC (including, in the case of offers or sales outside the United States, in compliance with Regulation S as such regulation is incorporated into the regulations of the OCC pursuant to 12 C.F.R. Section 16.5(g)).

The Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered and sold pursuant to Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time nor offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person; provided however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer.

Hedging transactions involving "equity securities" of "domestic issuers" (as each such term is defined in the Securities Act and regulations thereunder) may only be conducted in compliance with the Securities Act.

Any person who purchases Securities at any time is deemed to have acknowledged and understood the selling restrictions set out above and is also required to make, or is deemed to have made, the representations and agreements as set out below under "— *United States*" and under "*Purchaser representations and requirements and transfer restrictions*" as a condition to purchasing such Security or any legal or beneficial interest therein.

These selling restrictions may be modified by the agreement of the relevant Issuer and the Dealer(s) (e.g. following a change in a relevant law, regulation or directive). Any such modification will be set out in the Pricing Supplement issued in respect of the issue of Securities to which it relates or in a supplement to this Offering Circular.

No action has been taken in any jurisdiction that would permit a public offering of any of the Securities, or possession or distribution of this Offering Circular or any of the documents incorporated by reference therein or any other offering material or any Pricing Supplement, in any country or jurisdiction where action for that purpose is required.

J.P. Morgan Securities plc, J.P. Morgan Securities LLC, J.P. Morgan Securities (Asia Pacific) Limited, J.P. Morgan Securities Australia Limited and JPMorgan Securities Japan Co., Ltd. have agreed and any Dealer who is appointed by the relevant Issuer in connection with an issue of Securities will agree that it will, to the best of its knowledge, comply with all relevant laws, regulations and directives in each jurisdiction in which it purchases, offers, sells or delivers Securities or has in its possession or distributes this Offering Circular or any of the documents incorporated by reference therein, any other offering material or any Pricing Supplement and neither JPMCFC, JPMSP, JPMorgan Chase Bank, N.A., JPMorgan Chase & Co., nor any other Dealer shall have responsibility therefor.

Andorra

Each Dealer has represented and agreed, and each further Dealer appointed will be required to represent and agree, that the Securities will only be offered, marketed, distributed or sold, or any marketing materials distributed in the Principality of Andorra relating thereto, in accordance with the requirements set forth by the laws of Andorra, in particular: Law 7/2013, 9, May, on the regime for the operating entities in the Andorran financial system and other provisions which govern the financial activities at the Principality of Andorra ("**Law 7/2013**") "*Llei 7/2013, del 9 de maig, sobre el règim jurídic de les entitats operatives del sistema financer andorrà i altres disposicions que regulen l'exercici de les activitats financeres al Principat d'Andorra*" and Law 8/2013, 9, May, on the organizational requirements and operating conditions of the operating entities in the Andorran financial system, the investor protection, the market abuse and financial securities agreements ("**Law 8/2013**") "*Llei 8/2013, del 9 de maig sobre els requisits organitzatius i les condicions de funcionament de les entitats operatives del sistema financer, la protecció de l'inversor, l'abús de mercat i els acords de garantia financera*", as well as or any other related regulations that may be in force from time to time, as further amended, supplemented or restated governing the issue, offer and sale of Securities in the Principality of Andorra.

Accordingly, the Securities can only be publicly offered, marketed, promoted or negotiated in the Principality of Andorra by locally licensed entities "*entitats operatives del sistema financer andorrà*" authorised by the Andorran Financial Authority "*Autoritat Financera Andorrana*" to distribute Securities within the Principality of Andorra (i.e. banking entities, collective investment scheme management companies and both investment financial companies and agencies).

The Securities may only be offered or distributed exclusively to locally licensed entities in accordance with the laws of Andorra, or sell them to Andorran professional investors, as defined in Law 8/2013, as long as the selling of such Securities is expressly solicited by such investors.

Argentina

The Securities are not and will not be authorised by the Comisión Nacional de Valores (the "**CNV**") for public offer in Argentina and may thus not be offered or sold to the public at large or to sectors or specific groups thereof by any means, including but not limited to personal offerings, written materials, advertisements, the internet or the media, in circumstances which constitute a public offering of securities under Argentine Law No. 26,831 as amended by Argentine Law No. 27,440 (the "**Capital Markets Law**"). The Capital Market Law requires a license to make a "public offering" of securities, but the distinction between a "public" and a "private" offering is not clear in the regulations. The concept of

public offering under Section 2 of the Capital Markets Law is defined as any invitation addressed to people in general, or to a determined group of people or sectors, to perform any legal act with securities by the issuers of such securities or by any entity dedicated to the trading of such securities, through personal offers, news publications, radiotelephone, telephone or television broadcasts, films, putting up posters, signs or public announcements, advertisement, programmes, shows, electronic media, circulars and print communications, or any other means of communication.

The Capital Markets Law does not expressly recognise the concept of private placement and does not provide any specific safe harbour, rule or standard as to when an offering may be considered a private placement (such as limits regarding the offered amount or the number of recipients of the offer).

Non-licensed entities should avoid any type of systematic or regular activity aimed at prospecting or seeking referrals of individuals in Argentina in connection with financial services and related activities, since this may be seen as an indication of an unauthorised public offering of securities. In recent years, the CNV and local courts enforced a more restrictive approach to solicitation of investments and related products, including cases where there was a mere reference to local offices in general foreign-based websites of international banks, and even in a case of reverse enquiry.

The interpretation of the CNV regarding the circumstances that constitute an unauthorised public offer is made on a case-by-case basis and may vary from time to time.

The "public offering" of non (locally) listed securities and of non-licensed brokerage services are considered a crime pursuant to section 310 of the Criminal Code, with sanctions that go from 2 to 4 years of imprisonment, fines and disqualification to maintain a license.

Additionally, the prospectus must carry a wrapper, seal or stamp which includes the specific name of the addressee to complement the generic legend (above) included in the prospectus. This is because marketing materials should be addressed to specific individuals.

Australia

The Offering Circular has not been, and no prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) (the "**Corporations Act**")) in relation to the Programme or the Securities has been or will be, lodged with the Australian Securities and Investments Commission ("**ASIC**") and no recommendation to acquire, no invitation to apply for, no offer to apply for or buy, no offer to arrange the issue or sale of, nor any offer for issue or sale of, any securities in Australia, will be made, except as set out below. The Issuer has not authorised nor taken any action to prepare or lodge with the ASIC an Australian law compliant prospectus or product disclosure statement.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that unless the relevant Pricing Supplement (or another supplement to this Offering Circular) otherwise provides, it:

(a) has not made or invited, and will not make or invite, an offer of the Securities for issue or sale in Australia (including an offer or invitation which is received by a person in Australia); and

(b) has not distributed or published, and will not distribute or publish, any information memorandum or any other offering material or advertisement relating to any Securities in Australia,

unless:

(i) the aggregate consideration payable by each offeree is at least A$500,000 (or its equivalent in an alternate currency, in either case, disregarding moneys lent by the offeror or its associates);

(ii) the offer or invitation does not otherwise require disclosure to investors under Parts 6D.2 or 7.9 of the Corporations Act;

(iii) the offer or invitation does not constitute an offer to a "retail client" as defined for the purposes of section 761G of the Corporations Act;

(iv) such action complies with any other applicable laws, regulations or directives in Australia; and

(v) such action does not require any document to be lodged with ASIC or any other regulatory authority in Australia.

Austria

For selling restrictions in respect of Austria, please see "*European Economic Area*" below.

The Bahamas

The Securities may not be offered or sold in or from within The Bahamas unless the offer or sale is made by a person appropriately licensed or registered to conduct securities business in or from within The Bahamas.

The Securities may not be offered or sold to persons or entities deemed resident in The Bahamas pursuant to the Exchange Control Regulations, 1956 of The Bahamas unless the prior approval of the Central Bank of The Bahamas is obtained.

No offer or sale of the Securities may be made in The Bahamas via a public offer unless a preliminary prospectus and a prospectus have been filed with the Securities Commission of The Bahamas and the Securities Commission of The Bahamas has issued a receipt for each document, unless such offering is exempted pursuant to the Securities Industry Regulations, 2012.

Bahrain, Kingdom of

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold, and will not offer or sell, any Securities, except in compliance with Article 81 of the CBB and Financial Institutional Law promulgated by Legislative Decree No. 64 of 2006 to persons in Bahrain who are "Accredited Investors".

For this purpose, an "Accredited Investor" means:

(a) individuals holding financial assets (either singly or jointly with their spouse) of U.S.$1,000,000 or more, excluding that person's principal place of residence;

(b) companies, partnerships, trusts or other commercial undertakings, which have financial assets available for investment of not less than U.S.$1,000,000; or

(c) governments, supranational organisations, central banks or other national monetary authorities, and state organisations whose main activity is to invest in financial instruments (such as state pension funds).

Barbados

The Securities shall not be offered or sold into Barbados except in circumstances that do not constitute an offer to the public. This document is made available on the condition that it is for the use only by the recipient and may not be passed onto any other person or be reproduced in any part. The Financial Services Commission has not in any way evaluated the merits of the Securities offered hereunder and any representation to the contrary is an offence.

Belgium

For selling restrictions in respect of Belgium, please see "*European Economic Area*" below and in addition:

This Offering Circular has not been submitted for approval to the Financial Services and Markets Authority. Accordingly, investments instruments (as defined in the law of 11 July 2018 on offerings to the public of investment instruments and the admission of investment instruments to trading on regulated markets, as amended or replaced from time to time (the "**Prospectus Law**")) that do not qualify as securities (as defined in the EU Prospectus Regulation), including Securities that have a maturity of less than 12 months and qualify as money market instruments, and that therefore fall outside the scope of the EU Prospectus Regulation, may not be distributed in Belgium by way of an offering to the public, as defined in and subject to the exemptions set out in the Prospectus Law.

Any offeror of Securities will be required to represent and agree that it will not offer, sell or market Securities to any person that qualifies as a "consumer" within the meaning of Article I.1.2 of the Belgian Code of Economic Law (the "**Code**"), as amended from time to time, unless such offer, sale or marketing is made in compliance with the Code and its implementing regulation.

Belize

The Issuers are not registered under the laws of Belize nor are they licensed by the International Financial Services Commission of Belize. The Securities may be offered on a cross border basis to users in Belize as there are no licensing, regulatory restrictions or prohibitions in that regard in Belize.

Residents of Belize, including natural persons and corporate entities, and other corporations are all subject to Exchange Control Regulations which requires the permission of the Central Bank of Belize for them to engage, contract or deal in such services. Dealings by residents in such services without exchange control approval does not void and or vitiate such dealings as between the parties, save for contracts of insurance.

Securities may generally be offered to Belize International Business Companies ("**IBCs**"), Belize International Limited Liability Companies ("**LLCs**"), Belize International Foundations ("**IF**"), international banks licensed by the Central Bank of Belize under the International Banking Act ("**IBA**") and international insurance companies licensed under the International Insurance Act by the International Financial Services Commission.

All of the foregoing entities are exempt from the Exchange Control Regulations and so do not require Central Bank of Belize approval in order to deal in securities. They may not themselves engage in the activity of offering or marketing financial and commodity-based derivative instruments or other securities (e.g. futures, options, interest rates, foreign exchange instruments, shares, stock, contracts for differences, etc.) unless duly licensed under the International Financial Services Commission Act of Belize and regulations thereunder.

Bermuda

The Securities being offered hereby are being offered on a private basis to investors who satisfy the criteria outlined in this Offering Circular. This Offering Circular is not subject to, and has not received approval from, either the Bermuda Monetary Authority or the Bermuda Registrar of Companies and no statement to the contrary, explicit or implicit, is authorised to be made in this regard. The Securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act 2003 of Bermuda and the Investment Funds Act 2006 of Bermuda which regulate the sale or promotion of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are authorised to do so under applicable Bermuda legislation. Engaging in the activity of offering or marketing the Securities in Bermuda to persons in Bermuda may be deemed to be carrying on business in Bermuda.

Brazil

The Securities have not been and will not be registered with the "*Comissão de Valores Mobiliários*" - the Brazilian Securities and Exchange Commission ("**CVM**") and accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not and will not sell, promise to sell, offer, solicit, advertise and/or market the Securities within the Federative Republic of Brazil in an offering that can be construed as a public offering or unauthorised distribution of securities under Brazilian law and regulations. Additionally, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not and will not violate any of the registration requirements and securities distribution, sales and marketing restrictions under CVM rules, including, but not limited to Instruction nº 400, dated 29 December 2003, as amended from time to time, CVM's Opinions No. 32 and 33, both dated 30 September 2005, and Federal Law 6.385, dated 7 December 1976, as amended from time to time.

British Virgin Islands ("**BVI**")

The Securities may not be offered to the public in the British Virgin Islands unless the Issuer or the person offering the Securities on its behalf is licensed to carry on business in the British Virgin Islands.

The Issuer is not licensed to carry on business in the British Virgin Islands. The Securities may be offered to British Virgin Islands business companies (from outside the British Virgin Islands) without restriction. A "**British Virgin Islands business company**" is a BVI company formed under or otherwise governed by the BVI Business Companies Act 2004 of the BVI.

This Offering Circular is not an offer to sell, or a solicitation or invitation to make offers to purchase or subscribe for, the Securities or any other securities or investment business services in the BVI. This Offering Circular may not be sent or distributed to persons in the BVI and the Securities are not available to, and no invitation or offer to subscribe, purchase or otherwise acquire the Securities will be made to, persons in the BVI. However, the Securities may be offered and sold to business companies incorporated in the BVI and international limited partnerships formed in the BVI, provided that any such offering and sale is made outside the BVI or is otherwise permitted by BVI legislation.

Cayman Islands

Each Dealer and the Issuer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it does not intend to establish a place of business or otherwise intend to conduct business in the Cayman Islands. Accordingly the Dealers and the Issuer, and each further Dealer appointed under the Programme, should not be subject to the supervision of any Cayman Islands authority.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it shall not offer and sell Securities from a place of business within the Cayman Islands (including an offering from an internet or other electronic service provider located in the Cayman Islands) or in a manner constituting the establishment of a place of business or the commencement of business in the Cayman Islands unless it is appropriately registered and licensed or otherwise permitted to undertake such an offer or sale under applicable laws (including, without limitation, the Securities Investment Business Act (As Revised) of the Cayman Islands).

A Dealer may therefore offer and sell Securities to investors resident and incorporated in the Cayman Islands without restriction on such Dealer or the Issuer if such Dealer and the Issuer are, according to applicable Cayman Islands law, not located in the Cayman Islands (as a branch, an incorporated entity, a resident or otherwise) and do not have a place of business in and/or have not commenced the carrying on of business in the Cayman Islands.

No Securities may be sold by or on behalf of the Issuer within the Cayman Islands if such sale would require the Issuer to be registered as a foreign company under the Companies Act (As Revised) of the Cayman Islands.

Chile

The relevant Dealer, the Issuer of the Securities and the Securities will not be registered in the *Registro de Valores Extranjeros* (Foreign Securities Registry) of the *Comisión Para el Mercado Financiero* (Financial Markets Commission) and will not be subject to the supervision of the latter. If such Securities are offered in Chile, they will be offered and sold only pursuant to General Rule 336 of the Financial Markets Commission, and therefore are not subject to oversight by the latter. The commencement date of this offering is the one contained in the cover pages of this Offering Circular. Neither the relevant Dealer nor the Issuer of the Securities has an obligation to deliver public information in Chile with respect to the Securities. These Securities shall not be publicly offered in Chile unless registered in the Foreign Securities Registry.

El Distribuidor, el Emisor de los Valores y los Valores no serán registrados en el Registro de Valores Extranjeros de la Comisión Para el Mercado Financiero y no están sujetos a la fiscalización de ésta. Si dichos Valores son ofrecidos dentro de Chile, serán ofrecidos y colocados sólo de acuerdo a la Norma de Carácter General 336 de la Comisión Para El Mercado Financiero. La fecha de inicio de la presente oferta es la indicada en la portada del presente Offering Circular. Ni el Emisor de los Valores ni el Distribuidor están obligados a entregar información pública en Chile respecto de los Valores. Los Valores no podrán ser objeto de oferta pública mientras no sean inscritos en el Registro de Valores Extranjeros de la Comisión Para El Mercado Financiero.

Colombia

Each Dealer has represented and agreed that the Securities have not and will not be marketed, offered, sold or distributed in Colombia or to Colombian residents except in circumstances which do not constitute a public offer of securities in Colombia within the meaning of article 6.1.1.1.1 of Decree 2555 of 2010 as amended from time to time. The offer of the Securities is addressed to fewer than one hundred specifically identified investors. The material in this Offering Circular is for the sole and exclusive use of the addressee as a determined individual/entity and cannot be understood as addressed for the use of any third party, including any of such party's shareholders, administrators or employees, or by any other third party resident in Colombia. The information contained in this Offering Circular is provided for illustrative purposes only and no representation or warranty is made as to the accuracy or completeness of the information contained herein. Accordingly, the Securities will not be publicly offered, marketed or negotiated in Colombia through promotional or advertisement activities (as defined under Colombian law) except in compliance with the requirements of the Colombian Financial and Securities Market Regulation (Decree 2555 of 2010, Law 964 of 2005 and Organic Statute of the Financial System) as amended and restated, and decrees and regulations made thereunder. Each Dealer has acknowledged that the Securities listed in the Offering Circular have not been registered in the National Registry of Securities and Issuers (*Registro Nacional de Valores y Emisores*) of the Colombian Financial Superintendence (*Superintendencia Financiera de Colombia*) and will not be listed in the Colombian Stock Exchange *(Bolsa de Valores de Colombia*) or with any Colombian securities exchange or trading system, and therefore it is not intended for any public offer of the Securities in Colombia.

Investors acknowledge the Colombian laws and regulations (specifically foreign exchange and tax regulations) applicable to any transaction or investment consummated in connection with this Offering Circular and represent that they are the sole liable party for full compliance with any such laws and regulations.

The investors represent that the investment in the securities is a permitted investment for them under their corporate bylaws and/or particular investment regime that may be applicable. Additionally, Colombian investors acknowledge that the delivery of this Offering Circular and any other documents related hereto does not constitute investment advisory services, thus, Colombian investors are solely liable for conducting an investment suitability analysis as per their applicable investment regime.

Costa Rica

The Securities may not be offered or sold, directly or indirectly, to any person within the Republic of Costa Rica, in circumstances that require the issuer or offeror and the Securities to be authorised by the *Superintendencia General de Valores* (public offering) or the *Superintendencia General de Entidades Financieras* (general financial intermediation). Any offering, express or implicit, that seeks to issue, negotiate or sell securities among public investors, is deemed under Costa Rican law (*Ley Reguladora del Mercado de Valores, N° 7732, and its Regulations*) as a public offering, which requires the issuer or offeror and the securities to be authorised by the *Superintendencia General de Valores*. A public offering is presumed when made through public or collective means of communication (mass media), such as press, radio, television and internet, or when the offering includes standardised securities.

Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that (i) such Dealer is appropriately registered with the *Superintendencia General de Valores* or the *Superintendencia General de Entidades Financieras*, (ii) it has not offered or sold and will not offer or sell, directly or indirectly, any Securities to the public in Costa Rica and (iii) that sales of the Securities in Costa Rica shall only be placed or negotiated on an individual basis with private investors. Each Dealer will evidence in writing, for each offering, compliance with the above requirements by means of an affidavit, a party declaration or any form of express acknowledgement. Each Dealer has acknowledged that it is registered as a financial intermediary with the *Superintendencia General de Valores* or the *Superintendencia General de Entidades Financieras* (as the case may be), and that this Offering Circular has not been filed with the Superintendencia General de Valores and, therefore, it is not intended for any public offering of the Securities in Costa Rica within the meaning of Costa Rican law.

Czech Republic

For selling restrictions in respect of the Czech Republic, please see "*European Economic Area*" below.

Denmark

For selling restrictions in respect of Denmark, please see "*European Economic Area*" below.

Ecuador

The Securities may not be marketed, offered, advertised, promoted or brokered in Ecuador, because the Programme has not been approved by Ecuador's Superintendency of Companies, Securities and Insurance for which purpose the Securities would have to be registered with the National Stock Registry after submitting a large amount of information concerning the Issuer and the Programme.

However, Securities issued under the Programme may be sold from abroad, provided that a person residing in Ecuador is contacted from abroad and the offer is made and the product is negotiated from abroad either by telephone, e-mail, a Web page, or any other form of communication. Ecuadorian laws apply to offers, promotions and transactions carried out in Ecuador, not to those carried out from abroad, including where the purchaser is a person residing in Ecuador. Ecuador's residents have the right to contact a broker abroad to purchase securities issued and traded abroad. In addition, nothing prevents an overseas issuer or broker from contacting from abroad an Ecuadorian resident to offer securities or investment funds, provide informative material, applications, contracts, etc.

If the Securities issued abroad are not registered and publicly offered in Ecuador, they cannot be traded in Ecuador, but they may be traded from abroad if there is no involvement of the Issuer or broker in Ecuador.

Furthermore, pursuant to the General Regulations to the Stock Market Law, as concerns brokerage houses, any Ecuadorian national may ask an Ecuadorian brokerage house to act as a broker in the purchase of an asset (securities) abroad. The local house may contact the overseas house to purchase securities issued abroad and listed in an overseas stock exchange on behalf of the Ecuadorian national.

This implies several things:

(a) The initiative comes from the Ecuadorian client, not from the local or overseas broker.

(b) The local broker must act as an intermediary (records of operations).

(c) The overseas broker must be listed in an overseas stock exchange.

(d) Securities listed on an overseas stock exchange may be traded in this manner only.

El Salvador

The Securities may not be offered to the general public in El Salvador, and according to Article 2 of the *Ley de Mercado de Valores* (Securities Market Law) of the Republic of El Salvador, Legislative Decree number 809 dated 16 February 1994, published on the Diario Oficial (Official Gazette) number 73-BIS, Number 323, dated 21 April 1994 (as amended), and in compliance with the aforementioned regulation, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not make an invitation for subscription or purchase of the Securities to indeterminate individuals habitually, nor will it make known this Offering Circular in the territory of El Salvador through any mass media communication such as television, radio, press, or any similar medium, other than publications of an international nature that are received in El Salvador, such as internet access or foreign cable advertisements, which are not directed to the Salvadoran public. The offering of the Securities has not been registered with an authorised stock exchange in the Republic of El Salvador. Any negotiation for the purchase or sale of Securities in the Republic of El Salvador shall only be negotiated on an individual basis with determinate individuals or entities in strict compliance with the aforementioned Article 2 of the Salvadoran Securities Market Law, Money Laundry Law and shall in any event be effected in accordance with all securities, tax and exchange control regulations of the Dominican Republic, Central America, and United States Free Trade Agreements, and other applicable laws or regulations of the Republic of El Salvador.

European Economic Area

In relation to each Member State of the European Economic Area, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Securities which are the subject of the offering

contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to the public in that Member State except that it may make an offer of such Securities to the public in that Member State:

(a) to any legal entity which is a qualified investor as defined in the EU Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the EU Prospectus Regulation), subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(c) in any other circumstances falling within Articles 1(3), 1(4) and/or 3(2)(b) of the EU Prospectus Regulation (as may be locally implemented),

provided that no offer of Securities shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the EU Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the EU Prospectus Regulation.

For the purposes of this provision, the expression an **"offer of Securities to the public**"in relation to any Securities in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Securities to be offered so as to enable an investor to decide to purchase or subscribe the Securities, and the expression "**EU Prospectus Regulation**" means Regulation (EU) 2017/1129, and includes any relevant implementing measure in the Member State.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that any commission, fee or non-monetary benefit received from the relevant Issuer complies with the applicable rules set out in the Markets in Financial Instrument Directive (Directive 2014/65/EU, as amended, "**MiFID II**").

Prohibition of Sales to EEA Retail Investors

Unless the Pricing Supplement in respect of any Securities specifies the "Prohibition of Sales to EEA Retail Investors" to be "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Securities which are the subject of the offering contemplated by the Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the European Economic Area. For the purposes of this provision:

(a) the expression "retail investor" means a person who is one (or more) of the following:

  (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or

  (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

  (iii) not a qualified investor as defined in the EU Prospectus Regulation; and

(b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Securities to be offered so as to enable an investor to decide to purchase or subscribe for the Securities.

Notwithstanding the above, in the case where the Pricing Supplement in respect of any Securities does not specify the "Prohibition of Sales to EEA Retail Investors" to be not applicable but where the Dealer subsequently prepares and publishes a key information document under Regulation (EU) No 1286/2014 (as amended, the "**EU PRIIPs KID Regulation**") in respect of such Securities, then following such publication, the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the European Economic Area as described above shall no longer apply.

Finland

For selling restrictions in respect of Finland, please see "*European Economic Area*" above.

France

This Offering Circular has not been approved by the *Autorité des marchés financiers*.

Each of the Dealers and the relevant Issuer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold and will not offer or sell, directly or indirectly, Securities to the public in France, and has not distributed or caused to be distributed and will not distribute or cause to be distributed to the public in France, the Offering Circular, the relevant Pricing Supplement or any other offering material relating to the Securities, and that such offers, sales and distributions have been and will be made in France only in circumstances that do constitute an offer to the public exempted from the obligation to publish a prospectus pursuant to Article L.411-2 and L.411-2-1 of the French *Code monétaire et financier* and more particularly:

(i) to qualified investors (*investisseurs qualifiés*); as defined in, and in accordance with, Article L.411-2 1° of the French *Code monétaire et financier* and Article 2(e) of the EU Prospectus Regulation (Regulation (EU) 2017/1129), and/or

(ii) to a restricted number of investors (*cercle restreint d'investisseurs*) acting for their own account, other than qualified investors, as defined in, and in accordance with, Articles L. 411-2 1°, D. 411-4 of the French *Code monétaire et financier*; and/or

(iii) to investors who acquire Securities for a total consideration of at least EUR 100,000 (or its equivalent in another currency) per investor, for each separate offer in accordance with Article L. 411-2-1 2° of the French *Code monétaire et financier* and Article 211-2 II of the *Règlement Général* of the AMF ; and/or

(iv) Securities whose notional amount or equivalent amount is at least EUR 100,000 (or its equivalent in another currency) in accordance with Article L. 411-2-1 3° of the French *Code monétaire et financier* and Article 211-2 III of the *Règlement Général* of the AMF.

The direct or indirect resale of Securities to the public in France may be made only as provided by, and in accordance with, Articles L. 411-2 and L.411-2-1 of the French *Code monétaire et financier* and the provisions of the EU Prospectus Regulation as amended.

Germany

For selling restrictions in respect of Germany, please see "*European Economic Area*" above.

Greece

For selling restrictions in respect of Greece, please see "*European Economic Area*" above.

Guatemala

The Securities may not be offered to the general public in Guatemala, as it is required that the Issuer or offeror and the Securities to be authorised by the Securities Exchange Market Registry, and according to article 4 of the *Ley del Mercado de Valores y Mercancías* ("**Securities Exchange Market Law**"), Congress Decree 34-96 (amended by Decree 49-2008). Also, in compliance with such regulation, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not make an invitation for subscription or purchase of the Securities to indeterminate individuals, nor will it make known this Offering Circular in the territory of Guatemala through the Securities Exchange Market or any other means of mass communication or dissemination. Each Dealer has acknowledged that the public offering of the Securities has not been registered in the Securities Exchange Market Registry, and, therefore, cannot be offered to the general public in Guatemala. Any negotiation for the purchase or sale of Securities in Guatemala shall only be negotiated on an individual basis with determinate individuals or entities, in compliance with article 3 of the Securities Exchange Market Law, Congress Decree 34-96 (as amended by Decree 49-2008). Therefore, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that any negotiation for the purchase or sale of Securities in Guatemala will only be directed to:

(a) investors who are already partners or shareholders of the issuer of the securities, if the shares or interests issued are not registered in a public offering; or

(b) investors who are persons or entities considered as institutional investors, such as entities supervised and controlled by the Superintendencia de Bancos de Guatemala ("**Bank Superintendence of Guatemala**"), Instituto Guatemalteco de Seguridad Social ("**Social Security Institute**"), public or private social security entities, collective investment mechanisms, if the offering is made without the intervention of a third party and without using mass market communications media; or

(c) less than 35 specific individuals and/or companies per calendar year when the offering refers to securities that represent a creditor's right; or

(d) less than 35 specific individuals and/or companies, when the offering refers to securities that represent the partnership capital, when the Investors are not shareholders of the company.

Additionally, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not engage in financial intermediation operations within Guatemalan territory as defined by article 3 of the *Ley de Bancos y Grupos Financieros* ("**Banking and Financial Group Law**"), Congress Decree 19-2002.

Hong Kong

Each Dealer has acknowledged and agreed that the Securities have not been authorised by the Hong Kong Securities and Futures Commission. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Securities (except for any "structured product" which falls within paragraph (g) of the definition of "securities" as those terms are defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("**Securities and Futures Ordinance**")) other than (a) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Securities, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Hungary

For selling restrictions in respect of Hungary, please see "*European Economic Area*" above.

These Securities are issued via private placement.

India

Each Dealer has represented and agreed that this Offering Circular has not been and will not be deemed to be a "prospectus", as defined under the provisions of the Companies Act, 2013 (18 of 2013) and the same shall not be filed with either the Registrar of Companies in India or any other regulatory authority, and that they have not offered nor sold and will not offer nor sell any Securities, nor have they circulated or distributed nor will they circulate nor distribute the Offering Circular or any other offering document or material relating to the Securities to the Indian public. However, the Securities may be privately placed with a limited number of sophisticated private and institutional investors. The Securities are not registered and/or approved by the Securities and Exchange Board of India, the Reserve Bank of India or any other governmental/ regulatory authority in India.

Pursuant to the Foreign Exchange Management Act, 1999 and the regulations issued there under, any investor resident in India may be required to obtain prior special permission of the Reserve Bank of India before making investments outside of India, including any investment in the Securities. Any eligible investor who is resident of India will be entirely responsible for determining its eligibility to invest in the Securities.

Each Dealer has consented to the provision by the Issuer and its associates/affiliates to any Indian government, judicial or regulatory authority of any information regarding it and its dealings in the Securities as required under applicable Indian regulations and/or as requested by any Indian governmental, judicial or regulatory authority. Each Dealer has agreed to promptly provide to the Issuer, or directly to the relevant Indian governmental, judicial or regulatory authority (and confirm to the relevant Issuer when it has done so), such additional relevant information that the Issuer deems necessary or appropriate in order for the Issuer to comply with any such regulations and/or requests.

Each Dealer has agreed to promptly notify the relevant Issuer should any of the representations, warranties, agreements and undertakings given by them change or no longer hold true. Each Dealer has also represented that any sale, transfer assignment, novation or other disposal of the Securities by the Dealers, whether direct or indirect, will be subject to the acquiring entity giving substantially the same consents, representations and warranties to the Dealer as set out herein.

Indonesia

The Securities offered under this Offering Circular are not and will not be registered with the Financial Services Authority (*Otoritas Jasa Keuangan*, "**OJK**") and the Commodity Futures Trading Supervisory Agency ("**Bappebti**") or other agencies for sale in Indonesia. As such, marketing, offering and sale of these Securities (including the distribution and dissemination of this Offering Circular as well as other written materials either through advertisements or other media (including internet)) are not authorised by the OJK, Bappebti and/or such other agencies for their sale by public offering in the Indonesian territory and/or to Indonesian citizens wherever they are domiciled or to Indonesian entities or residents in the Indonesian territory in circumstances which constitute a public offering of securities under the Indonesian Law No. 8/1995 regarding Capital Market. Likewise, the Securities and the Offering Circular have not been reviewed, registered or authorised by the OJK for their distribution through banking institutions in Indonesia. Further the Securities distributed for sale under the Offering Circular are not guaranteed by the Indonesian Deposit Insurance Corporation (*Lembaga Penjamin Simpanan*, "**LPS**") in the event they are marketed and distributed to the investors through banking channels.

The Securities offered under this Offering Circular are complex financial instruments and may not be suitable for certain investors, including institutional investors. Without prejudice to the foregoing, the number of natural or legal persons resident in Indonesia offered Securities on a cross border basis shall be 100 or fewer or purchased by 50 or fewer. Investors that intend to purchase the Securities should consult with their tax and financial advisors to ensure that the Securities that the investors intend to purchase meet their individual investment objective before making such purchase.

Ireland

Each Dealer has represented, warranted and agreed that (and each further Dealer appointed under the Programme will be required to represent, warrant and agree that) it has not offered, sold, placed or underwritten and will not offer, sell, place or underwrite the Securities, or do anything in Ireland in respect of the Securities, otherwise than in conformity with the provisions of:

(a) Regulation (EU) 2017/1129 (EU Prospectus Regulation), Commission Delegated Regulation (EU) 2019/980 (PR Regulation), Commission Delegated Regulation (EU) 2019/989 (RTS Regulation) and any Central Bank of Ireland ("**Central Bank**") rules issued and / or in force pursuant to Section 1363 of the Companies Act 2014 (as amended);

(b) the Companies Act 2014 (as amended);

(c) the European Union (Markets in Financial Instruments) Regulations 2017 (as amended) and it will conduct itself in accordance with any rules or codes of conduct and any conditions or requirements, or any other enactment, imposed or approved by the Central Bank;

(d) Regulation (EU) No 596/2014 of the European Parliament and the Council of 16 April 2014 on market abuse, the European Union (Market Abuse) Regulations 2016 and any Central Bank rules issued and / or in force pursuant to section 1370 of the Companies Act 2014 (as amended);

(e) Regulation (EU) No. 1286/2014 of the European Parliament and of the Council of 26 November 2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs); and

(f) the Central Bank Acts 1942 to 2018 (as amended) and any codes of conduct rules made under Section 117(1) of the Central Bank Act 1989.

Israel

This Offering Circular (and any Pricing Supplement or securities notes) has not been approved by the Israeli Securities Authority. Accordingly, each Dealer has agreed and each further Dealer appointed under the Programme will be required to agree that it will not offer or sell any Securities directly or indirectly, in Israel or to others for re-offering or re-sale, directly or indirectly, in Israel except to investors of the type listed in the First Schedule to Israel's Securities Law 5728-1968 (the "**Securities Law**"), and that the Securities will only be distributed to Israeli residents in a manner that will not constitute "an offer to the public" under sections 15 and 15A of the Securities Law. The Securities are being offered to a limited number of investors (35 investors or fewer during any given 12 month period) and/or those categories of investors listed in section 15A(b) of and/or the First Addendum (the "**Addendum**") to the Securities Law ("**Sophisticated Investors**") namely joint investment funds or mutual trust funds (or a company managing such funds), provident funds, insurance companies, banking corporations (purchasing Securities for themselves or for clients who are Sophisticated Investors), portfolio managers (purchasing Securities for themselves or for clients who are Sophisticated Investors), investment advisors or investment marketers (purchasing Securities for themselves), members of the Tel-Aviv Stock Exchange (purchasing Securities for themselves or for clients who are Sophisticated Investors), underwriters qualified in accordance with Section 56(c) of the Securities Law (purchasing Securities for themselves), venture capital funds, an entity which is wholly owned by Sophisticated Investors, corporations, other than formed for the specific purpose of an acquisition pursuant to an offer, with a shareholder's equity in excess of NIS 50 million, and individuals investing for their own account, in respect of which at least one of the following applies: 1) the total value of their cash, deposits, financial assets (as defined in the Investment Advice Law) and securities traded on a stock exchange licensed under the Securities Law (together, "**Liquid Assets**") exceeds NIS 8,364,177; 2) their level of income over each of the preceding two years exceeds NIS 1,254,627, or the level of income of their "family unit" exceeds NIS 1,881,940; or 3) the aggregate value of all their Liquid Assets exceeds NIS 5,227,610 and their level of income over each of the preceding two years exceeds NIS 627,313, or the level of income of their "family unit" exceeds NIS 940,969; each as defined in the said Addendum, as amended from time to time, and who in each case have provided written confirmation that they qualify as Sophisticated Investors, and that they are aware of the consequences of such designation and agree thereto; in all cases under circumstances that will fall within the private placement or other exemptions of the Securities Law and any applicable guidelines, pronouncements or rulings issued from time to time by the Israeli Securities Authority.

This Offering Circular may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Any offeree who purchases a Security is purchasing such Security for its own benefit and account and not with the aim or intention of distributing or offering such Security to other parties (other than, in the case of an offeree which is a Sophisticated Investor by virtue of it being a banking corporation, portfolio manager or member of the Tel-Aviv Stock Exchange, as defined in the Addendum, where such offeree is purchasing Security for another party which is an Sophisticated Investor). Nothing in this Offering Circular should be considered investment advice or investment marketing defined in the Regulation of Investment Counselling, Investment Marketing and Portfolio Management Law, 5755 – 1995 (the "**Investment Advice Law**") that take into account the special characteristics and needs of each investor. The Issuer does not hold a licence under the Investment Advice Law, nor does it carry the insurance as required of a licensee thereunder.

Investors are encouraged to seek competent investment counselling from a locally licensed investment counsel prior to making the investment. As a prerequisite to the receipt of a copy of this Offering Circular a recipient shall be required by the Dealer to provide confirmation that it is a Sophisticated Investor purchasing Securities for its own account or, where applicable, for other Sophisticated Investors.

This Offering Circular does not constitute an offer to sell or solicitation of an offer to buy any securities other than the Securities offered hereby, nor does it constitute an offer to sell to or solicitation of an offer to buy from any person or persons in any state or other jurisdiction in which such offer or solicitation would be unlawful, or in which the person making such offer or solicitation is not qualified to do so, or to a person or persons to whom it is unlawful to make such offer or solicitation.

Republic of Italy

The offering of any Securities has not been registered pursuant to Italian securities legislation, and, accordingly, no Securities may be offered, sold or delivered, nor may copies of this Offering Circular or of any other document relating to the Securities be distributed in the Republic of Italy, except:

(a) to qualified investors (*investitori qualificati*), as defined in the EU Prospectus Regulation; or

(b) in other circumstances which are exempted from the rules on public offerings pursuant to the EU Prospectus Regulation, Article 100 of the Legislative Decree No. 58 of 24 February 1998, as amended from time to time (the "**Financial Services Act**") and Article 34-ter of CONSOB Regulation No. 11971 of 14 May 1999, as amended from time to time (the "**Regulation No. 11971**").

Any offer, sale or delivery of any Securities or distribution of copies of this Offering Circular or any other document relating to any Securities in the Republic of Italy under (a) or (b) above must:

(i) be made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with the Financial Services Act, CONSOB Regulation No. 20307 of 15 February 2018 (as amended from time to time) and Legislative Decree No. 385 of 1 September 1993, as amended from time to time (the "**Banking Act**"); and

(ii) comply with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy (including the reporting requirements, where applicable, pursuant to Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy issued on 25 August 2015, as amended on 10 August 2016, on 2 November 2020 and from time to time) and/or any other Italian authority.

Please note that in any subsequent distribution of the Securities in the Republic of Italy, the EU Prospectus Regulation and the Financial Services Act may require compliance with the law relating to public offers of securities. Furthermore, in accordance with Article 100-bis of the Financial Services Act, where no exemption from the rules on public offerings applies, Securities which are initially offered and placed in Italy or abroad to professional investors only but in the following year are "systematically" distributed on the secondary market in Italy become subject to the public offer and the prospectus requirement rules provided under the Financial Services Act and Regulation No. 11971. Failure to comply with such rules may result in the sale of such Securities being declared null and void and in the liability of the intermediary transferring the financial instruments for any damages suffered by the investors.

Jamaica

Each Dealer and the relevant Issuer has represented and warranted, and each further Dealer appointed under the Programme will be required to represent and warrant, that it is in good standing under the Securities Act (1993) (as amended, supplemented or otherwise modified from time to time) and the Securities (Licensing and Registration) Regulations and that the offer of the Securities in Jamaica has been registered by the applicable Issuer(s) as an "exempt distribution" under the Guidelines for Exempt Distributions (SR-GUID-20/12-0027) published by the Financial Services Commission of Jamaica (the "**Guidelines SR-GUID-20/12-0027**") unless such offer is not required to be registered under the aforementioned legislation. Moreover, that issuer must comply with all relevant provisions in the Companies Act where the issuer has been registered pursuant to that Act. The offer of Securities is not nor shall it be deemed to be a public offering of securities under the laws of Jamaica.

Distribution of the Securities in Jamaica shall be restricted to Holders who qualify under the Guidelines SR-GUID-20/12-0027 and further resale or trading in the Securities in Jamaica is restricted to persons who fall within any exemption under the Guidelines SR-GUID-20/12-0027 and/or the Securities Act of

Jamaica and obtain the relevant license to deal or issue as issued by the Financial Services Commission of Jamaica. Solicitation of persons in Jamaica to participate in any offer of Securities shall be construed as dealing in securities for which a license is required under the Securities Act of Jamaica.

The Financial Services Commission of Jamaica has not approved the offer of Securities nor has it passed judgment on the accuracy or adequacy of this Offering Circular and is therefore not liable for any statements or omissions contained herein.

Furthermore, any representation to the contrary is a criminal offence.

Japan

The Securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "**Financial Instruments and Exchange Act**"). Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Securities, in Japan or to, or for the benefit of, any resident of Japan or to others for re-offering or resale, directly or indirectly, in Japan or to any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan. As used in this paragraph, "**resident of Japan**" means any person resident in Japan, including any corporation or other entity organised under the laws of Japan.

Jordan

The Offering Circular has not been presented to, or approved by, the Jordanian Securities Commission. The Securities will be offered in Jordan on a cross border basis based on one-on-one contact with no more than thirty potential investors and accordingly the Securities will not be registered with the Jordanian Securities Commission and a local offering circular is not required. Moreover, the Securities will not be listed on any foreign exchange nor is it anticipated that the Securities will be listed on any foreign exchange in the future and as such any intermediary involved in this transaction is not licensed by the Jordanian Securities Commission.

Korea, Republic of

The Securities have not been registered with the Financial Services Commission of Korea for public offering in Korea. None of the Securities may be offered, sold and delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the Financial Investment Services and Capital Markets Act and the decrees and regulations thereunder (the "**Securities and Exchange Laws**") and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (the "**Foreign Exchange Transaction Laws**"). Without prejudice to the foregoing, the number of Securities offered in Korea or to a resident in Korea shall be less than 50 and for a period of one year from the issue date of the Securities, none of the Securities may be divided resulting in an increased number of Securities. Furthermore, the purchaser of the Securities shall comply with all applicable regulatory requirements (including but not limited to requirements under the Foreign Exchange Transaction Laws) in connection with the purchase of the Securities.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, any Securities in Korea or to any resident of Korea and will not offer, sell or deliver directly or indirectly or offer or sell to any person for re-offering or resale, directly or indirectly, any Securities in Korea or to any resident of Korea, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Securities and Exchange Laws, Foreign Exchange Transaction Laws and other relevant laws and regulations of Korea.

Kuwait

This Offering Circular is not for general circulation to the public in Kuwait. The Securities have not been licensed for offering in Kuwait by the Kuwait Capital Markets Authority or any other relevant Kuwaiti government agency. The offering of the Securities in Kuwait on the basis of a private placement or public

offering is, therefore, restricted in accordance with Law No. 7 of 2010 and the bylaws thereto (as amended). No private or public offering of the Securities is being made in Kuwait, and no agreement relating to the sale of the Securities will be concluded in Kuwait. No marketing or solicitation or inducement activities are being used to offer or market the Securities in Kuwait.

Lebanon

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that, in connection with any marketing, offer, sale, distribution, resale or buy-back of any of the Securities in Lebanon, it shall comply with all applicable laws and regulations in Lebanon, and in particular Law N° 161 dated 17 August 2011, governing capital markets, Capital Markets Authority Series No. 2000 regarding licensing and registration regulation published on 19 January 2017, and Banque Du Liban intermediary circular No. 437 relating to financial operations and activities in financial markets published on 15 December 2016; and Capital Markets Authority Series No. 6000 regarding offering of securities regulation published on 7 August 2017.

The persons that will be investing in the Securities have obtained all the information and the necessary financial and legal advice in this respect. The said persons or entities acknowledge that they are aware of the risks associated to their investment in the Securities and are aware that such risks, given the nature of the investment, may engender a loss in respect thereof.

Liechtenstein

For selling restrictions in respect of Liechtenstein, please see "*European Economic Area*" above.

Malaysia

The Securities may not be offered for subscription or sale, sold, transferred or otherwise disposed of, directly or indirectly, nor may any document or other material in connection therewith be distributed, in Malaysia unless such offer, sale or invitation falls within (i) Schedule 5 to the Capital Markets and Services Act 2007 ("**CMSA**"), (ii) Schedule 6 or 7 to the CMSA as an "excluded offer" or "excluded invitation" or "excluded issue" within the meaning of sections 229 and 230 of the CMSA and, additionally, where such Securities are debentures (as defined in the CMSA), (iii) Schedule 8 such that the trust deed requirements in the CMSA are not applicable. Each Dealer has represented and undertaken, and each further Dealer appointed under the Programme will be required to represent and undertake, that it has not offered for subscription or sale, sold, transferred or otherwise disposed of, and will not offer for subscription or sale, sell, transfer or otherwise dispose of any of the Securities directly or indirectly, nor has it distributed any document or other material in connection therewith, in Malaysia unless such offer, sale or invitation falls within (i) Schedule 5 to the CMSA, (ii) Schedule 6 or 7 to the CMSA as an "excluded offer" or "excluded invitation" or "excluded issue" within the meaning of sections 229 and 230 of the CMSA and, additionally, where such Securities are debentures (as defined in the CMSA) (iii), Schedule 8 such that the trust deed requirements in the CMSA are not applicable. No proposal has been submitted to the Securities Commission Malaysia for its recognition, authorisation or approval under the CMSA in respect of Securities, and no prospectus, trust deed or deed which complies with the requirements of the CMSA and the guidelines of the Securities Commission Malaysia has been or will be registered with the Securities Commission Malaysia under the CMSA.

In addition to the above, the Securities may not be offered for subscription or sale, sold, transferred or otherwise disposed of, directly or indirectly, nor may any document or other material in connection therewith be distributed, in or from within the Federal Territory of Labuan without the prior written approval of the Labuan Financial Services Authority ("**LFSA**") or otherwise in compliance with the Labuan Financial Services and Securities Act 2010 ("**LFSSA**") unless such offer, sale or invitation falls within section 8(5) of the LFSSA. Each Dealer has represented and undertaken, and each further Dealer appointed under the Programme will be required to represent and undertake, that it has not offered for subscription or sale, sold, transferred or otherwise disposed of, and will not offer for subscription or sale, sell, transfer or otherwise dispose of any of the Securities directly or indirectly, nor has it distributed any document or other material in connection therewith, in or from within the Federal Territory of Labuan except in compliance with the LFSSA. No proposal has been submitted to LFSA for its approval under the LFSSA in respect of Securities, and no prospectus which complies with the requirements of the LFSSA has been or will be registered with the LFSA under the LFSSA.

Mexico

Under the Mexican Securities Market Law, the Securities have not been, and will not be, registered with the Mexican National Securities Registry (*Registro Nacional de Valores*) maintained by the Mexican National Banking and Securities Commission (*Comisión Nacional Bancaria y de Valores*; the "**CNBV**") and may not be offered or sold publicly in the United Mexican States or be the subject of brokerage activities in the United Mexican States.

Pursuant to Article 8 of the Mexican Securities Market Law, the Securities may be offered or sold by non-Mexican broker-dealers, on a private placement basis, as an offering not requiring any approval from the CNBV, to Mexican investors that are deemed as accredited and institutional investors (*inversionistas institucionales or inversionistas calificados*).

The information contained in this Offering Circular is solely the responsibility of the Issuer and has not been reviewed or authorised by the CNBV.

Monaco

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not offer, market or sell any Securities or distribute any documents in the Principality of Monaco relating thereto, save in strict compliance with Law n° 1.338 of 7 September 2007 as amended by Law n° 1.515 of 21 December 2021 and Sovereign Ordinance n° 1.284 of 10 September 2007, as amended from time to time.

Securities shall not be marketed, offered and sold from a place of business within the Principality of Monaco (including any offering from an internet or other electronic service provider located in the Principality of Monaco) or in any manner constituting a commencement of business, unless by a company duly licensed by the *Commission de Contrôle des Activités Financières* by virtue of Law n° 1.338 of 7 September 2007, as amended by Law n° 1.515 of 21 December 2021, and authorised under Law n° 1.144 of 26 July 1991.

A Dealer not established in Monaco may, under their own liability, offer and sell Securities to a Monaco Bank or a duly authorised Monegasque intermediary acting as a professional institutional investor, subject to strict compliance with Law n° 1.338 of 7 September 2007, as amended by Law n° 1.515 of 21 December 2021.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it/he/she will comply with article 29 of Law n° 1.338 of 7 September 2007, as amended by Law n° 1.515 of 21 December 2021, providing that: "***Companies not authorised under this law are prohibited from taking any steps, whether solicited or not, to offer financial services or products, regardless of the place or means used***".

The Netherlands

For selling restrictions in respect of The Netherlands, see "*European Economic Area*" above and in addition, each Dealer under the Programme, and each further Dealer appointed under the Programme, that did and does not have the requisite Dutch regulatory capacity to make offers or sales of financial instruments in The Netherlands has represented and agreed or, in the case of further Dealers, will be required to represent and agree with the Issuers that it has not offered or sold and will not offer or sell any of the Securities of the relevant Issuer in The Netherlands, other than through one or more investment firms acting as principals and having the Dutch regulatory capacity to make such offers or sales.

Norway

For selling restrictions in respect of Norway, please see "*European Economic Area*" above.

Panama, Republic of

The Programme has not been notified to, and this Offering Circular has not been approved by, the Superintendence of Capital Markets ("**SCM**") of the Republic of Panama for its offering in Panama. Consequently, the Programme may not be advertised, the Securities may not be offered or sold and this Offering Circular, and any other information related thereto, may not be distributed, directly or indirectly,

to any person in the Republic of Panama other than institutional investors or private placement investors as are defined by the Securities Laws of the Republic of Panama, or through a corresponding brokerage firm licensed by the SCM to offer and sell securities in Panama.

It is the responsibility of any person or persons in possession of this Offering Circular and wishing to make application for Securities to inform themselves of, and to observe, all applicable laws and regulations of the Republic of Panama. Prospective applicants for Securities which have citizenship, are resident in or domiciled in Panama should inform themselves as to legal requirements applying and any applicable exchange control regulations and applicable taxes in their jurisdiction. This Offering Circular does not constitute an offer or solicitation to any person in the Republic of Panama in circumstances in which such offer or solicitation is not authorised or to any person to whom it would be unlawful to make such offer or solicitation.

The People's Republic of China

The Securities may not be offered or sold or delivered, or offered or sold or delivered to any person for reoffering or resale or redelivery, in any such case directly or indirectly (i) by means of any advertisement, invitation, document or activity which is directed at, or the contents of which are likely to be accessed or read by, the public in the People's Republic of China, excluding Hong Kong, Macau and Taiwan ("**PRC**") or (ii) to any person within the PRC other than in full compliance with the relevant laws and regulations of the PRC. Neither this Offering Circular nor any material or information contained or incorporated by reference herein relating to the Programme, which has not been and will not be submitted to or approved/verified by or registered with the China Securities Regulatory Commission or other relevant governmental authorities or industry regulatory bodies in the PRC, constitutes an offer or solicitation of an offer to subscribe, purchase or sell the Securities in the PRC or may be supplied to the public in the PRC or used in connection with any offer for the subscription, purchase or sale of the Securities other than in compliance with the aforesaid in the PRC. PRC investors are responsible for: obtaining all relevant government or industry regulatory approvals/licences, verification and/or registrations themselves and complying with all relevant PRC regulations, including, but not limited to, all relevant foreign exchange regulations and/or securities investment regulations.

Peru

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Securities have not and will not be placed, offered, sold, disposed of or distributed in Peru, except in circumstances which do not constitute a public offer of securities in Peru within the meaning of Peruvian securities laws and regulations. Accordingly, the Securities will not be the subject of a duly diffused invitation for subscription, acquisition or purchase of the Securities in Peru, pursuant to the Peruvian Securities Market Law, Supreme Decree No. 093-2002-EF, as amended and restated.

The Securities may only be offered in Peru, under private offerings, complying with the Securities Market Law and the regulations that govern the investment policy of institutional investors such as, but not restricted to, banking and other financial entities, insurance entities, private pension fund managers, open ended and close ended collective investment schemes.

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge that the Securities Market Superintendence (*Superintendencia del Mercado de Valores*, "**SMV**") does not exercise any supervision over this Offering Circular, nor the management of it, and that the information each Dealer provides to its investors and the other services it provides to them are the sole responsibility of the relevant Dealer. Therefore, this Offering Circular is not intended for any public offer of the Securities in Peru. If the Securities were to be offered under private offerings in Peru, regulations do not impose reporting obligations with SMV, to any of the Issuer or the Dealers.

The Philippines

The Securities being offered or sold have not been registered with the Securities and Exchange Commission (the "**SEC**") under Republic Act No. 8799, known as the Securities Regulation Code of the Philippines (the "**Code of the Philippines**") and are not permitted to be sold or offered for sale or distribution within the Philippines unless such Securities are otherwise exempt securities or sold pursuant to an exempt transaction.

To the extent that the Securities will be offered in the Philippines, the Securities will be offered to qualified buyers as defined in the Code of the Philippines and relevant regulations. The offer and sale of the Securities qualify as an exempt transaction pursuant to section 10.1(l) of the Code of the Philippines. A confirmation of exemption from the SEC that the offer and sale of the Securities in the Philippines qualify as an exempt transaction under the Code of the Philippines will not be obtained.

THE SECURITIES BEING OFFERED OR SOLD HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE CODE OF THE PHILIPPINES. ANY FUTURE OFFER OR SALE OF THE SECURITIES IS SUBJECT TO THE REGISTRATION REQUIREMENTS UNDER THE CODE OF THE PHILIPPINES UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Poland

For selling restrictions in respect of Poland, please see "*European Economic Area*" above and in addition:

Recipients of this Offering Circular or any related documents, including but not limited to other offering materials, should be aware that neither this Offering Circular nor any related documents have been approved by the Financial Supervision Commission in the Republic of Poland (the "**FSC**") and the FSC has not received notification from any other competent authority in the European Union concerning the approval of the Offering Circular together with a copy of the approved Offering Circular and translation of its summary section.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer or sale of Securities which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto in Poland and will not distribute this Offering Circular and any related documents, unless they publicly offer the Securities within the meaning of Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, only:

(a) at any time, to any legal entity which is a qualified investor; or

(b) to investors, each of whom acquires Securities for a total consideration of at least EUR 100,000 for each separate offer; or

(c) if the denomination of offered Securities per unit amounts to at least EUR 100,000.

Portugal

For selling restrictions in respect of Portugal, please see "*European Economic Area*" above.

Qatar (including the Qatar Financial Centre)

This Offering Circular, together with the relevant Pricing Supplement, are provided on an exclusive basis to the specifically intended recipient thereof, upon that person's request and initiative, and for the recipient's personal use only.

Nothing in this Offering Circular and the relevant Pricing Supplement constitutes, is intended to constitute, shall be treated as constituting or shall be deemed to constitute, any offer or sale of securities in the State of Qatar (including the Qatar Financial Centre) or the inward marketing of any securities or an attempt to do business, as a bank, an investment company or otherwise in the State of Qatar (including the Qatar Financial Centre) other than in compliance with the laws applicable in the State of Qatar (including the Qatar Financial Centre) governing the issue, offering and sale of securities.

This Offering Circular, the relevant Pricing Supplement and the Securities have not been approved, registered or licensed by the Qatar Central Bank, the Qatar Financial Centre's Regulatory Authority, the Qatar Financial Markets Authority or any other regulator in the State of Qatar.

This Offering Circular, the relevant Pricing Supplement and any related documents have not been reviewed or approved by the Qatar Central Bank, the Qatar Financial Centre's Regulatory Authority or the Qatar Financial Markets Authority.

Recourse against the Dealer, and those involved with it, may be limited or difficult and may have to be pursued in a jurisdiction outside of the State of Qatar (including the Qatar Financial Centre).

Any distribution of this Offering Circular and the relevant Pricing supplement by the recipient to third parties in the State of Qatar (including the Qatar Financial Centre) beyond the terms hereof is not authorised and shall be at the liability of such recipient.

Romania

For selling restrictions in respect of Romania, please see "*European Economic Area*" above and in addition:

Each Dealer has represented, warranted and agreed that (and each further Dealer appointed under the Programme will be required to represent, warrant and agree that):

(a) it has not offered, sold, placed or underwritten and will not offer, sell, place or underwrite the Securities, or do anything in Romania in respect of the Securities, otherwise than in conformity with the provisions of Law 24/2017 on issuers of financial instruments and markets operations, as amended from time to time and with the relevant secondary legislation issued by the Romanian Financial Supervisory Authority, including Regulation no. 5/2018, as amended;

(b) it has not made a request for the listing of the Securities with a regulated exchange and/or alternative trading system in Romania; and

(c) it will comply with the legislation governing government bonds and money-market instruments, including secondary legislation issued by the National Bank of Romania.

Russia

The Securities have not been authorised to be offered to the public in the Russian Federation. This Offering Circular has neither been approved nor registered by the Central Bank of the Russian Federation, and does not constitute or form part of any offer or invitation to the public in the Russian Federation to subscribe for or purchase the Securities and should not be construed as such. This Offering Circular may not be distributed to the public in the Russian Federation.

Each of the Dealers and the relevant Issuer has agreed, and each further Dealer appointed under the Programme will be required to agree, that the Securities will not be offered, transferred, sold or distributed to the public or any persons/entities within the territory of the Russian Federation unless and to the extent otherwise permitted under Russian Law.

Saudi Arabia, Kingdom of

This Offering Circular may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Rules on the Offers of Securities and Continuing Obligations issued by the Saudi Arabian Capital Market Authority. The Saudi Arabian Capital Market Authority does not make any representation as to the accuracy or completeness of this Offering Circular and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this Offering Circular. Prospective purchasers of the Securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this Offering Circular you should consult an authorised financial advisor.

If the relevant Pricing Supplement specifies that "Saudi Arabia LEPW Provisions" are applicable, prospective purchasers of the Securities offered hereby should also consider the relevant provisions in the sections entitled "*Risk Factors*", "*Annex 6 – Low Exercise Price Warrant Provisions*" and "*Purchaser Representations and Requirements and Transfer Restrictions - Saudi Arabia LEPW Investor Agreement Letter*".

Singapore

Singapore Selling Restrictions

Neither the Offering Circular nor the Pricing Supplement has been registered as a prospectus with the Monetary Authority of Singapore under the Securities and Futures Act 2001 (the "**SFA**"). The Offering Circular, the Pricing Supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Securities may not be circulated or distributed, nor may the Securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than: (i) to an institutional investor (as defined in the SFA) pursuant to Section 274 of the SFA or, as the case may be, Section 276(2)(a) of the SFA; or (ii) to an accredited investor (as defined in the SFA) pursuant to Section 275(1) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or pursuant to Section 276(2)(b) of the SFA, and in accordance with the conditions specified in Section 276 of the SFA.

Where Securities are subscribed or purchased under Section 275 of the SFA by a person which is:

(a) a corporation (which is not an accredited investor (as defined in the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 2(1) of the SFA) or securities-based derivatives contracts (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Securities pursuant to an offer made under Section 275 of the SFA except:

1. to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;

2. where no consideration is or will be given for the transfer;

3. where the transfer is by operation of law;

4. as specified in Section 276(7) of the SFA; or

5. as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act 2001 and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

Singapore Selling Restrictions for Other Investors

Notwithstanding the above, if the relevant Pricing Supplement specifies that "Singapore Selling Restrictions for Other Investors" are applicable, the Singapore Selling Restrictions above shall be deleted in their entirety and replaced as follows:

Neither the Offering Circular nor the Pricing Supplement has been registered as a prospectus with the Monetary Authority of Singapore under the Securities and Futures Act 2001 (the "**SFA**"). The Offering Circular, the Pricing Supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Securities may not be circulated or distributed, nor may the Securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in the SFA) pursuant to Section 274 of the SFA, or (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 2(1) of the SFA) or securities-based derivatives contracts (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Securities pursuant to an offer made under Section 275 of the SFA except:

1. to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or 276(4)(c)(ii) of the SFA;

2. where no consideration is or will be given for the transfer;

3. where the transfer is by operation of law;

4. as specified in Section 276(7) of the SFA; or

5. as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act 2001 and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

Slovak Republic

For selling restrictions in respect of the Slovak Republic, please see "*European Economic Area*" above.

South Africa

Each Dealer has (or will have) represented, warranted and agreed that it (i) will not offer Securities for subscription, (ii) will not solicit any offers for subscription for or sale of the Securities, and (iii) will itself not sell or offer the Securities in South Africa in contravention of the South African Companies Act, 2008, the South African Banks Act, 1990, the South African Exchange Control Regulations, 1961, promulgated pursuant to the South African Currency and Exchanges Act, 1933 and/or any other applicable laws and regulations of South Africa in force from time to time.

Prior to the issue of any Securities under the Programme, each Dealer who has (or will have) agreed to place those Securities will be required to represent and agree that it will not make an "offer to the public" (as such expression is defined in the South African Companies Act, 2008, and which expression includes any section of the public) of Securities (whether for subscription, purchase or sale) in South Africa. This Offering Circular does not, nor is it intended to, constitute a solicitation for investments from members of the public in terms of the Collective Investment Schemes Control Act, 45 of 2002 (as amended) nor a prospectus prepared and registered under the South African Companies Act, 71 of 2008.

Offers not deemed to be offers to the public

Offers for subscription for, or sale of, Securities are not deemed to be offers to the public if:

(a) made only to certain investors contemplated in section 96(1)(a) of the South African Companies Act, 2008; or

(b) the total contemplated acquisition cost of Securities, for any single addressee acting as principal, is equal to or greater than ZAR1,000,000, or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act, 2008.

Information made available in this Offering Circular should not be considered as "advice" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Spain

This Offering Circular related to the Securities described in this document has not been registered with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*) nor passported into Spain and therefore the Securities are not intended to be publicly offered or sold to investors in Spain.

The Securities contemplated in this Offering Circular may not be publicly offered or sold in Spain unless in compliance with the provisions of the EU Prospectus Regulation, Royal Legislative Decree 4/2015 of 23 October of the Securities Markets (*Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores*), as amended and restated, ("**Royal Legislative Decree 4/2015**") and Royal Decree 1310/2005 of 4 November, partially developing Law 24/1988, of 28 July on admission to trading of securities in official secondary markets, public offerings and prospectus (*Real Decreto 1310/2005, de 4 de noviembre por el que se desarrollaparcialmente la Ley 24/1988, de 28 de julio, del Mercado de Valores, en materia de admisión anegociación de valores en mercados secundarios oficiales, de ofertas públicas de venta o suscripción y del folleto exigible a tales efectos*) ("**Royal Decree 1310/2005**"), as amended and restated, and any other regulation developing them which may be in force from time to time.

Therefore, the offering of Securities shall not constitute a public offering in Spain pursuant to articles 34 and 35 of Royal Legislative Decree 4/2015. As a consequence, to the extent that the Securities are offered or sold to investors in Spain through other than a public offering of securities, investors in those Securities may not sell or offer those Securities in Spain other than in compliance with the requirements set out by the EU Prospectus Regulation, articles 34 and 35 of Royal Legislative Decree 4/2015 and article 38 of Royal Decree 1310/2005, so that any subsequent sale or offering of those Securities in Spain is not classified as a public offering of securities in Spain or otherwise in breach of the requirements set out by said articles 34 and 35 of Royal Legislative Decree 4/2015.

Sri Lanka

The Securities or an interest therein may not at any time be made the subject of an invitation or offer to the public or any section of the public in the Republic of Sri Lanka and any document or material relating to the Securities may not be circulated or distributed to the public or any section of the public in the Republic of Sri Lanka. Investors intending to purchase or otherwise acquire the Securities or any interest in the Securities must consult with their legal, tax and financial advisers and obtain all necessary approvals before subscribing for or purchasing or acquiring any of the Securities.

Sweden

For selling restrictions in respect of Sweden, please see "*European Economic Area*" above.

Switzerland

If the relevant Pricing Supplement in respect of any Securities specifies "Swiss Non-Exempt Public Offer" as "No":

(a) the Securities may not be publicly offered, directly or indirectly, to private clients in Switzerland within the meaning of the FinSA and no application has or will be made to admit the Securities to trading on SIX Swiss Exchange or any other trading venue in Switzerland, and neither this document nor the Offering Circular and Pricing Supplement nor any documents related to the Securities shall constitute a prospectus pursuant to the FinSA, and neither this document nor any other offering or marketing material relating to the Securities may be publicly distributed or otherwise made publicly available in Switzerland; and

(b) such Securities may only be offered in Switzerland pursuant to and in accordance with an exemption from the prospectus requirement listed in article 36 para. 1 FinSA or where such offer does not qualify as a public offer in Switzerland.

Taiwan

The Securities may be made available (i) outside Taiwan to Taiwan resident investors for purchase by such investors outside Taiwan; (ii) to the offshore banking units of Taiwan banks (including Taiwan

branches of foreign banks), offshore securities units of Taiwan securities houses (including Taiwan branches of foreign securities houses) and offshore insurance units of Taiwan insurance companies (including Taiwan branches of foreign insurance companies) purchasing the Securities in trust for, as agents of, or otherwise on behalf of their non-Taiwan clients or for purposes of on-sale to qualified Taiwan investors; or (iii) to qualified investors via a Taiwan-licensed intermediary, but may not otherwise be offered or sold in Taiwan. Any subscriptions of Securities shall only become effective upon acceptance by the Issuer or the relevant Dealer outside Taiwan and shall be deemed a contract entered into in the jurisdiction of incorporation of the Issuer or relevant Dealer, as the case may be, unless otherwise specified in the subscription documents relating to the Securities signed by the investors.

Thailand

No offers, sales, re-sales or deliveries of the Securities or distribution of any offering material relating to the Securities, directly or indirectly, may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations in Thailand and which will not impose any obligation on the Issuer, the Dealer or the Arranger (as the case may be).

The information herein is provided to investors solely at their request and is not intended to be an offer, sale, advice or invitation for subscription or purchase of the Securities in Thailand or to initiate contact in relation to the purchase of the Securities in any way. Any investor in the Securities has directly approached the Issuer, the relevant Dealer or the Arranger (as the case may be) in relation to the purchase of the Securities and the Issuer, the Dealer or the Arranger (as the case may be) has not offered any advice or initiated any contact in relation to the purchase of the Securities in any way.

No invitation will be made to the public in Thailand to subscribe for the Securities. The Securities may not be offered or sold, directly or indirectly, within Thailand to any person. This document has not been registered as a prospectus with the Office of the Securities and Exchange Commission of Thailand. Accordingly, this document and any other documents and material in connection with the arrangement of procuring or offering the Securities that are provided to the investor by request of the investor may not be circulated or distributed, nor may the Securities be offered or sold in Thailand, or be made the subject of an invitation for subscription or purchase in Thailand, whether directly or indirectly, to the public or any members of the public.

Trinidad and Tobago, Republic of

The Securities inclusive of the Notes and the Issuers have not been registered under the Securities Act 2012 Chap. 83:02 (the "**Act**"). None of the Issuers is a reporting issuer under the Act. The Securities shall not be offered, sold or distributed in the Republic of Trinidad and Tobago unless any offer to sell, sale, invitation or distribution is in accordance with the provisions of the Act.

In Trinidad and Tobago, no security shall be distributed or listed with any securities exchange unless the said security is registered with the Trinidad and Tobago Securities and Exchange Commission (the "**Commission**"). Distribution includes, inter alia, a trade in securities of an issuer that have not previously been issued and/or a trade in previously issued securities of an issuer that have been redeemed, repurchased or otherwise re-acquired by the issuer. Any person who is not a reporting issuer under the Act and who proposes to make a distribution must be registered as a reporting issuer. This requirement for registration as a reporting issuer under the Act would, however, not apply to an issuer who is a government entity, international agency, or such other person as may be prescribed. The Act contains provisions to allow an issuer an exemption from registration of its security in respect of distribution of such security and/or registration as a reporting issuer where the distribution is a (i) Limited Offering (as defined below) and the issuer notifies the Commission in writing of the proposed commencement date of the distribution within ten days of the first distribution of securities and files a post distribution statement in accordance with section 84 of the Act, or (ii) a Limited Offering made to a person who is a senior officer or partner of the issuer, is directly involved in the business of the issuer, is an associate of the issuer within the meaning of paragraphs (a), (b) and (c) of the definition of "associate", is a relative of the senior officer or partner of the issuer, is a shareholder of the issuer or meets such conditions as may be prescribed.

Notwithstanding the aforementioned exemptions that may be available in the case of a Limited Offering, the Act contains provisions that the Commission may determine that it is in the public interest that the registration requirements for securities be met.

A person cannot trade in a security required to be registered under the Act, unless a prospectus has been filed with the Commission with the prescribed fee and a receipt issued by the Commission. "Trade" is defined for the purposes of the Act to include any (i) sale or purchase of a security, (ii) any participation as a registrant or agent in any transaction in a security or (iii) any act, advertisement, solicitation, conduct or negotiation directly or indirectly in furtherance of any activity referred to in (i) or (ii). No person shall trade in asset–backed securities where such trade would be a distribution unless such securities have received an approved rating. The requirement of filing a prospectus does not apply to certain distributions as set out in section 79 of the Act. The Act also states that an approved foreign issuer may be exempt from the requirement of filing prospectus.

Subject to the provisions of the Act, no person shall carry on business or hold himself out as or engage in any act, action, course or conduct in connection with or incidental to the business activities of a broker dealer, investment adviser or underwriter unless the person is registered or deemed to be registered in accordance with the Act.

Definitions:

"**Limited Offering**" means a distribution by a government entity or Private Issuer where (i) following the completion of such distribution, the number of security holders of the issue is thirty-five or less persons not including senior officers and employees or former senior officers and employees of the issuer and its affiliates, (ii) the constituent documents of the distribution contain provisions restricting the aggregate number of security holders of the issue to thirty-five persons or less not including senior officers and employees or former senior officers and employees of the issuer and its affiliates, (iii) no selling or promotional expenses are paid or incurred in connection with the distribution except for professional services or services provided by a registrant under section 51(1), (2) or (5) of the Act and (iv) no general solicitation or advertising to market the securities is used.

"**Private Issuer**" means an issuer (i) that is not a reporting issuer, (ii) whose securities, other than non-voting debt securities are subject to restriction on transfer; and are beneficially owned by no more than thirty-five persons, not including employees and former employees of the issuer, (iii) that does not distribute securities in the securities market on a frequent basis and (iv) meets such other requirements as may be prescribed.

The Republic of Turkey

Pursuant to Article 15(d)(ii) of the Decree No. 32 Regarding the Protection of the Value of Turkish Currency, Turkish residents may freely (i) purchase and sell securities and other capital market instruments which are traded at the financial markets outside the Republic of Turkey ("**Turkey**"), with the intermediation of banks or brokerage companies licensed in Turkey; and (ii) transfer the amount of the purchase price of the securities and any other capital market instruments, abroad through banks in Turkey. However, the provisions of Capital Market Law (Law No. 6362) and the Communiqué No. VII/128.4 provide that no offer, by any means, of any Security outside Turkey to Turkish residents can be made without the prior approval of the Capital Markets Board (the "**CMB**").

The offering of the Securities is not approved by the CMB under the provisions of the Capital Market Law (Law No. 6362) and the Communiqué Serial No VII/128.4 issued thereunder by the CMB. Accordingly, the Securities cannot be marketed, offered, solicited and consequently sold to Turkish residents without obtaining the necessary approval of the CMB.

No information in this Offering Circular, any Pricing Supplement, any securities note or any document thereunder is provided for the purpose of offering, marketing, soliciting and sale by any means of Securities in Turkey. Therefore, this Offering Circular, any Pricing Supplement, any securities note or any document thereunder may not be considered as an offer made or to be made to residents of Turkey.

Therefore, it is agreed and understood by the Holder that it cannot offer and/or market the Securities in Turkey without obtaining the necessary approval from the CMB. However, pursuant to Article 15(d) (ii) of the Decree No. 32 residents of Turkey may freely approach (the first approach must always come from the Turkish resident for the sale and purchase of the Securities) the Holder to purchase the Securities and may freely purchase and sell the Securities outside Turkey with the intermediation of banks or brokerage companies licensed in Turkey (authorised pursuant to the CMB regulations) provided that no offer,

solicitation or marketing is made by the Holder to such Turkish resident for the purpose of sale and purchase of the Securities.

United Arab Emirates

United Arab Emirates (excluding the Dubai International Financial Centre and the Abu Dhabi Global Market) residents only

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to acknowledge and agree that:

(a) the Securities to be issued under the Programme have not been and will not be offered, sold or publicly promoted or advertised by it in the United Arab Emirates ("**UAE**") (including the Dubai International Financial Centre and the Abu Dhabi Global Market) other than in compliance with any laws applicable in the UAE governing the issue, offering and sale of securities;

(b) the information contained in this Offering Circular does not constitute a public offer of securities in the UAE in accordance with the Commercial Companies Law (Federal Law No. 2 of 2015, as amended), Emirates Securities and Commodities Authority (the "**SCA**") Chairman Decision No. 13/R.M of 2021 on the Rulebook of Financial Activities and Mechanisms for Adjusting Positions (the "**Rulebook**"), or otherwise and is not intended to be a public offer and the information contained in this Offering Circular is not intended to lead to the conclusion of any contract of whatsoever nature within the territory of the UAE;

(c) the Securities to be issued under the Programme and this Offering Circular have not been and will not be filed, reviewed or approved by the United Arab Emirates Central Bank, the SCA, the Dubai Financial Services Authority, the Financial Services Regulatory Authority or any other relevant licensing authorities or governmental agencies in the UAE; and

(d) the Securities will only be promoted and marketed on a cross-border basis in to the territory of the UAE to a limited number of "Professional Investors" (as set out in Part 3, Chapter 1, Article 5 of the SCA Rulebook): (A) Professional Investors by nature; (B) Professional Investors by experience; (C) Professional Investors by evaluation; (D) an undertaker/a person handling undertakings; or (E) an undertaker.

(e) The information in this Offering Circular may also be provided to investors in the UAE (and addressed solely to such investor) who (a) are willing and able to conduct an independent investigation of the risks involved in the investment in the Securities and (b) at their unsolicited and specific request. Such an investor may directly approach the Issuer, the relevant Dealer or the Arranger (as the case may be) in relation to the purchase of the Securities.

Dubai International Financial Centre

This information does not constitute or form part of any offer to issue or sell, or any solicitation of any offer to subscribe for or purchase, any securities or investment products in the UAE (including the Dubai International Financial Centre and the Abu Dhabi Global Market) and accordingly should not be construed as such.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Securities to be issued under the Programme to any person in the Dubai International Financial Centre unless such offer is an "Exempt Offer" in accordance with the Markets Rules of the Dubai Financial Services Authority (the "**DFSA**"). Furthermore, this information is being made available on the basis that the recipient acknowledges and understands that the entities and securities to which it may relate have not been approved, licensed by or registered with the UAE Central Bank, the UAE Securities and Commodities Authority, the Dubai Financial Services Authority, the Financial Services Regulatory Authority or any other relevant licensing authority or governmental agency in the UAE.

This Offering Circular relates to Securities which are not subject to any form of regulation or approval by the DFSA. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this Offering Circular or any associated documents nor taken steps to verify the information set out in it, and has no responsibility for it.

The Securities to which this Offering Circular relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of any Securities offered should conduct their own due diligence on the Securities.

If you do not understand the contents of this Offering Circular you should consult an authorised financial adviser.

United Kingdom

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Securities which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to the public in the United Kingdom except that it may make an offer of such Securities to the public in the United Kingdom:

(a) to any legal entity which is a qualified investor as defined in the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the UK Prospectus Regulation), subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(c) in any other circumstances falling within section 86 of the Financial Services and Markets Act 2000 (as amended, the "**FSMA**"),

provided that no offer of Securities shall require the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression "**an offer of Securities to the public**" in relation to any Securities in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and the Securities to be offered so as to enable an investor to decide to purchase or subscribe the Securities.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that any commission, fee or non-monetary benefit received from the relevant Issuer complies with the applicable rules set out in the Markets in Financial Instrument Directive (Directive 2014/65/EU, as amended, "**MiFID II**") as implemented under UK law, such implementing legislation being preserved under UK law by virtue of the European Union (Withdrawal) Act 2018 (as amended, the "**EUWA**").

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) Securities with maturities of less than one year: in relation to any Securities (other than Securities issued by JPMorgan Chase Bank, N.A.) where the issue of the Securities would otherwise constitute a contravention of section 19 of the FSMA by the Issuer:

  (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and

  (ii) it has not offered or sold and will not offer or sell any Securities other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses;

(b) *Financial promotion*: it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Securities in circumstances in which section 21(1) of the FSMA does not apply to JPMCFC, JPMSP or JPMorgan Chase & Co. (as Issuer or as Guarantor in respect of Securities issued by JPMCFC), and would not, if it was not an authorised person, apply to

JPMorgan Chase Bank, N.A. (as Issuer or as Guarantor in respect of Securities issued by JPMSP);

(c) *General compliance*: it has complied and will comply with all applicable provisions of the FSMA and the Financial Conduct Authority Handbook with respect to anything done by it in relation to any Securities in, from or otherwise involving the United Kingdom; and

(d) *Commissions and fees*:

(i) if it is distributing Securities that are "retail investment products" (as such term is defined in the Financial Conduct Authority Handbook) into the United Kingdom and it is entitled to receive any commission or fee from the Issuer, it will not transfer any part of that commission or fee to any third party who may advise retail investors to purchase a Security that is a retail investment product; and

(ii) if it is authorised and regulated by the Financial Conduct Authority to provide investment advice to retail investors in the United Kingdom and it is providing advice to retail investors in respect of a Security that is a retail investment product, it undertakes not to request any commission or fee from the Issuer and to otherwise reject any such payment offered to it other than in circumstances where the Issuer has agreed to facilitate the payment of an advisory fee and has the express consent of the retail investor to do so.

Prohibition of Sales to UK Retail Investors

Unless the Pricing Supplement in respect of any Securities specifies the "Prohibition of Sales to UK Retail Investors" to be "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Securities which are the subject of the offering contemplated by the Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the United Kingdom. For the purposes of this provision:

(a) the expression "retail investor" means a person who is one (or more) of the following:

(i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of UK domestic law by virtue of the EUWA; or

(ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the EUWA; or

(iii) not a qualified investor as defined in the UK Prospectus Regulation; and

(b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Securities to be offered so as to enable an investor to decide to purchase or subscribe for the Securities.

Notwithstanding the above, in the case where the Pricing Supplement in respect of any Securities does not specify the "Prohibition of Sales to UK Retail Investors" to be not applicable but where the Dealer subsequently prepares and publishes a key information document under Regulation (EU) No 1286/2014 as it forms part of UK domestic law by virtue of the EUWA (as amended, the "**UK PRIIPs KID Regulation**") in respect of such Securities, then following such publication, the prohibition on the offering, sale or otherwise making available the Securities to a retail investor in the United Kingdom as described above shall no longer apply.

United States

General

The Securities, the Guarantees and, in certain instances, the securities to be delivered upon redemption or exercise of the Securities, if any, have not been and will not be registered under the Securities Act, or

the laws of any state or other jurisdiction of the United States. Trading in the Securities and the Guarantees has not been approved by the CFTC under the U.S. Commodity Exchange Act, as amended, any U.S. federal or state banking authority or any other U.S. or foreign regulatory authority.

The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee have not been registered under the rules of the OCC. The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee may also be offered or sold in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 3(a)(2) thereof and will be offered and sold pursuant to an exemption from the registration requirements of the OCC (including, in the case of offers or sales outside the United States, in compliance with Regulation S as such regulation is incorporated into the regulations of the OCC pursuant to 12 C.F.R. Section 16.5(g)).

Neither the SEC nor any state securities commission has approved or disapproved of the Securities and the Guarantees or determined that this Offering Circular is accurate or complete. Any representation to the contrary is a criminal offence. The OCC has not approved or disapproved of the Securities issued by JPMorgan Chase Bank, N.A. or the JPMorgan Chase Bank, N.A. Guarantee or determined that this Offering Circular is accurate or complete.

JPMCFC has not registered, and does not intend to register, as an investment company under the Investment Company Act.

JPMSP has not registered, and does not intend to register, as an investment company under the Investment Company Act.

Accordingly, the Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time nor offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, any U.S. Person, provided however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer. In this Offering Circular, the term "U.S. Person" means (unless otherwise specified herein with regard to Regulation S/Rule 144A Securities) any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S or a "United States person" as defined in section 7701(a)(30) of the Code and Treasury regulations thereunder (as may be amended from time to time), as the context requires.

Hedging transactions involving "equity securities" of "domestic issuers" (as each such term is defined in the Securities Act and regulations thereunder) may only be conducted in compliance with the Securities Act.

The Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) are being offered and sold outside of the United States in reliance on the registration exemption contained in Regulation S and, with respect to CREST CDI Securities, also provided that the persons to whom are offered and sold have entered into, and remain in compliance with, an Investor Letter of Representations. Accordingly, the Dealers have represented and agreed in the Programme Agreement, and any other Dealer who is appointed by the relevant Issuer in connection with an issue of a Series of Securities which are not Rule 144A Securities, Rule 144A New York Law Notes or Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A, will represent and agree, that it, its affiliates, and any person acting on its or their behalf has not offered or sold and will not offer or sell such Securities at any time, directly or indirectly within the United States or to, or for the account or benefit of, any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer.

In respect of Regulation S/Rule 144A Securities, the Dealers have represented and agreed in the Programme Agreement, and any other Dealer who is appointed by the relevant Issuer in connection with an issue of a Series of such Securities, will represent and agree, that it, its affiliates, and any person acting on its or their behalf has not offered or sold and will not offer or sell such Securities at any time, (a) directly or indirectly within the United States or to, or for the account or benefit of, any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer, except in accordance with the restrictions specified in the section entitled "*Purchaser representations and requirements and transfer restrictions*" or (b) except to non-U.S. Persons in "offshore transactions" in accordance with Regulation S under the Securities Act and that neither it, its affiliates nor any persons acting on its or

their behalf have engaged or will engage in any directed selling efforts with respect to such Regulation S/Rule 144A Securities, and it and they have complied and will comply with the offering restrictions requirement of Regulation S with respect to Securities other than CREST CDI Securities.

The Dealers further have represented and agreed in the Programme Agreement, and any other Dealer who is appointed by the relevant Issuer in connection with an issue of a Series of Securities which are not Rule 144A Securities, Rule 144A New York Law Notes or Regulation S/Rule 144A Securities offered or sold in accordance with Rule 144A will represent and agree that it, its affiliates, and any person acting on its or their behalf has not offered or sold and will not offer or sell such Securities at any time except in accordance with Regulation S under the Securities Act, and that neither it, its affiliates nor any persons acting on its or their behalf have engaged or will engage in any directed selling efforts with respect to such Securities, and it and they have complied and will comply with the offering restrictions requirement of Regulation S. The terms used in this paragraph and the preceding paragraphs (other than the term "U.S. Person" as defined above) have the meanings given to them under Regulation S.

The Dealers have also agreed in the Programme Agreement, and any other Dealer who is appointed by the relevant Issuer in connection with an issue of a Series of Securities will agree, that, at or prior to confirmation of a sale of such Securities, it, its affiliates, and any person acting on its or their behalf will have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration that purchases such Securities and, in relation to Securities issued by JPMCFC or JPMSP, the relevant Guarantee from it (whether upon original issuance or in any secondary transaction) a written confirmation or notice stating that the purchaser is subject to the same restrictions on offers and sales and setting forth the restrictions on offers and sales of such Securities within the United States or to, or for the account or benefit of, any U.S. Person.

In addition, with respect to Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities offered or sold in accordance with Rule 144A, until 40 days after the commencement of the offering of the Securities and any Guarantee, an offer or sale of the Securities or the relevant Guarantee within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A or pursuant to another applicable exemption from the registration requirements of the Securities Act.

Each holder and legal and beneficial owner will be deemed on purchase to agree that the relevant Issuer, the relevant Guarantor (in relation to Securities issued by JPMCFC or JPMSP), the Relevant Programme Agent, the Registrar, the Arranger, the Dealers and their affiliates, and others will rely upon the truth and accuracy of the acknowledgements, representations and agreements made by such holder and legal and beneficial owner (as applicable) in this Offering Circular.

Securities other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A

The Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) may not be legally or beneficially owned by any U.S. Person at any time, provided however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer.

Other than as provided in the paragraph below with respect to each holder of CREST CDI Securities, each holder and each legal and beneficial owner of Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold in accordance with Rule 144A) that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer, as a condition to purchasing such Security or any legal or beneficial interest therein, will be deemed to represent on purchase, among other things, that (A) neither it nor any person for whose account or benefit the Securities are being purchased (i) is located in the United States, (ii) is a U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer or (iii) was solicited to purchase the Securities while present in the United States and (B) it shall not offer, sell, transfer, pledge, assign, deliver, exercise or redeem any of such Securities or any interest therein at any time, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer.

Each holder of CREST CDI Securities, as a condition to purchasing such CREST CDI Securities, will be required to enter into, and remain in compliance with, an Investor Letter of Representations in which it represents, among other things, that (A) neither it nor any person for whose account or benefit the CREST CDI Securities are being purchased (i) is located in the United States, (ii) is a U.S. Person or (iii) was solicited to purchase the CREST CDI Securities while present in the United States and (B) it shall not offer, sell, transfer, pledge, assign, deliver, exercise or redeem any of such CREST CDI Securities or any interest therein at any time, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. Person.

Rule 144A Securities and Rule 144A New York Law Notes

Each holder and each legal and beneficial owner of Rule 144A Securities and Rule 144A New York Law Notes, as a condition to purchasing such Securities or any legal or beneficial interest therein, will (1) in the case of Notes in definitive form or in the case of Certificates or Warrants (in any form), enter into and remain in compliance with an Investor Letter of Representations in which it will represent that, or (2) in the case of Notes in global form, be deemed to represent on purchase that, (A) it is a QIB and also an Eligible Investor (each as defined in "*Purchaser representations and requirements and transfer restrictions*" below) at the time of the acquisition and is otherwise in compliance with Rule 144A and (B) it shall not offer, sell, transfer, pledge, assign, deliver, exercise or redeem such Securities or any interest therein at any time, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. Person that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer unless such person is a QIB and also an Eligible Investor at the time of the acquisition and is otherwise in compliance with Rule 144A. See "*Purchaser representations and requirements and transfer restrictions*" below.

Regulation S/Rule 144A Securities

Each holder and each legal and beneficial owner of Regulation S/Rule 144A Securities, as a condition to purchasing such Securities or any legal or beneficial interest therein, will be obliged to enter into and remain in compliance with an Investor Letter of Representations in which it will represent on purchase that, unless such person is a QIB and also an Eligible Investor (each as defined in "*Purchaser representations and requirements and transfer restrictions*" below) at the time of the acquisition and is otherwise in compliance with Rule 144A, (A) neither it nor any person for whose account or benefit such Securities are being purchased (i) is located in the United States, (ii) is a U.S. person (as such terms is defined in Rule 902(k) of Regulation S) that is not an affiliate (as defined in Rule 405 under the Securities Act) of the issuer or (iii) was solicited to purchase such Securities while present in the United States, (B) it is a "qualified investor", as defined in the EU Prospectus Regulation or UK Prospectus Regulation (as applicable), or any other purchaser that is approved by the Dealer from time to time and (C) it shall not offer, sell, transfer, pledge, assign, deliver, exercise or redeem otherwise transfer any of such Securities or any interest therein at any time, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. person (as such term is defined in Rule 902(k) of Regulation S) that is not an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer unless such person is a QIB and also an Eligible Investor at the time of the acquisition and otherwise in compliance with Rule 144A. See "*Purchaser representations and requirements and transfer restrictions*" below.

All Warrants

With respect to all Warrants, each holder and each legal and beneficial owner of a Warrant will be deemed to agree on purchase that such person shall not engage in hedging transactions with regard to the Warrants unless in compliance with the Securities Act.

All Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities) upon exercise or redemption of which equity securities may be deliverable

Upon purchase of all Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities) upon exercise or redemption of which equity securities may be deliverable, each holder and each legal and beneficial owner of such Securities is deemed to have represented and agreed that:

(a) it will not exercise or redeem the Securities, and it understands and acknowledges that the securities to be delivered upon exercise or redemption may not be delivered, within the United States or to, or the account or benefit of, a U.S. Person;

(b) it will only engage in hedging transactions with respect to the Securities and the securities to be delivered upon exercise or redemption of the Securities in compliance with the Securities Act and the Commodity Exchange Act; and

(c) it understands and acknowledges that the Securities will bear a legend setting out the applicable selling restrictions under the Securities Act and the representations it is deemed to have made as a condition to purchasing such Security or any legal or beneficial interest therein.

ERISA Restrictions

Each Security must comply with the legends and restrictions described in "*Purchaser representations and requirements and transfer restrictions – ERISA Legends and ERISA Restrictions*" below.

Purchaser representations and requirements and transfer restrictions

Each Rule 144A Security, Rule 144A New York Law Note and Regulation S/Rule 144A Security is subject to the purchaser representations and requirements and transfer restrictions set forth in the section entitled "*Purchaser representations and requirements and transfer restrictions*".

Uruguay

Neither the Issuer nor the Securities have been registered with the "Superintendence of Financial Services" of the Central Bank of Uruguay (the "**CBU**") and the Securities were not and will not be traded on any Uruguayan stock exchange. The sale of the Securities qualifies as a private placement pursuant to section 2 of Uruguayan Securities Market Law (Law No 18.627 of 24 November 2009).

The Securities are not offered or sold to the public in or from Uruguay. This offer has not been and will not be announced to the public and offering material will not be made available to the public except in circumstances which do not constitute a public offer of securities in Uruguay in compliance with the requirements of the Uruguayan Securities Market Law (Law No 18.627 of 24 November 2009). Public advertising of the Programme will be avoided.

The Securities will be offered to people in or from Uruguay only through occasional private offerings and never on a professional or regular basis.

If private offers are made in or from Uruguay on a professional and regular basis, the intermediary entity has to be registered before the Superintendence of Financial Services of the CBU, and must comply with the obligations indicated in the Compilation of Securities Market Regulations.

Venezuela (The Bolivarian Republic of Venezuela)

No public offering of the Securities has been authorised by the National Securities Superintendence (*Superintendencia Nacional de Valores* -"**SNV**"). Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that (i) it shall not offer and/or sell Securities in Venezuela by means of a public offering and (ii) this offer has not been and will not be announced to the public and offering material will not be made available to the public, without the prior authorisation of SNV.

The public offer of the Securities described in this Offering Circular within the territory of Venezuela is subject to the authorisations and regulations issued by the SNV in effect in Venezuela.

Vietnam

The Securities will not be offered in the territory of the Socialist Republic of Vietnam ("**Vietnam**") or to any individual that is a citizen of Vietnam.

The Securities will only be offered or transferred to a Vietnamese entity if such entity is qualified to purchase and/or hold the Securities by entrustment, or has either obtained all required approvals/permits

from or completed all required registrations with the Vietnamese authorities (including but not limited to the Prime Minister of Vietnam, the State Bank of Vietnam and any other relevant authority as required by applicable Vietnamese laws from time to time) to purchase and/or hold the Securities.

By purchasing or accepting the Securities, the relevant Holder will be deemed to represent and warrant that it is qualified to purchase and/or hold the Securities by entrustment, and/or has either obtained all required approvals/permits from or completed all required registrations with the relevant Vietnamese authorities to purchase and/or hold the Securities. The relevant Holder will further be deemed to have complied with all requirements under Vietnamese regulations regarding investment methods and/or opening/maintaining an account in Vietnam to manage the investment in the Securities.

The Issuer makes no representation, expressed or implied, that the Securities are eligible securities that the relevant Holder may hold under Vietnamese regulations. The relevant Holder will be solely responsible to ascertain the eligibility of the Securities that it plans to purchase or hold.

Disclaimer

As a result of the foregoing restrictions, purchasers of Securities are advised to consult legal counsel prior to making any purchase, offer, sale, resale or other transfer of such Securities.

No offers, sales, re-sales or deliveries of any Securities, or distribution of any offering material relating to any Securities, may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations and which will not impose any obligation on JPMCFC, JPMSP, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co.

PURCHASER REPRESENTATIONS AND REQUIREMENTS AND TRANSFER RESTRICTIONS

The Securities (including Rule 144A Securities, the Rule 144A New York Law Notes and Regulation S/Rule 144A Securities), the Guarantees and, in certain instances, the securities to be delivered upon redemption or exercise of the Securities, if any, have not been and will not be registered under the Securities Act, or the laws of any state or other jurisdiction of the United States. Trading in the Securities and the Guarantees has not been approved by the CFTC under the Commodity Exchange Act.

The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee have not been registered under the rules of the OCC. The Securities issued by JPMorgan Chase Bank, N.A. and the JPMorgan Chase Bank, N.A. Guarantee may also be offered or sold in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 3(a)(2) thereof and will be offered and sold pursuant to an exemption from the registration requirements of the OCC (including, in the case of offers or sales outside the United States, in compliance with Regulation S as such regulation is incorporated into the regulations of the OCC pursuant to 12 C.F.R. Section 16.5(g)).

The Securities may not be offered or sold except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any other applicable securities laws. Hedging transactions involving "equity securities" of "domestic issuers" (as each such term is defined in the Securities Act and regulations thereunder) may be conducted only in compliance with the Securities Act, and hedging transactions must be conducted only in compliance with the Commodity Exchange Act.

Securities (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities being offered or sold pursuant to Rule 144A) are being offered and sold pursuant to an exemption from registration under the Securities Act provided by Regulation S and may not be legally or beneficially owned by any U.S. Person at any time nor offered, sold, transferred, pledged, assigned, delivered, exercised or redeemed at any time within the United States or to, or for the account or benefit of, U.S. Persons; provided however, that this restriction shall not apply to a U.S. Person that is an affiliate (as defined in Rule 405 under the Securities Act) of the Issuer. Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities are being offered and sold pursuant to Rule 144A under the Securities Act to QIBs that are also Eligible Investors (as defined below) at the time of the acquisition and are otherwise in compliance with Rule 144A. Additionally, Regulation S/Rule 144A Securities are being offered and sold to non-U.S. Persons that have entered into and remain in compliance with the relevant Investor Letter of Representations (as defined below under "Investor Letter of Representations / Deemed Representations") with respect to their purchases of Regulation S/Rule 144A Securities in "offshore transactions" in accordance with Rule 903 of Regulation S under the Securities Act. As used in this section, the term "U.S. Person" means (i) in respect of any Regulation S/Rule 144A Securities, any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S (as may be amended from time to time) or (ii) in respect of any Securities other than Regulation S/Rule 144A Securities, any person which is a "U.S. person" as defined in Rule 902(k) of Regulation S (as may be amended from time to time) or any person which is a "United States person" as defined in section 7701(a)(30) of the Code and Treasury regulations thereunder (as may be amended from time to time, as the context requires.

In addition, where Notes or Certificates issued by JPMCFC, JPMSP or JPMorgan Chase Bank (other than Rule 144A Securities, Rule 144A New York Law Notes and Regulation S/Rule 144A Securities) are being offered and sold pursuant to an exemption from registration under the Securities Act provided by Regulation S and where the relevant Pricing Supplement specifies "ECI Holder Restrictions" to be applicable, the Securities may not at any time be legally or beneficially owned by any U.S. Person or any non-U.S. Person whose income, gain or loss, if any, or the Notes or Certificates (if applicable) would be effectively connected with a U.S. trade or business (an "**ECI Holder**").

In addition to the purchaser representations and requirements and transfer restrictions (the "**Purchaser representations and requirements and transfer restrictions**") described in this section, the distribution restrictions imposed by this Offering Circular and the relevant Pricing Supplement in certain jurisdictions and the offering or sale of Securities to which the relevant Pricing Supplement relates in such jurisdictions may be further restricted by law. Persons into whose possession such documents come are required by the Issuer, the Dealer and the Arranger to inform themselves about and to observe any such restriction. This Offering Circular and the relevant Pricing Supplement are not intended to constitute

an offer or solicitation for the purchase or sale of Securities in any jurisdiction where such offer or solicitation would violate the laws of such jurisdiction.

Eligible Investors

"**Eligible Investors**" are qualified institutional buyers ("**QIBs**") (as defined in Rule 144A under the Securities Act) that:

(a) are also ECPs (as defined below);

(b) in the case of Rule 144A Securities issued by JPMSP and Regulation S/Rule 144A Securities issued by JPMSP are qualified purchasers ("**QPs**") (as defined in Section 2(a)(51) and related rules under the Investment Company Act);

(c) in the case of Rule 144A Securities issued by JPMSP and Regulation S/Rule 144A Securities issued by JPMSP are also (a) major U.S. institutional investors ("**MUSIV**") (as defined in Rule 15a-6(b)(4) under the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**") or (b) Qualified Offshore Clients (as defined in the General Conditions); and

(d) in the case of (1) all Regulation S/Rule 144A Securities and (2) Rule 144A Securities and Rule 144A New York Law Notes which are:

(i) (A) Notes held in definitive form or (B) Certificates or Warrants (in definitive or global form), have entered into and have remained in compliance with the relevant Investor Letter of Representations (as defined below under "Investor Letters of Representations / Deemed Representations – Regulation S / Rule 144A Warrants, Rule 144A New York Law Notes and Rule 144A Securities") with respect to their purchases of Securities; or

(ii) Notes represented by a Global Security, have remained in compliance with the representations for the benefit of the Dealer, the relevant Issuer and the relevant Guarantor (if applicable) (together with their respective affiliates and control persons) that such beneficial holders are deemed to have made by virtue of holding such Securities subject to the Purchaser representations and requirements and transfer restrictions herein and as described below with respect to their purchases of such Securities.

ECPs

An "**ECP**" means an "**eligible contract participant**" as defined in Section 1(a)(18) of the Commodity Exchange Act.

Investor Letter of Representations / Deemed Representations – Regulation S / Rule 144A Warrants, Rule 144A New York Law Notes and Rule 144A Securities

Purchasers and subsequent transferees of (1) all Regulation S/Rule 144A Securities and of (2) Rule 144A Securities and Rule 144A New York Law Notes which are:

(i) (A) Notes held in definitive form or (B) Certificates or Warrants (in definitive or global form), will be required to execute and deliver to the Dealer for the benefit of the Dealer, the relevant Issuer and the relevant Guarantor (if applicable) (together with their respective affiliates and control persons), a letter of representations (such letter, for the benefit of such parties, an "**Investor Letter of Representations**") prior to agreeing to purchase any such instruments; and

(ii) Notes represented by a Global Security, will be deemed to have made the representations and warranties set forth in the form of Investor Letter of Representations below as of the time of their entering into any commitment to purchase any such Securities or Regulation S/Rule 144A Securities.

The Investor Letter of Representations will be in the form approved by the Dealer. The Investor Letter of Representations shall (unless otherwise required by the Dealer in relation to any particular Securities) contain, among other representations, the purchaser representations set out below.

The types of representations that may be included in the Investor Letter of Representations include the purchaser representing that:

(a) it has all requisite power and authority to enter into the Investor Letter of Representations and that the Investor Letter of Representations has been duly authorised (save for where these acknowledgements, representations, warranties and agreements are being made on a deemed basis only), validly executed and delivered by it, and that such entrance into the Investor Letter of Representations and its acquisition of and payment for any Securities do not violate or conflict with any law applicable to it, any provision of its constitutional documents, any order or judgment of any court or other agency of government applicable to it or any of its assets or any contractual restriction binding on or affecting it or any of its assets;

(b) if purchasing for allocation to one or more accounts or ultimate purchasers, it is acting as the duly authorised agent and/or the advisor with discretionary investment authority for such accounts or purchasers; it has all requisite agency or discretionary investment power and authority to enter into the Investor Letter of Representations on behalf of such accounts and/or ultimate purchasers, and that the representations herein contained are true and correct as they apply to each of such accounts or ultimate purchasers at the time the commitment to purchase is undertaken;

(c) it has received copies of the Offering Circular and such other information as it deems necessary to make its investment decision and that it has read and understands all such information, including information contained in the relevant Pricing Supplement (or has been afforded the opportunity to obtain such documents and information and has not taken the opportunity to do so);

(d) if purchasing securities which have been issued prior to the purchaser's date of purchase which the Dealer (or any affiliate or subsidiary of the Dealer) has been holding from time to time on its own account ("**Inventory Securities**"), it acknowledges and accepts that (a) disclosure in relation to the Reference Assets to which the relevant Inventory Securities may be linked as set forth in the Pricing Supplement will have been extracted by the Issuer from such publicly available sources but will not have been prepared by, or on behalf of, and will not have been verified by, or on behalf of, the Issuer, the Guarantor (if applicable) or the Dealer or any of their affiliates (the Issuer, the Guarantor, the Dealer and any of their affiliates, together the "**JPMorgan Affiliates**"), (b) the JPMorgan Affiliates will have disclaimed any responsibility for such information, and such information will be out of date and none of the JPMorgan Affiliates shall provide any updated information thereon, and (c) any sale of Inventory Securities shall not, under any circumstances, create any implication whatsoever that there has been no change in the situation or condition of the Issuer or the Guarantor, or no change in Reference Assets since the date of the Pricing Supplement, which might have an adverse effect on the pay-out and/or value of the relevant Inventory Securities;

(e) it acknowledges and agrees that the Securities (the return of which is linked to the relevant Reference Asset) have been chosen by the purchaser, without solicitation or advice by the Issuer, Guarantor or Dealer, based on the purchaser's own independent investigation of the Reference Asset (or any related asset or instrument) and Security, and in connection with such investigation it has not relied on the Issuer, the Guarantor, the Dealer or any of their respective affiliates, representatives or agents;

(f) it understands that the investment in a Security (particularly where linked to a Reference Asset) is subject to a very high degree of complex risks which may arise without warning, may at times be volatile, and that losses may occur quickly and in unanticipated magnitude and may result in a loss of the entire investment and the purchaser acknowledges and agrees that it has a valid business purpose for acquiring the Security, and has concluded (if necessary, in conjunction with its own legal, tax, accountancy, regulatory, investment or other professional advisers) that its investment in Securities is suitable in light of its own investment objectives, financial capabilities and expertise;

(g) it understands that the initial sale and any subsequent transfer of the Securities to it, for its own account, or for the account of one or more other buyers are subject to certain restrictions and conditions set out in this Offering Circular and the Securities (including the legends thereon)

and that it agrees that it meets and is bound by, and will not resell, pledge or otherwise transfer the Securities except in compliance with such restrictions and conditions including the conditions specified in the applicable legend contained in paragraph (i) below;

(h) if the purchaser is acquiring Securities which are either (i) offshore derivative instruments, as such term is defined for the purposes of the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019, and notifications, circulars, rules and guidelines of the Securities and Exchange Board of India issued from time to time, or (ii) PRC Derivative Instruments, then prior to such acquisition, the purchaser shall execute and deliver to the Dealer a further letter of representations, warranties and undertakings as prescribed by the Dealer with respect to such Securities in the form set out below under "Representations relating to Securities which are offshore derivative instruments" and "Representations relating to Securities which are PRC Derivative Instruments";

(i) it understands and acknowledges that:

(i) Rule 144A Securities issued by JPMCFC, JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. will bear a legend substantially to the following effect:

THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES, AND NEITHER THIS SECURITY NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD, TRANSFERRED, PLEDGED, ASSIGNED, DELIVERED, EXERCISED OR REDEEMED, EXCEPT IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO MEETS ALL OF THE FOLLOWING REQUIREMENTS AT THE TIME OF SUCH TRANSFER: (A) IT IS A QUALIFIED INSTITUTIONAL BUYER ("**QIB**") AS DEFINED IN RULE 144A; (B) IT WILL PROVIDE NOTICE OF APPLICABLE TRANSFER RESTRICTIONS TO ANY SUBSEQUENT TRANSFEREES; (C) IT IS PURCHASING SOLELY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNTS OF ONE OR MORE QIBs AS TO EACH OF WHICH IT EXERCISES SOLE INVESTMENT DISCRETION AND FOR EACH OF WHICH IT HAS FULL POWER TO MAKE THE ACKNOWLEDGMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN CLAUSES (A) THROUGH (G); (D) IT IS AN "**ELIGIBLE CONTRACT PARTICIPANT**", AS DEFINED IN THE U.S. COMMODITIES EXCHANGE ACT, AS AMENDED; (E) IT HAS ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS (OR, IF THIS SECURITY IS A NOTE REPRESENTED BY A GLOBAL SECURITY, THEN IT SHALL BE DEEMED TO HAVE ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS) FOR THE BENEFIT OF THE DEALER AND THE RELEVANT ISSUER AND (TOGETHER WITH THEIR RESPECTIVE AFFILIATES AND CONTROL PERSONS) AND REMAINS IN COMPLIANCE THEREWITH; (F) IT UNDERSTANDS AND ACKNOWLEDGES THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE SECURITIES FROM ONE OR MORE BOOK-ENTRY DEPOSITORIES; AND (G) IT AGREES THAT IT WILL NOT REOFFER, RESELL, REDELIVER, PLEDGE OR OTHERWISE TRANSFER ANY SECURITIES OR ANY LEGAL OR BENEFICIAL INTEREST THEREIN TO ANY PERSON EXCEPT (X) TO THE ISSUER OR THE DEALER OR (Y) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO PERSONS WHO MEET ALL OF THE REQUIREMENTS OF CLAUSES (A) THROUGH (E) ABOVE, WHO MAKE THE ACKNOWLEDGMENT IN CLAUSE (F) ABOVE AND WHO MAKE AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (G). ANY PLEDGE, SALE OR OTHER TRANSFER OF THIS SECURITY EFFECTED OTHERWISE THAN TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON THAT IS (i) A QIB, (ii) AN ELIGIBLE CONTRACT PARTICIPANT, (iii)

A PARTY TO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS IN COMPLIANCE WITH CLAUSE (E) ABOVE AND (iv) SUBJECT TO CLAUSE (G) ABOVE SHALL, AT THE OPTION OF THE ISSUER, (X) CAUSE SUCH SECURITY TO BE SOLD OR (Y) GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED.

(ii) Rule 144A Securities issued by J.P. Morgan Structured Products B.V. ("**JPMSP**"), will bear a legend as determined by the relevant Issuer, and substantially to the following effect:

THIS SECURITY AND THE GUARANTEE IN RESPECT HEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES, AND NEITHER THIS SECURITY NOR THE GUARANTEE IN RESPECT HEREOF NOR ANY INTEREST HEREIN OR THEREIN MAY BE OFFERED, SOLD, TRANSFERRED, PLEDGED, ASSIGNED, DELIVERED, EXERCISED OR REDEEMED, EXCEPT IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO MEETS ALL OF THE FOLLOWING REQUIREMENTS AT THE TIME OF SUCH TRANSFER: (A) IT IS A QUALIFIED INSTITUTIONAL BUYER ("**QIB**") AS DEFINED IN RULE 144A; (B) IT IS A QUALIFIED PURCHASER ("**QP**"), AS DEFINED IN SECTION 2(A)(51) AND RELATED RULES UNDER THE U.S. INVESTMENT COMPANY ACT OF 1940 (**THE "INVESTMENT COMPANY ACT**"); (C) IT WILL PROVIDE NOTICE OF APPLICABLE TRANSFER RESTRICTIONS TO ANY SUBSEQUENT TRANSFEREE; (D) IT IS PURCHASING SOLELY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNTS OF ONE OR MORE QIBs AS TO EACH OF WHICH IT EXERCISES SOLE INVESTMENT DISCRETION AND FOR EACH OF WHICH IT HAS FULL POWER TO MAKE THE ACKNOWLEDGMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN CLAUSES (A) THROUGH (I); (E) IT IS AN "ELIGIBLE CONTRACT PARTICIPANT" (AS DEFINED IN THE U.S. COMMODITIES EXCHANGE ACT, AS AMENDED); (F) IT IS EITHER A MAJOR U.S. INSTITUTIONAL INVESTOR ("**MUSIV**"), AS DEFINED IN RULE 15A-6(B)(4) UNDER THE U.S. SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, OR A QUALIFIED OFFSHORE CLIENT, ("**QUALIFIED OFFSHORE CLIENT**"), AS DEFINED IN THE PROSPECTUS; (G) IT HAS ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS (OR, IF THIS SECURITY IS A NOTE REPRESENTED BY A GLOBAL SECURITY, THEN IT SHALL BE DEEMED TO HAVE ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS) FOR THE BENEFIT OF THE DEALER, THE RELEVANT ISSUER AND (IF APPLICABLE) THE GUARANTOR (TOGETHER WITH THEIR RESPECTIVE AFFILIATES AND CONTROL PERSONS) AND REMAINS IN COMPLIANCE THEREWITH; (H) IT UNDERSTANDS AND ACKNOWLEDGES THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE SECURITIES FROM ONE OR MORE BOOK-ENTRY DEPOSITORIES; AND (I) IT AGREES THAT IT WILL NOT REOFFER, RESELL, REDELIVER, PLEDGE OR OTHERWISE TRANSFER ANY SECURITIES OR ANY LEGAL OR BENEFICIAL INTEREST THEREIN TO ANY PERSON EXCEPT (X) TO THE ISSUER OR THE DEALER OR (Y) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO PERSONS WHO MEET ALL OF THE REQUIREMENTS OF CLAUSES (A) THROUGH (G) ABOVE, WHO MAKE THE ACKNOWLEDGMENT IN CLAUSE (H) ABOVE AND WHO MAKE AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (I). ANY PLEDGE, SALE OR OTHER TRANSFER OF THIS SECURITY EFFECTED OTHERWISE THAN TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON THAT IS (i) A QIB, (ii)

AN ELIGIBLE CONTRACT PARTICIPANT, (iii) A MUSIV OR A QUALIFIED OFFSHORE CLIENT, (iv) A PARTY TO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS IN COMPLIANCE WITH CLAUSE (H) ABOVE AND (v) SUBJECT TO CLAUSE (H) ABOVE SHALL, AT THE OPTION OF THE ISSUER, (X) CAUSE SUCH SECURITY TO BE SOLD OR (Y) GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED.

(iii) Regulation S/Rule 144A Notes will bear a legend as determined by the relevant Issuer, substantially to the following effect:

THIS NOTE, THE GUARANTEE IN RESPECT HEREOF AND, IN CERTAIN INSTANCES THE SECURITIES TO BE DELIVERED UPON EXERCISE HEREOF, IF ANY, HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES, AND NEITHER THIS NOTE NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD, TRANSFERRED, PLEDGED, ASSIGNED, DELIVERED, EXERCISED OR REDEEMED, EXCEPT:

(I) (1) PURSUANT TO THE REGISTRATION EXEMPTION CONTAINED IN REGULATION S UNDER THE SECURITIES ACT ("**REGULATION S**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO (A) IS NOT A U.S. PERSON OR IS AN AFFILIATE OF THE ISSUER, (B) IS NOT ACTING FOR OR ON BEHALF OF A U.S. PERSON, (C) IS ACQUIRING THIS NOTE IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH REGULATION S, AND (D) IS EITHER (I) A "**QUALIFIED INVESTOR**" AS DEFINED IN REGULATION (EU) 2017/1129 (AS AMENDED) OR REGULATION (EU) 2017/1129 AS IT FORMS PART OF UK DOMESTIC LAW BY VIRTUE OF THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 (AS AMENDED) (AS APPLICABLE), OR (II) ANY OTHER PURCHASER THAT IS APPROVED BY THE DEALER FROM TIME TO TIME) OR (2) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO MEETS ALL OF THE FOLLOWING REQUIREMENTS AT THE TIME OF SUCH TRANSFER: (A) IT IS A QUALIFIED INSTITUTIONAL BUYER ("**QIB**") AS DEFINED IN RULE 144A; (B) IT IS A QUALIFIED PURCHASER ("**QP**"), AS DEFINED IN SECTION 2(A)(51) OF THE U.S. INVESTMENT COMPANY ACT OF 1940 (THE "**INVESTMENT COMPANY ACT**"); (C) IT IS AN "ELIGIBLE CONTRACT PARTICIPANT" (AS DEFINED IN THE U.S. COMMODITIES EXCHANGE ACT, AS AMENDED); (D) IT IS EITHER A MAJOR U.S. INSTITUTIONAL INVESTOR ("**MUSIV**"), AS DEFINED IN RULE 15A-6(B)(4) UNDER THE U.S. SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, OR A QUALIFIED OFFSHORE CLIENT ("**QUALIFIED OFFSHORE CLIENT**"), AS DEFINED IN THE PROSPECTUS; AND

(II) WHERE THE PURCHASER THEREOF (A) WILL PROVIDE NOTICE OF APPLICABLE TRANSFER RESTRICTIONS TO ANY SUBSEQUENT TRANSFEREE; (B) IS PURCHASING SOLELY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNTS OF ONE OR MORE NON-U.S. PERSONS (IN THE CASE OF CLAUSE (I)(1) ABOVE) OR ONE OR MORE QIBs (IN THE CASE OF CLAUSE (I)(2) ABOVE) AS TO EACH OF WHICH IT ACTS AS DULY AUTHORISED AGENT AND/OR EXERCISES SOLE INVESTMENT DISCRETION AND FOR EACH OF WHICH IT HAS FULL POWER TO MAKE THE ACKNOWLEDGMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN EITHER CLAUSES (I)(1) OR (I)(2); (C) HAS ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS FOR THE BENEFIT OF THE ISSUER, THE GUARANTOR, THE ARRANGER AND THE DEALER AND REMAINS IN COMPLIANCE THEREWITH; (D) UNDERSTANDS AND ACKNOWLEDGES THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE SECURITIES FROM

ONE OR MORE BOOK-ENTRY DEPOSITORIES; AND (E) AGREES THAT IT WILL NOT REOFFER, RESELL, REDELIVER, PLEDGE OR OTHERWISE TRANSFER ANY SECURITIES OR ANY LEGAL OR BENEFICIAL INTEREST THEREIN TO ANY PERSON EXCEPT (W) TO THE ISSUER OR THE DEALER, (X) IN ACCORDANCE WITH REGULATION S IN A TRANSACTION THAT MEETS ALL THE REQUIREMENTS OF CLAUSES (I)(1) ABOVE AND THIS CLAUSE (II), TO A PERSON WHO MAKES THE ACKNOWLEDGMENT IN CLAUSE (II)(D) ABOVE AND WHO MAKES AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (II)(E), OR (Y) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO PERSONS WHO MEET ALL OF THE REQUIREMENTS OF CLAUSES (I)(2) ABOVE AND THIS CLAUSE (II), WHO MAKE THE ACKNOWLEDGMENT IN CLAUSE (II)(D) ABOVE AND WHO MAKE AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (II)(E).

ANY PLEDGE, SALE OR OTHER TRANSFER OF THIS NOTE EFFECTED OTHERWISE THAN EITHER TO OR THROUGH THE ISSUER OR THE DEALER IN AN OFFSHORE TRANSACTION SOLELY TO OR FOR THE BENEFIT OF A PERSON WHO SATISFIES THE CONDITIONS OF CLAUSE (I)(1) OR TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON THAT SATISFIES THE CONDITIONS IN CLAUSE (I)(2) ABOVE AND IN EITHER CASE SATISFIES THE CONDITIONS IN CLAUSE (II) ABOVE SHALL, AT THE OPTION OF THE ISSUER, (X) CAUSE SUCH NOTE TO BE SOLD OR (Y) GIVE NOTICE TO THE TRANSFEREE THAT SUCH NOTE WILL BE REDEEMED. AS USED HEREIN, THE TERMS "**OFFSHORE TRANSACTION**", "**UNITED STATES**" AND "**U.S. PERSON**" HAVE THE MEANINGS GIVEN TO THEM UNDER REGULATION S.

HEDGING TRANSACTIONS INVOLVING THIS NOTE MAY NOT BE CONDUCTED EXCEPT IN COMPLIANCE WITH THE SECURITIES ACT.

(iv) Regulation S/Rule 144A Warrants or Regulation S/Rule 144A Certificates will bear a legend as determined by the relevant Issuer, substantially to the following effect:

THIS SECURITY, THE GUARANTEE IN RESPECT HEREOF AND, IN CERTAIN INSTANCES THE SECURITIES TO BE DELIVERED UPON EXERCISE HEREOF, IF ANY, HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR ANY STATE SECURITIES LAWS, AND NEITHER THIS SECURITY NOR ANY INTEREST HEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED, DELIVERED OR OTHERWISE TRANSFERRED OR EXERCISED OR REDEEMED, EXCEPT:

(I) (1) PURSUANT TO THE REGISTRATION EXEMPTION CONTAINED IN REGULATION S UNDER THE SECURITIES ACT ("**REGULATION S**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO (A) IS NOT A U.S. PERSON OR IS AN AFFILIATE OF THE ISSUER, (B) IS NOT ACTING FOR OR ON BEHALF OF A U.S. PERSON, (C) IS ACQUIRING THIS SECURITY IN AN OFFSHORE TRANSACTION IN COMPLIANCE WITH REGULATION S, AND (D) IS EITHER (I) A "**QUALIFIED INVESTOR**" AS DEFINED IN REGULATION (EU) 2017/1129 (AS AMENDED) OR REGULATION (EU) 2017/1129 AS IT FORMS PART OF UK DOMESTIC LAW BY VIRTUE OF THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 (AS AMENDED) (AS APPLICABLE), OR (II) ANY OTHER PURCHASER THAT IS APPROVED BY THE DEALER FROM TIME TO TIME) OR (2) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO MEETS ALL OF THE FOLLOWING REQUIREMENTS AT THE TIME OF SUCH TRANSFER: (A) IT IS A QUALIFIED INSTITUTIONAL BUYER ("**QIB**") AS DEFINED IN RULE 144A; (B) IT IS A QUALIFIED PURCHASER

("**QP**"), AS DEFINED IN SECTION 2(A)(51) OF THE U.S. INVESTMENT COMPANY ACT OF 1940 ("**INVESTMENT COMPANY ACT**"); (C) IT IS AN "**ELIGIBLE CONTRACT PARTICIPANT**" (AS DEFINED IN THE U.S. COMMODITIES EXCHANGE ACT, AS AMENDED); (D) IT IS EITHER A MAJOR U.S. INSTITUTIONAL INVESTOR ("**MUSIV**"), AS DEFINED IN RULE 15A-6(B)(4) UNDER THE U.S. SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, OR A QUALIFIED OFFSHORE CLIENT ("**QUALIFIED OFFSHORE CLIENT**"), AS DEFINED IN THE PROSPECTUS; AND

(II) WHERE THE PURCHASER THEREOF (A) WILL PROVIDE NOTICE OF APPLICABLE TRANSFER RESTRICTIONS TO ANY SUBSEQUENT TRANSFEREE; (B) IS PURCHASING SOLELY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNTS OF ONE OR MORE NON-U.S. PERSONS (IN THE CASE OF CLAUSE (I)(1) ABOVE) OR ONE OR MORE QIBs (IN THE CASE OF CLAUSE (I)(2) ABOVE) AS TO EACH OF WHICH IT ACTS AS DULY AUTHORISED AGENT AND/OR EXERCISES SOLE INVESTMENT DISCRETION AND FOR EACH OF WHICH IT HAS FULL POWER TO MAKE THE ACKNOWLEDGMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN EITHER CLAUSES (I)(1) OR (I)(2); (C) HAS ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS WITH THE ISSUER, THE GUARANTOR, THE ARRANGER AND THE DEALER AND REMAINS IN COMPLIANCE THEREWITH; (D) UNDERSTANDS AND ACKNOWLEDGES THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE SECURITIES FROM ONE OR MORE BOOK-ENTRY DEPOSITORIES; AND (E) AGREES THAT IT WILL NOT REOFFER, RESELL, REDELIVER, PLEDGE OR OTHERWISE TRANSFER ANY SECURITIES OR ANY LEGAL OR BENEFICIAL INTEREST THEREIN TO ANY PERSON EXCEPT (W) TO THE ISSUER OR THE DEALER, (X) IN ACCORDANCE WITH REGULATION S IN A TRANSACTION THAT MEETS ALL THE REQUIREMENTS OF CLAUSES (I)(1) ABOVE AND THIS CLAUSE (II), TO A PERSON WHO MAKES THE ACKNOWLEDGMENT IN CLAUSE (II)(D) ABOVE AND WHO MAKES AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (II)(E), OR (Y) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO PERSONS WHO MEET ALL OF THE REQUIREMENTS OF CLAUSES (I)(2) ABOVE AND THIS CLAUSE (II), WHO MAKE THE ACKNOWLEDGMENT IN CLAUSE (II)(D) ABOVE AND WHO MAKE AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (II)(E).

ANY PLEDGE, SALE OR OTHER TRANSFER OF THIS SECURITY EFFECTED OTHERWISE THAN EITHER IN AN OFFSHORE TRANSACTION SOLELY TO OR FOR THE BENEFIT OF A PERSON WHO SATISFIES THE CONDITIONS OF CLAUSE (I)(1) OR TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON THAT SATISFIES THE CONDITIONS IN CLAUSE (I)(2) ABOVE AND IN EITHER CASE SATISFIES THE CONDITIONS IN CLAUSE (II) ABOVE SHALL, AT THE OPTION OF THE ISSUER, (X) CAUSE SUCH SECURITY TO BE SOLD OR (Y) GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED. AS USED HEREIN, THE TERMS "**OFFSHORE TRANSACTION**", "**UNITED STATES**" AND "**U.S. PERSON**" HAVE THE MEANINGS GIVEN TO THEM BY REGULATION S.

HEDGING TRANSACTIONS INVOLVING THIS SECURITY MAY NOT BE CONDUCTED EXCEPT IN COMPLIANCE WITH THE SECURITIES ACT.

(v) Rule 144A New York Law Notes will bear a legend as determined by the relevant Issuer, substantially to the following effect:

THIS SECURITY AND, IN CERTAIN INSTANCES, THE SECURITIES TO BE DELIVERED UPON EXERCISE OR REDEMPTION HEREOF HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS

AMENDED (THE "**SECURITIES ACT**"), OR THE LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. THIS SECURITY AND, IF APPLICABLE, THE SECURITIES TO BE DELIVERED UPON EXERCISE OR REDEMPTION HEREOF MAY BE OFFERED, SOLD, TRANSFERRED, PLEDGED, ASSIGNED, DELIVERED, EXERCISED OR REDEEMED, EXCEPT IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON WHO MEETS ALL OF THE FOLLOWING REQUIREMENTS AT THE TIME OF SUCH TRANSFER: (A) IT IS A QUALIFIED INSTITUTIONAL BUYER ("**QIB**") AS DEFINED IN RULE 144A; (B) IT WILL PROVIDE NOTICE OF APPLICABLE TRANSFER RESTRICTIONS TO ANY SUBSEQUENT TRANSFEREES; (C) IT IS PURCHASING SOLELY FOR ITS OWN ACCOUNT OR FOR THE ACCOUNTS OF ONE OR MORE QIBs AS TO EACH OF WHICH IT EXERCISES SOLE INVESTMENT DISCRETION AND FOR EACH OF WHICH IT HAS FULL POWER TO MAKE THE ACKNOWLEDGMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN CLAUSES (A) THROUGH (G); (D) IT IS AN "**ELIGIBLE CONTRACT PARTICIPANT**", AS DEFINED IN THE U.S. COMMODITIES EXCHANGE ACT, AS AMENDED; (E) IT HAS ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS (OR, IF THIS SECURITY IS A NOTE REPRESENTED BY A GLOBAL SECURITY, THEN IT SHALL BE DEEMED TO HAVE ENTERED INTO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS) FOR THE BENEFIT OF THE DEALER AND THE ISSUER (TOGETHER WITH THEIR RESPECTIVE AFFILIATES AND CONTROL PERSONS) AND REMAINS IN COMPLIANCE THEREWITH; (F) IT UNDERSTANDS AND ACKNOWLEDGES THAT THE ISSUER MAY RECEIVE A LIST OF PARTICIPANTS HOLDING POSITIONS IN THE SECURITIES FROM ONE OR MORE BOOK-ENTRY DEPOSITORIES; AND (G) IT AGREES THAT IT WILL NOT REOFFER, RESELL, REDELIVER, PLEDGE OR OTHERWISE TRANSFER ANY SECURITIES OR ANY LEGAL OR BENEFICIAL INTEREST THEREIN TO ANY PERSON EXCEPT (X) TO THE ISSUER OR THE DEALER OR (Y) IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND IN ACCORDANCE WITH RULE 144A EXCLUSIVELY TO OR THROUGH THE ISSUER OR THE DEALER TO PERSONS WHO MEET ALL OF THE REQUIREMENTS OF CLAUSES (A) THROUGH (E) ABOVE, WHO MAKE THE ACKNOWLEDGMENT IN CLAUSE (F) ABOVE AND WHO MAKE AN UNDERTAKING TO THE EFFECT OF THIS CLAUSE (G). ANY PLEDGE, SALE OR OTHER TRANSFER OF THIS SECURITY EFFECTED OTHERWISE THAN TO OR THROUGH THE ISSUER OR THE DEALER TO A PERSON THAT IS (i) A QIB, (ii) AN ELIGIBLE CONTRACT PARTICIPANT, (iii) A PARTY TO THE RELEVANT INVESTOR LETTER OF REPRESENTATIONS IN COMPLIANCE WITH CLAUSE (E) ABOVE AND (iv) SUBJECT TO CLAUSE (G) ABOVE SHALL, AT THE OPTION OF THE ISSUER, (X) CAUSE SUCH SECURITY TO BE SOLD OR (Y) GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED.

and, as a holder of a Rule 144A Security, Rule 144A New York Law Notes, a Rule 144A New York Law Note, a Regulation S/Rule 144A Note, a Regulation S/Rule 144A Certificate or a Regulation S/Rule 144A Warrant, it agrees to comply with all terms and restrictions specified in such applicable legend.

(j) it will provide notice of applicable transfer restrictions to any subsequent transferees of Securities;

(k) it understands that each Global Security deposited with a custodian for DTC shall also bear the following legend:

"UNLESS THIS SECURITY IS PRESENTED BY AN AUTHORISED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("**DTC**"), TO THE RELEVANT ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER,

EXCHANGE OR PAYMENT, AND ANY SECURITY ISSUED IN THE SAME SERIES (AS DEFINED IN THE AGENCY AGREEMENT) IS REGISTERED IN THE NAME OF CEDE & CO. OR SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORISED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORISED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN."

(l) it does not have, at the time it purchases or receives Securities of any Series or at the time it resells, transfers, exercises or redeems Securities, any material, non-public information regarding the relevant Reference Asset (if any);

(m) it agrees that the Securities are not secured by any interest in any property or assets of any kind whatsoever, that the purchaser does not acquire any interest in or right to acquire, or rights associated with holding any Reference Asset (including voting rights, if any) by virtue of holding any Security, that neither the Issuer nor the Guarantor or any entity acting for the Issuer or Guarantor is obliged to hold or sell the relevant Reference Asset, and that this disclaimer of any interest or claim to the relevant Reference Asset (if any) is itself an integral term of the Securities;

(n) it acknowledges that where the purchaser faces J.P. Morgan Securities LLC ("**JPMS LLC**")in connection with such sale or purchase such securities will be settled through the operations of J.P. Morgan Securities plc ("**JPMS plc**") and it agrees to proceed solely against JPMS plc, and not JPMS LLC, in seeking enforcement of its rights and obligations with respect to the performance of such sale or purchase of Regulation S/Rule 144A Securities, including its rights and obligations with respect to any payment or delivery of Regulation S/Rule 144A Securities in connection with any such sale or purchase;

(o) where the purchaser faces JPMS LLC in connection with any sale or purchase of Regulation S/Rule 144A Securities it requests JPMS LLC to discontinue physical delivery of trade confirmations produced pursuant to SEC Rule 10b-10 for all its accounts (as specified in the form agreed between it and JPMS LLC) and to request electronic mail delivery (e-mail) of such trade confirmations to certain email accounts as specified from time to time. It agrees to notify the JPMS LLC in writing of any updates to its e-mail addresses or if it wishes to resume physical delivery of such trade confirmations. It also acknowledges that it has been notified by JPMS LLC that the contents of messages sent via e-mail are not protected against either being viewed or altered in transmission without the sender or receiver's knowledge, and that JPMS LLC cannot be responsible for guaranteeing message content, integrity or timeliness although the JPMS LLC will make reasonable efforts to ensure that the information as delivered is sent to the correct recipient;

(p) where the purchaser faces JPMS LLC in connection with any sale or purchase of Regulation S/Rule 144A Securities, the purchaser hereby relieves JPMS LLC of its obligation to provide the Purchaser quarterly account statements pursuant to Financial Industry Regulatory Authority (FINRA) Rule 2231. It acknowledges that: (i) its account(s) is/are carried solely for the purpose of execution of Regulation S/Rule 144A Securities on a delivery versus payment/receive versus payment **("DVP/RVP**") basis; and (ii) all sales or purchases of Regulation S/Rule 144A Securities effected for its account(s) are done on a DVP/RVP basis. JPMS LLC undertakes to provide any particular statement or statements it promptly upon request and to promptly reinstate the delivery of such statements to it upon request;

(q) it is not:

1. a country, territory, individual or entity named on any publicly available list of known or suspected terrorists, terrorist organisations or other sanctioned persons or entities, or an individual or entity that resides or has a place of business in a country or territory named on such lists, issued by the U.S. government, including those lists administered by the Office of Foreign Assets Control and the undersigned has established procedures to identify clients on such lists; or

2. a "Foreign Shell Bank" as defined in the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, as amended (the "**USA PATRIOT Act**"), a foreign bank operating under an "**Offshore Banking License**", as defined in the USA PATRIOT Act, a foreign bank operating in a non-cooperative Financial Action Task Force jurisdiction, or a foreign bank operating in an industry or jurisdiction designated as of primary money laundering concern by the U.S. Secretary of the Treasury;

(r) if it is holding Regulation S/Rule 144A Securities, it agrees, if requested by the Issuer, to certify that when it purchased such Regulation S/Rule 144A Securities, it purchased the Regulation S/Rule 144A Securities pursuant to either or both of (i) Rule 144A of the Securities Act, as amended; or (ii) the registration exemption contained in Regulation S under the Securities Act;

(s) if it is purchasing a Regulation S/Rule 144A Security, a Rule 144A New York Law Note or a Rule 144A Security and if it (or any ultimate purchaser):

(i) is not a "United States person" within the meaning of section 7701(a)(30) of the U.S. Internal Revenue Code (the "**Code**"), it certifies that it (and any ultimate purchaser) is not a United States person within the meaning of section 7701(a)(30) of the Code and upon written request of the relevant Issuer, the Guarantor (if applicable) or Dealer, it will provide to the relevant Issuer the applicable IRS Form W-8 or other certification of its (and any ultimate purchaser's) nationality, residence and identity as prescribed by applicable Treasury regulations; or

(ii) is a "United States person" within the meaning of section 7701(a)(30) of the Code:

(a) it certifies that it (and any ultimate purchaser) is a "United States person" within the meaning of section 7701(a)(30) of the Code;

(b) it represents that it (and any ultimate purchaser) is not investing in the Security as part of a tax avoidance plan and will reflect payments on the Security on its U.S. tax return;

(c) with respect to any Rule 144A Security or Rule 144A New York Law Note in definitive form or any Regulation S/Rule 144A Security, it shall provide the complete name (as shown on its U.S. tax return), complete address and tax identification number in respect of itself and any ultimate purchaser that is a "United States person" within the meaning of section 7701(a)(30) of the Code for whom it may be acting as a duly authorised agent (as appropriate); and

(d) it certifies that it (and any ultimate purchaser) has not been notified by the Internal Revenue Service that it is subject to backup withholding as a result of a failure to report all interest or dividends;

(t) it understands and acknowledges that it, its employees, representatives or other agents may disclose to any and all persons, without limitation of any kind, the U.S. federal income tax treatment and tax structure of the offering of Securities pursuant to the Offering Circular and all materials of any kind (including any opinions or other tax analyses provided) relating to such U.S. federal income tax treatment and tax structure; and

(u) it makes the acknowledgements, representations, warranties and agreements in relation to the applicable Securities as set forth in section (a), (b) or (c), as applicable, in "ERISA Legends and ERISA Restrictions" below, and such applicable section shall be set out in full or deemed to be set out in full (as applicable) in the relevant Letter of Representations (if any).

Investor Letter of Representations - CREST CDI Securities

Purchasers and subsequent transferees of CREST CDI Securities (whether represented in global or definitive form) will be required to execute and deliver to the Dealer for the benefit of each of the Dealer, the relevant Issuer and the relevant Guarantor (if applicable) (together with their respective affiliates and control persons), a letter of representation (such letter, for the benefit of such parties, an "**Investor Letter of Representations**") prior to agreeing to purchase any such Securities.

The Investor Letter of Representations will be in the form approved by the Dealer, and shall (unless otherwise required by the Dealer in relation to any particular Securities) contain, among other representations, the following purchaser representations:

1. Neither we nor any person(s) on whose behalf or for whose account or benefit we are acting are (a) U.S. persons (as defined in Regulation S ("**Regulation S**") under the United States Securities Act of 1933, as amended (the "**Securities Act**")) or (b) resident or otherwise located in the United States. If we are acquiring the Securities on behalf of, or for the account or benefit of, one or more investor accounts for which we exercise investment discretion, we have full power and authority to exercise such investment discretion and to make, and do so make, the representations, warranties, agreements and acknowledgements herein on behalf of such investor.

2. Any Securities we acquire will be for our own account (or for accounts of an investor for which we exercise sole investment discretion) for investment purposes, and not with a view to resale or distribution, directly or indirectly, in the United States or otherwise in violation of the U.S. securities laws, subject to the understanding that the disposition of our property shall at all times be and remain within our control.

3. Other than pursuant to paragraph 2, we shall not hold the Securities for the benefit of any other person and shall be the sole beneficial owner thereof for all purposes and shall not sell participation interests in the Securities or enter into any other arrangement pursuant to which any other person shall be entitled to a beneficial interest in the distributions on the Securities.

4. We understand that the Securities are being offered in a transaction not involving any public offering in the United States within the meaning of the Securities Act and that the Securities have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States. We are acquiring the Securities in an "offshore transaction" (as such term is defined in Regulation S). We acknowledge and agree that we are not acquiring the Securities as a result of any directed selling efforts (as that term is defined in Regulation S) and that our purchase of the Securities is not part of a plan or scheme to evade the registration requirements of the Securities Act.

5. We agree that any reoffer, resale, pledge, assignment or other transfer of the Securities shall only be made with the prior written consent of the Dealer in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S under the Securities Act to a person that has executed and agrees to remain at all times during which it holds the Securities in compliance with an investor letter in substantially the form as this letter.

6. We represent that:

   (1) (A) we are not (a) an "employee benefit plan" (as defined in Section 3(3) of Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**")) that is subject to the fiduciary responsibilities provisions of ERISA, (b) a "plan" as defined in Section 4975(e)(1) of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), that is subject to Section 4975 of the Code, (c) any entity whose underlying assets include "plan assets" by reason of any such employee benefit plan's or plan's investment in the entity or (d) a "benefit plan investor" as such term is otherwise defined in Section 3(42) of ERISA or any regulations promulgated by the U.S. Department of Labor thereunder; or

   (B) (i) we are an insurance company acting on behalf of our general account, (ii) we are not a person who has discretionary authority or control with respect to the assets of the Issuer or a person who provides investment advice for a fee (direct or indirect) with respect to such assets, or any affiliate of such a person, (iii) as of the date we acquire and throughout the period we hold the Securities, or any interest therein, less than 25 per cent. of the assets of such general account constitutes "plan assets" (as defined in 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA) for purposes of ERISA and/or Section 4975 of the Code, (iv) we agree that if, after our initial acquisition of the Securities, or any interest therein, at any time during any month, 25 per cent. or more of the assets

of such general account constitute "plan assets", then we shall, in a manner consistent with the restrictions on transfer set forth herein, dispose of the Securities, or any interest therein, held in our general account by the end of the next following month, and (v) the acquisition, holding and subsequent disposition of the Securities, or any interest therein, will not constitute or result in a prohibited transaction under ERISA or Section 4975 of the Code which is not covered under PTCE 95-60 or some other applicable exemption; and

(2) if we are a governmental, church, non-U.S. or other plan which is subject to any federal, state, local or non-U.S. law similar to the provisions of Section 406 of ERISA or Section 4975 of the Code, (A) we are not, and for so long as we hold such Security or interest therein will not be, subject to any federal, state, local, non-U.S. or other law or regulation that could cause the underlying assets of the Issuer to be treated as assets of the investor in any Security (or any interest therein) by virtue of its interest and thereby subject the Issuer or any person responsible for the investment and operation of the Issuer's assets to laws or regulations that are similar to the fiduciary responsibility or prohibited transaction provisions of ERISA or Section 4975 of the Code, and (B) our acquisition, holding and subsequent disposition of such Securities will not constitute or result in a non-exempt violation under any such similar federal, state, local or non-U.S. law. We understand and acknowledge that each of the Issuer and the Guarantor shall have no obligation to recognise any offer, sale, pledge, assignment, delivery or other transfer of the Securities made other than in compliance with the consent requirements and restrictions on transfer set forth and described herein.

(3) We understand and agree that if any purported transfer of the Securities to a purchaser does not comply with such requirement, the Issuer will have the right to either cause the Securities to be sold to an acquirer selected by the Issuer that certifies to the Issuer that it meets the required criteria, pending which transfer no further payments will be made on the Securities, or give notice to the holder of the Securities that the Securities will be redeemed at the Early Payment Amount.

7. We understand that the global certificate representing the Securities will bear the following legend:

"THE SECURITIES REPRESENTED BY THIS GLOBAL CERTIFICATE AND THE GUARANTEE IN RESPECT THEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**") NOR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND THE GUARANTEE HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE RULES OF THE U.S. COMPTROLLER OF THE CURRENCY. THE SECURITIES REPRESENTED BY THIS GLOBAL CERTIFICATE AND THE GUARANTEE IN RESPECT THEREOF MAY NOT AT ANY TIME BE OFFERED, SOLD, TRANSFERRED, PLEDGED, ASSIGNED, DELIVERED, EXERCISED OR REDEEMED TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY U.S. PERSON (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT."

8. We understand that we will not be a legal or beneficial owner of Securities, but that we will instead hold dematerialised CREST depository interests ("**CDIs**") which are issued, held, settled and transferred through CREST, representing an indirect interest only in the Securities. We further understand that (i) CDIs are separate legal instruments from the Securities, which are issued by CREST Depository Limited and represent indirect interests in the interests of the nominee for the CREST Depository Limited in the Securities, and (ii) we have read and understood the risks in relation to CDIs as set out in "*Book-Entry Clearing Systems*" in the Offering Circular.

9. We confirm and agree that we and any investors for whose account or benefit or on whose behalf we are acting have satisfied, and will satisfy, any and all requirements and restrictions relating to the Securities set forth in the section "*Subscription and Sale*" of the Offering Circular in relation to our purchase of Securities and any subsequent offer or sale made by us of the Securities.

10. We understand that the foregoing representations, warranties, agreements and acknowledgements are required in connection with U.S. and other securities laws and that the Issuer, the Guarantor, the Dealer and their respective affiliates, and any broker, dealer, placing agent or distributor that may be acting in connection with the issuance of the Securities outside the United States, and their respective affiliates, and others are entitled to rely upon the truth and accuracy of the representations, warranties, agreements and acknowledgements contained herein.

11. We agree that, if at any time any of the representations, warranties, agreements, acknowledgments or understandings made or given in this letter are no longer true, whether with respect to ourselves or with respect to any investor for whose account or benefit or on whose behalf we are purchasing or holding the Securities, we will (i) promptly inform the Dealer and (ii) until such time as we have re-executed and re-delivered an investor letter in substantially the form of this letter, we will not purchase any further CREST CDI Securities.

12. We confirm that, to the extent we are purchasing the Securities for the account of one or more other persons, (a) we have been duly authorised to sign this letter and make the confirmations, understandings, acknowledgements and agreements set forth herein on their behalf and (b) the provisions of this letter constitute legal, valid and binding obligations of us and any other person for whose account we are acting.

13. We irrevocably authorise the Issuer, the Guarantor, the Dealer, their respective affiliates, any broker, dealer, placing agent or distributor, and their respective affiliates and any person acting on their behalf to produce this letter or a copy hereof to any interested party in any administrative or legal proceedings, dispute or official inquiry with respect to the matters covered hereby.

14. The terms and provisions of this letter shall inure to the benefit of the Issuer, the Guarantor and the Dealer and their successors and permitted assigns, and the terms and provisions hereof shall be binding on our permitted successors in title, permitted assigns and permitted transferees.

15. We agree to indemnify and hold harmless the Issuer, the Guarantor and the Dealer as well as their officers, director, employees, advisors, agents and controlling persons (each, an "**Indemnified Person**") from and against any and all losses, claims, damages, judgments, liabilities and expenses, including reasonable attorneys' fees and expenses (including the cost of any investigation and preparation), when and as incurred by such Indemnified Person, resulting from or arising out of or related to a breach of any representation, warranty or agreement made in this letter by us on our own behalf or on behalf of any investor for whose account or benefit or on whose behalf we are purchasing or holding the Securities.

16. We hereby represent and warrant that all necessary actions have been taken to empower and authorise the purchase by us of the Securities and the execution of this letter.

ERISA Legends and ERISA Restrictions

Each purchaser of any Securities hereunder shall be deemed to make the following acknowledgements, representations, warranties and agreements in relation to the applicable Securities as set forth below (and the applicable acknowledgements, representations, warranties and agreements shall be set out in each Investor Letter of Representations):

(a) *JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. issued Securities*: With respect to each Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., each purchaser acknowledges, represents, warrants and agrees with the following:

(i) With respect to each Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., it shall not acquire, hold or subsequently dispose of such Security for, on behalf of, or with the assets of any "employee benefit plan" subject to the fiduciary responsibility provisions of the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**") or any "plan" subject to Section 4975 of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), or an entity part or all of the assets of which constitute assets of any such employee benefit plan or plan by reason of Department of Labor Regulation Section 2510.3 101, Section 3(42) of ERISA or

otherwise (each a "**Plan**") or any governmental, church, non-U.S. or other plan subject to any federal, state, local or non-U.S. law similar to Section 406 of ERISA or Section 4975 of the Code, unless such acquisition, holding and subsequent disposition of the Security will not constitute or result in any non-exempt prohibited transaction under Section 406 of ERISA or under Section 4975 of the Code (or in the case of a governmental, church, non-U.S. or other plan, a non-exempt violation of any similar federal, state, local or non-U.S. law). Any fiduciary of a Plan acquiring a Security in reliance upon the statutory "service provider exemption" under Section 408(b)(17) of ERISA or Section 4975(d)(20) of the Code represents and warrants at the time of the Plan's acquisition and throughout the period the Plan holds the Security that (x) the Plan fiduciary has made a good faith determination that the Plan is paying no more than, and is receiving no less than, adequate consideration in connection with the transaction and (y) none of JPMorgan Chase & Co. or any of its affiliates exercises discretionary authority or control or renders investment advice with respect to the assets of the Plan which the fiduciary is using to acquire the Security.

(ii) each Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. shall bear the following legend:

THE ACQUISITION, HOLDING AND SUBSEQUENT DISPOSITION OF THIS SECURITY BY, OR ON BEHALF OF, OR WITH THE ASSETS OF ANY "EMPLOYEE BENEFIT PLAN" SUBJECT TO THE FIDUCIARY RESPONSIBILITY PROVISIONS OF THE U.S. EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("**ERISA**"), OR ANY "PLAN" SUBJECT TO SECTION 4975 OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "**CODE**"), OR AN ENTITY PART OR ALL OF THE ASSETS OF WHICH CONSTITUTE ASSETS OF ANY SUCH EMPLOYEE BENEFIT PLAN OR PLAN BY REASON OF DEPARTMENT OF LABOR REGULATION SECTION 2510.3-101, SECTION 3(42) OF ERISA OR OTHERWISE (EACH A "**PLAN**") OR ANY GOVERNMENTAL, CHURCH, NON-U.S., OR OTHER PLAN SUBJECT TO ANY FEDERAL, STATE, LOCAL OR NON-U.S. LAW SIMILAR TO SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE IS PROHIBITED UNLESS SUCH ACQUISITION, HOLDING AND SUBSEQUENT DISPOSITION OF THE SECURITY WOULD NOT CONSTITUTE OR RESULT IN ANY NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR UNDER SECTION 4975 OF THE CODE (OR IN THE CASE OF A GOVERNMENTAL, CHURCH, NON-U.S. OR OTHER PLAN, A NON-EXEMPT VIOLATION OF ANY SIMILAR FEDERAL, STATE, LOCAL OR NON-U.S. LAW). ANY FIDUCIARY OF A PLAN ACQUIRING A SECURITY IN RELIANCE UPON THE STATUTORY "SERVICE PROVIDER EXEMPTION" UNDER SECTION 408(b)(17) OF ERISA OR SECTION 4975(d)(20) OF THE CODE WILL REPRESENT AND WARRANT OR WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED, AS APPLICABLE, AT THE TIME OF THE PLAN'S ACQUISITION AND THROUGHOUT THE PERIOD THE PLAN HOLDS THE SECURITY THAT (X) THE PLAN FIDUCIARY HAS MADE A GOOD FAITH DETERMINATION THAT THE PLAN IS PAYING NO MORE THAN, AND IS RECEIVING NO LESS THAN, ADEQUATE CONSIDERATION IN CONNECTION WITH THE TRANSACTION AND (Y) NONE OF JPMORGAN CHASE & CO. OR ANY OF ITS AFFILIATES EXERCISES DISCRETIONARY AUTHORITY OR CONTROL OR RENDERS INVESTMENT ADVICE WITH RESPECT TO THE ASSETS OF THE PLAN WHICH THE FIDUCIARY IS USING TO ACQUIRE THE SECURITY. IF ANY PURPORTED TRANSFER OF THE SECURITY, OR ANY INTEREST THEREIN, TO AN ACQUIRER OR TRANSFEREE DOES NOT COMPLY WITH THE REQUIREMENTS OF THIS PARAGRAPH, THE ISSUER MAY, AT ITS DISCRETION, CAUSE SUCH SECURITY TO BE SOLD OR GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED. EACH BENEFICIAL OWNER OF THIS SECURITY IN PHYSICAL FORM WILL BE REQUIRED TO EXECUTE AN INVESTOR LETTER OF REPRESENTATIONS OR WILL BE DEEMED TO HAVE MADE THE ACKNOWLEDGEMENTS,

REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN SUCH LETTER.

(b) *JPMCFC/JPMSP Standard Restrictions*: With respect to each Security issued by JPMSP, where the relevant Pricing Supplement provides that "JPMSP Standard Restrictions apply" (or where the relevant Pricing Supplement is silent as to whether "JPMSP Standard Restrictions apply" or "JPMSP Special Restrictions apply") or with respect to each Security issued by JPMCFC, where the relevant Pricing Supplement provides that the "JPMCFC Standard Restrictions apply" (or where the relevant Pricing Supplement is silent as to whether "JPMCFC Standard Restrictions apply" or "JPMCFC Special Restrictions apply"), in each case, it acknowledges, represents, warrants and agrees with the following:

(i) With respect to the acquisition, holding and subsequent disposition of each Security issued by JPMCFC or JPMSP, as the case may be, (1) (A) it is not (a) an "employee benefit plan" (as defined in Section 3(3) of Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**")) that is subject to the fiduciary responsibilities provisions of ERISA, (b) a "**plan**" as defined in Section 4975(e)(1) of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), that is subject to Section 4975 of the Code, (c) any entity whose underlying assets include "plan assets" by reason of any such employee benefit plan's or plan's investment in the entity or (d) a "benefit plan investor" as such term is otherwise defined in Section 3(42) of ERISA or in any regulations promulgated by the U.S. Department of Labor thereunderunder or (B) (i) it is an insurance company acting on behalf of its general account, (ii) it is not a person who has discretionary authority or control with respect to the assets of the Issuer or a person who provides investment advice for a fee (direct or indirect) with respect to such assets, or any affiliate of such a person, (iii) as of the date it acquires and throughout the period it holds the Security, or any interest therein, less than 25 per cent. of the assets of such general account constitutes "plan assets" (as defined in 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA) for purposes of ERISA and/or Section 4975 of the Code, (iv) it agrees that if, after its initial acquisition of the Security, or any interest therein, at any time during any month, 25 per cent. or more of the assets of such general account constitute "plan assets", then such insurance company shall, in a manner consistent with the restrictions on transfer set forth herein, dispose of the Security, or any interest therein, held in its general account by the end of the next following month, and (v) the acquisition, holding and subsequent disposition of the Security, or any interest therein, will not constitute or result in a prohibited transaction under ERISA or Section 4975 of the Code which is not covered under PTCE 95-60 or some other applicable exemption; and (2) if it is a governmental, church, non-U.S. or other plan which is subject to any federal, state, local or non-U.S. law similar to the provision of Section 406 of ERISA or Section 4975 of the Code, (A) it is not, and for so long as it holds such Security or interest therein will not be, subject to any federal, state, local, non-U.S. or other law or regulation that could cause the underlying assets of the Issuer to be treated as assets of the investor in any Security (or any interest therein) by virtue of its interest and thereby subject the Issuer or any person responsible for the investment and operation of the Issuer's assets to laws or regulations that are similar to the fiduciary responsibility or prohibited transaction provisions of ERISA or Section 4975 of the Code, and (B) its acquisition, holding and subsequent disposition of such Security will not constitute or result in a non-exempt violation under any such similar federal, state, local or non-U.S. law.

(ii) each Security issued by JPMSP where the relevant Pricing Supplement provides that the "JPMSP Standard Restrictions apply" (or where the relevant Pricing Supplement is silent as to whether "JPMSP Standard Restrictions apply" or "JPMSP Special Restrictions apply" with respect to such Security) and each Security issued by JPMCFC where the relevant Pricing Supplement provides that the "JPMCFC Standard Restrictions apply" (or where the relevant Pricing Supplement is silent as to whether "JPMCFC Standard Restrictions apply" or "JPMCFC Special Restrictions apply" with respect to such Security) shall bear the following legend:

BY ITS ACQUISITION, HOLDING OR SUBSEQUENT DISPOSITION OF THIS SECURITY, OR ANY INTEREST THEREIN, THE ACQUIRER AND/OR HOLDER

THEREOF AND EACH TRANSFEREE WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED AT THE TIME OF ITS ACQUISITION AND THROUGHOUT THE PERIOD THAT IT HOLDS SUCH SECURITY THAT (1) (A) IT IS NOT AN EMPLOYEE BENEFIT PLAN (AS DEFINED IN SECTION 3(3) OF THE U.S. EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("**ERISA**")) THAT IS SUBJECT TO THE FIDUCIARY RESPONSIBILITY PROVISIONS OF ERISA, A PLAN AS DEFINED IN SECTION 4975(e)(1) OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "**CODE**"), THAT IS SUBJECT TO SECTION 4975 OF THE CODE, ANY ENTITY WHOSE UNDERLYING ASSETS INCLUDE "PLAN ASSETS" BY REASON OF ANY SUCH EMPLOYEE BENEFIT PLAN'S OR PLAN'S INVESTMENT IN THE ENTITY OR THAT IS OTHERWISE A "BENEFIT PLAN INVESTOR" AS SUCH TERM IS DEFINED IN SECTION 3(42) OF ERISA OR IN ANY REGULATIONS PROMULGATED BY THE U.S. DEPARTMENT OF LABOR THEREUNDER OR (B) (I) IT IS AN INSURANCE COMPANY ACTING ON BEHALF OF ITS GENERAL ACCOUNT, (II) IT IS NOT A PERSON WHO HAS DISCRETIONARY AUTHORITY OR CONTROL WITH RESPECT TO THE ASSETS OF THE ISSUER OR A PERSON WHO PROVIDES INVESTMENT ADVICE FOR A FEE (DIRECT OR INDIRECT) WITH RESPECT TO SUCH ASSETS OR AN AFFILIATE OF SUCH A PERSON, (III) AS OF THE DATE IT ACQUIRES AND THROUGHOUT THE PERIOD IT HOLDS A SECURITY OR ANY INTEREST THEREIN, LESS THAN 25 PER CENT. OF THE ASSETS OF SUCH GENERAL ACCOUNT CONSTITUTES "PLAN ASSETS" (AS DEFINED IN 29 C.F.R. SECTION 2510.3-101, AS MODIFIED BY SECTION 3(42) OF ERISA), (IV) IT AGREES THAT IF, AFTER ITS INITIAL ACQUISITION OF A SECURITY, OR ANY INTEREST THEREIN, AT ANY TIME DURING ANY MONTH, 25 PER CENT. OR MORE OF THE ASSETS OF SUCH GENERAL ACCOUNT CONSTITUTES "PLAN ASSETS", THEN SUCH INSURANCE COMPANY SHALL, IN A MANNER CONSISTENT WITH THE RESTRICTIONS ON TRANSFER SET FORTH HEREIN, DISPOSE OF THE SECURITY, OR ANY INTEREST THEREIN, HELD IN ITS GENERAL ACCOUNT BY THE END OF THE NEXT FOLLOWING MONTH, AND (V) THE ACQUISITION, HOLDING OR SUBSEQUENT DISPOSITION OF SUCH SECURITY, OR ANY INTEREST THEREIN, WILL NOT CONSTITUTE OR RESULT IN A PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE WHICH IS NOT COVERED UNDER PROHIBITED TRANSACTION CLASS EXEMPTION 95-60 OR SOME OTHER APPLICABLE EXEMPTION; AND (2) IF IT IS A GOVERNMENTAL, CHURCH, NON-U.S. OR OTHER PLAN WHICH IS SUBJECT TO ANY FEDERAL, STATE, LOCAL OR NON-U.S. LAW THAT IS SIMILAR TO THE PROVISIONS OF SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE, (A) IT IS NOT, AND FOR SO LONG AS IT HOLDS SUCH SECURITY OR INTEREST THEREIN WILL NOT BE, SUBJECT TO ANY FEDERAL, STATE, LOCAL, NON-U.S. OR OTHER LAW OR REGULATION THAT COULD CAUSE THE UNDERLYING ASSETS OF THE ISSUER TO BE TREATED AS ASSETS OF THE INVESTOR IN ANY SECURITY (OR ANY INTEREST THEREIN) BY VIRTUE OF ITS INTEREST AND THEREBY SUBJECT THE ISSUER OR ANY PERSON RESPONSIBLE FOR THE INVESTMENT AND OPERATION OF THE ISSUER'S ASSETS TO LAWS OR REGULATIONS THAT ARE SIMILAR TO THE FIDUCIARY RESPONSIBILITY OR PROHIBITED TRANSACTION PROVISIONS OF ERISA OR SECTION 4975 OF THE CODE, AND (B) ITS ACQUISITION, HOLDING OR SUBSEQUENT DISPOSITION OF SUCH SECURITY WILL NOT CONSTITUTE OR RESULT IN A NON-EXEMPT VIOLATION UNDER SUCH SIMILAR FEDERAL, STATE, LOCAL OR NON-U.S. LAW. IF ANY PURPORTED TRANSFER OF THE SECURITY, OR ANY INTEREST THEREIN, TO AN ACQUIRER OR TRANSFEREE DOES NOT COMPLY WITH THE REQUIREMENTS OF THIS PARAGRAPH, THE ISSUER MAY, AT ITS DISCRETION, CAUSE SUCH SECURITY TO BE SOLD OR GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED. EACH BENEFICIAL OWNER OF THIS SECURITY IN PHYSICAL FORM WILL BE REQUIRED TO EXECUTE AN INVESTOR LETTER OF REPRESENTATIONS OR WILL BE DEEMED TO HAVE MADE THE ACKNOWLEDGEMENTS,

REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN SUCH LETTER.

(c) *JPMCFC/JPMSP Special Restrictions*: With respect to each Security issued by JPMSP where the relevant Pricing Supplement provides that the "JPMSP Special Restrictions apply" (which shall be the case only where the relevant Issuer has satisfied itself that such Security does not constitute an equity interest for purposes of ERISA) or with respect to each Security issued by JPMCFC where the relevant Pricing Supplement provides that the "JPMCFC Special Restrictions apply" (which shall be the case only where the relevant Issuer has satisfied itself that such Security does not constitute an equity interest for purposes of ERISA), in each case, it acknowledges, represents, warrants and agrees with the following:

(i) With respect to the acquisition, holding and subsequent disposition of each Security issued by JPMCFC or JPMSP, it shall not acquire, hold or subsequently dispose of such Security for, on behalf of, or with the assets of any "employee benefit plan" subject to the fiduciary responsibility provisions of the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**") or any "plan" subject to Section 4975 of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), or an entity part or all of the assets of which constitute assets of any such employee benefit plan or plan by reason of Department of Labor Regulation Section 2510.3-101, Section 3(42) of ERISA or otherwise (each a "**Plan**") or any governmental, church, non-U.S. or other plan subject to any federal, state, local or non-U.S. law similar to Section 406 of ERISA or Section 4975 of the Code, unless such acquisition, holding and subsequent disposition of the Security will not constitute or result in any non-exempt prohibited transaction under Section 406 of ERISA or under Section 4975 of the Code (or in the case of a governmental, church, non-U.S. or other plan, a non-exempt violation of any similar federal, state, local or non-U.S. law). Any fiduciary of a Plan acquiring a Security in reliance upon the statutory "service provider exemption" under Section 408(b)(17) of ERISA or Section 4975(d)(20) of the Code represents and warrants at the time of the Plan's acquisition and throughout the period the Plan holds the Security that (x) the Plan fiduciary has made a good faith determination that the Plan is paying no more than, and is receiving no less than, adequate consideration in connection with the transaction and (y) none of JPMorgan Chase & Co. or any of its affiliates exercises discretionary authority or control or renders investment advice with respect to the assets of the Plan which the fiduciary is using to acquire the Security.

(ii) Each Security issued by JPMSP where the relevant Pricing Supplement provides that the "JPMSP Special Restrictions apply" (which shall be the case only where the relevant Issuer has satisfied itself that such Security does not constitute an equity interest for purposes of ERISA) and each Security issued by JPMCFC where the relevant Pricing Supplement provides that the "JPMCFC Special Restrictions apply" (which shall be the case only where the relevant Issuer has satisfied itself that such Security does not constitute an equity interest for purposes of ERISA) shall bear the following legend:

THE ACQUISITION, HOLDING AND SUBSEQUENT DISPOSITION OF THIS SECURITY BY, OR ON BEHALF OF, OR WITH THE ASSETS OF ANY "EMPLOYEE BENEFIT PLAN" SUBJECT TO THE FIDUCIARY RESPONSIBILITY PROVISIONS OF THE U.S. EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("**ERISA**"), OR ANY "PLAN" SUBJECT TO SECTION 4975 OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "**CODE**"), OR AN ENTITY PART OR ALL OF THE ASSETS OF WHICH CONSTITUTE ASSETS OF ANY SUCH EMPLOYEE BENEFIT PLAN OR PLAN BY REASON OF DEPARTMENT OF LABOR REGULATION SECTION 2510.3-101, SECTION 3(42) OF ERISA OR OTHERWISE (EACH A "**PLAN**") OR ANY GOVERNMENTAL, CHURCH, NON-U.S., OR OTHER PLAN SUBJECT TO ANY FEDERAL, STATE, LOCAL OR NON-U.S. LAW SIMILAR TO SECTION 406 OF ERISA OR SECTION 4975 OF THE CODE IS PROHIBITED UNLESS SUCH ACQUISITION, HOLDING AND SUBSEQUENT DISPOSITION OF THE SECURITY WOULD NOT CONSTITUTE OR RESULT IN ANY NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR UNDER SECTION 4975 OF THE CODE (OR IN THE CASE OF A GOVERNMENTAL,

CHURCH, NON-U.S. OR OTHER PLAN, A NON-EXEMPT VIOLATION OF ANY SIMILAR FEDERAL, STATE, LOCAL OR NON-U.S. LAW). ANY FIDUCIARY OF A PLAN ACQUIRING A SECURITY IN RELIANCE UPON THE STATUTORY "SERVICE PROVIDER EXEMPTION" UNDER SECTION 408(b)(17) OF ERISA OR SECTION 4975(d)(20) OF THE CODE WILL REPRESENT AND WARRANT OR WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED, AS APPLICABLE, AT THE TIME OF THE PLAN'S ACQUISITION AND THROUGHOUT THE PERIOD THE PLAN HOLDS THE SECURITY THAT (X) THE PLAN FIDUCIARY HAS MADE A GOOD FAITH DETERMINATION THAT THE PLAN IS PAYING NO MORE THAN, AND IS RECEIVING NO LESS THAN, ADEQUATE CONSIDERATION IN CONNECTION WITH THE TRANSACTION AND (Y) NONE OF JPMORGAN CHASE & CO. OR ANY OF ITS AFFILIATES EXERCISES DISCRETIONARY AUTHORITY OR CONTROL OR RENDERS INVESTMENT ADVICE WITH RESPECT TO THE ASSETS OF THE PLAN WHICH THE FIDUCIARY IS USING TO ACQUIRE THE SECURITY. IF ANY PURPORTED TRANSFER OF THE SECURITY, OR ANY INTEREST THEREIN, TO AN ACQUIRER OR TRANSFEREE DOES NOT COMPLY WITH THE REQUIREMENTS OF THIS PARAGRAPH, THE ISSUER MAY, AT ITS DISCRETION, CAUSE SUCH SECURITY TO BE SOLD OR GIVE NOTICE TO THE TRANSFEREE THAT SUCH SECURITY WILL BE REDEEMED. EACH BENEFICIAL OWNER OF THIS SECURITY IN PHYSICAL FORM WILL BE REQUIRED TO EXECUTE AN INVESTOR LETTER OF REPRESENTATIONS OR WILL BE DEEMED TO HAVE MADE THE ACKNOWLEDGEMENTS, REPRESENTATIONS, WARRANTIES AND AGREEMENTS SET FORTH IN SUCH LETTER.

The following additional representations will be given by each purchaser of ODIs:

Representations relating to Securities which are offshore derivative instruments ("ODIs")

For the purposes hereof, the following terms shall have the following meanings:

(a) "**Non-Resident Indian**" means as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019, which, as of the date of this Offering Circular, means an individual resident outside India who is a citizen of India.

(b) "**Person**" as the term is defined in Section 2(u) of the Foreign Exchange Management Act, 1999 ("**FEMA**"), which, as of the date of this Offering Circular, includes:

(i) an individual;

(ii) a Hindu Undivided Family;

(iii) a company;

(iv) a firm;

(v) an association of persons or a body of individuals, whether incorporated or not;

(vi) every artificial juridical person, not falling within any of the preceding sub-clauses; or

(vii) any agency, office or branch owned or controlled by such person.

(c) "**Indian Resident**" means a person resident in India in terms of Section 2(v) of FEMA which, as of the date of this Offering Circular, includes:

(i) a person residing in India for more than one hundred and eighty-two days during the course of the preceding financial year but does not include:

(A) a person who has gone out of India or who stays outside India, in either case:

(1) for or on taking up employment outside India; or

(2) for carrying on outside India a business or vocation outside India; or

(3) for any other purpose, in such circumstances as would indicate his intention to stay outside India for an uncertain period;

(B) a person who has come to or stays in India, in either case, otherwise than:

(1) for or on taking up employment in India; or

(2) for carrying on in India a business or vocation in India; or

(3) for any other purpose, in such circumstances as would indicate his intention to stay in India for an uncertain period;

(ii) any person or body corporate registered or incorporated in India;

(iii) an office, branch or agency in India owned or controlled by a person resident outside India;

(iv) an office, branch or agency outside India owned or controlled by a person resident in India;

For the purposes of this definition, "**person resident outside India**" in terms of Section 2(w) of FEMA which, as of the date of this Offering Circular, means a person who is not resident in India;

(d) "**Appropriate Regulated**", as the term is defined in Regulation 2(1)(b) of the FPI Regulations, which, as of the date of this Offering Circular, means a person regulated by the securities market regulator or the banking regulator of home jurisdiction or otherwise, in the same capacity in which it proposes to make investments in India.

(e) "**Category I foreign portfolio investor**", as the term is defined in Regulation 5(a) of the FPI Regulations, which, as of the date of this Offering Circular, includes:

(i) Government and Government-related investors such as central banks, sovereign wealth funds, international or multilateral organizations or agencies including entities controlled or at least 75% directly or indirectly owned by such Government and Government related investor(s);

(ii) Pension funds and university funds;

(iii) Appropriately Regulated entities such as insurance or reinsurance entities, banks, asset management companies, investment managers, investment advisors, portfolio managers, broker dealers and swap dealers;

(iv) Entities from the FATF member countries, or from any country specified by the Central Government by an order or by way of an agreement or treaty with other sovereign Governments, which are:

(A) Appropriately Regulated funds;

(B) unregulated funds whose investment manager is Appropriately Regulated and registered as a Category I foreign portfolio investor:

Provided that the investment manager undertakes the responsibility of all the acts of commission or omission of such unregulated fund;

(C) university related endowments of such universities that have been in existence for more than five years;

(v) An entity (A) whose investment manager is from the FATF member country and such an investment manager is registered as a Category I foreign portfolio investor; or (B) which is at least seventy-five per cent owned, directly or indirectly by another entity,

eligible under sub-clause (ii), (iii) and (iv) above and such an eligible entity is from a FATF member country:

Provided that such an investment manager or eligible entity undertakes the responsibility of all the acts of commission or omission of the applicants seeking registration under this sub-clause.

Paragraph 2 under Part A of the Operational Guidelines clarifies that the phrase an entity "**from a FATF member country**" will mean that the entity has its primary place of business in a FATF member country and, if regulated, is Appropriately Regulated in a FATF member country.

(f) "**Investor Group**" as such term is defined under Regulation 22(3) of the FPI Regulations read with paragraph 1 under Part C of the Operational Guidelines, which, as of the date of this Offering Circular, shall include:

(i) in case of individual investors, the individual and his/her relatives, within the meaning of Section 2(77) of the Companies Act, 2013;

(ii) in case of other investors, all such entities having common ownership, directly or indirectly, more than 50% or common control.

For the purposes of this definition common control shall not be considered where:

(i) the holder is an Appropriately Regulated public retail fund;

(ii) the investors in the holder are public retail funds majority owned by Appropriately Regulated public retail fund on look through basis;

(iii) the holder is a public retail fund and the investment managers of the fund are Appropriately Regulated.

(g) "**Overseas Citizen of India**" as the term is defined under rule 2 of the Foreign Exchange Management (Non-debt Instruments) Rules 2019, which, as of the date of this Offering Circular, means an individual resident outside India who is registered as an Overseas Citizen of India Cardholder under Section 7 (A) of the Citizenship Act, 1955.

(h) "**Senior managing official**", for identification of beneficial owner means individual(s) as designated by the holder, who holds a senior management position and makes key decisions relating to the holder.

For the purposes hereof, the term "**holder**" shall mean (i) the holder of, or the counterparty to, the ODIs; or (ii) in relation to ODIs which are in the form of a note, security or similar instrument, a person/entity who has been approved by the JPMorgan Entity or any of its associates/affiliates (acting in its or their respective sole and absolute discretion) as a permitted holder of, or counterparty to, ODIs (which person/entity may include but is not limited to any unit trust, fund or investment scheme (howsoever described) under the Purchaser's management which transacts or proposes to transact with the JPMorgan Entity or its associates/affiliates in respect of any ODI, including but not limited to, each entity as may be specified from time to time by the JPMorgan Entity (each, an "**Approved Entity**"), where such Approved Entity is the holder of the ODI.

Each purchaser (the "**Purchaser**") of any Securities which are ODIs, as such term is defined for the purposes of the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019, and notifications, circulars, rules and guidelines of the Securities and Exchange Board of India issued from time to time as may be amended and supplemented from time to time (collectively referred to as the "**FPI Regulations**") shall be deemed to make the following acknowledgements, representations, warranties, undertakings and agreements in relation to the Securities as set forth below (and the applicable acknowledgements, representations, warranties, undertakings and agreements shall be set out in an Investor Letter of Representations for the benefit of the Dealer, the Issuer and the Guarantor (if applicable)).

Notwithstanding any agreements between the JPMorgan Entity and/or its associates/affiliates and the Purchaser or any regulatory rules applicable to the JPMorgan Entity or its associates/affiliates or to the Purchaser, in respect of ODIs held or otherwise entered into by the Purchaser or in respect of which the

Purchaser or an Approved Entity are a holder as at or after the date of this Offering Circular, the Purchaser represents, warrants, acknowledges, agrees and/or undertakes, as applicable, on behalf of itself and each holder that on each date on which an ODI has been issued, entered into, purchased or agreed to be purchased and at all times until the respective maturity or termination of each such ODI, for (i) the Purchaser, where it is the holder of the relevant ODI; or (ii) the Purchaser and on behalf of every Approved Entity which is a holder of the ODI:

(a) that each holder is not (i) an Indian Resident or (ii) a Non-Resident Indian or (iii) an Overseas Citizen of India (each of (i), (ii) and (iii), a "**Restricted Entity**");

(b) that each holder is:

(i) registered as a Category I foreign portfolio investor; or

(ii) eligible for registration as a Category I foreign portfolio investor;

(iii) an entity that has an investment manager from a Financial Action Task Force ("**FATF**") member country, and such investment manager has undertaken the responsibility of all the acts of commission or omission of the holder;

(c) that each holder is not a person/entity wherein:

(i) contribution of a single Restricted Entity is 25% or above of the total contribution in the corpus of the holder;

(ii) aggregate contribution of Restricted Entities is 50% or above of the total contribution in the corpus of the holder;

(iii) a Restricted Entity is in control (as defined below) of the holder, except where:

(A) the holder is an "offshore fund" for which a no-objection certificate has been provided by the Securities and Exchange Board of India ("**SEBI**") in terms of Securities and Exchange Board of India (Mutual Funds) Regulations, 1996; or

(B) the holder is controlled by investment managers (which are controlled and/ or owned by Restricted Entity) who are either (i) Appropriately Regulated in their home jurisdiction and registered with SEBI as non-investing foreign portfolio investor; or (ii) incorporated or setup under Indian laws and appropriately registered with SEBI.

For the purposes of this paragraph, an "investment manager" would include an entity performing the role of investment management or any equivalent role, including trustee.

For the purpose of this paragraph, "control" includes the right to appoint the majority of the directors or to control management or policy decisions exercisable by a person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements or in any other manner;

(d) that each holder agrees and undertakes to comply with the requirements set out in paragraph (c) above at all times and any breach in the conditions therein shall be rectified by the holder within a prescribed period (which, as of the date of this Offering Circular, means a period of 90 days) as may be permitted under relevant applicable laws (including, without limitation, any legislations, rules, regulations, notifications, circulars or guidelines), or, upon issue of any orders or directives, from time to time, from the date of occurrence of such breach. In case the breach is not rectified within this time period, the holder shall take all steps as may be required by the JPMorgan Entity, including, if required, to ensure that the ODI is terminated immediately and in the manner required by the JPMorgan Entity.

(e) that each holder:

(i) is a resident of a country whose securities market regulator is a signatory to International Organization of Securities Commission's Multilateral Memorandum of Understanding

(Appendix A Signatories) or a signatory to Bilateral Memorandum of Understanding with SEBI or in the case of a holder being Government or Government related investor, a resident of a country otherwise approved by the Government of India for the purposes of registration of FPIs; and;

(ii) where the holder is a bank, is a resident of a country whose central bank is a member of Bank for International Settlements, or is a central bank.

For the purposes of this paragraph, a "Bilateral Memorandum of Understanding with SEBI" shall mean a bilateral Memorandum of Understanding between SEBI and any authority outside India that, *inter alia*, provides for information sharing arrangements as specified under Section 11(2)(ib) of the SEBI Act, 1992;

(f) that each holder, as well as their underlying investor(s) contributing 25% or more of the corpus or identified on the basis of control, is not (a) mentioned in the Sanctions List notified by the United Nations Security Council; or (b) a resident of a country identified in the public statement of FATF as (i) a jurisdiction having a strategic Anti-Money Laundering or Combating the Financing of Terrorism deficiencies to which counter measures apply; or (ii) a jurisdiction that has not made sufficient progress in addressing the deficiencies or has not committed to an action plan developed with the FATF to address the deficiencies;

For the purpose of paragraphs (e) and (f) above, as of the date of this Offering Circular, "resident" may be determined on the basis of paragraph 2(i) under Part A of the Operational Guidelines which states that residency status may be ascertained from the place of incorporation/establishment through appropriate document or information such as any identification/ registration document issued by applicable regulator or the Income Tax authority;

(g) that the relevant ODIs do not violate any applicable laws (including, without limitation, any legislations, rules, regulations, notifications, circulars or guidelines), or, any orders or directives, which may be issued from time to time, including in relation to the eligibility and permissibility of each holder to transact in ODIs;

(h) that the relevant ODI has been purchased (and is being held by) or has been entered into by the holder as a principal for its own account and not as an agent, nominee, trustee or representative of any other person/entity and that the holder has not entered into any agreement or arrangement for the issuance of a back-to-back ODI against the relevant ODI;

(i) that each holder has not entered into the relevant ODI(s), or will not deal in the relevant ODI, with the intent of circumventing or otherwise avoiding any requirements applicable under any laws applicable in India (including, without limitation, the FPI Regulations and any restrictions with respect to subscriptions, issuances and/or other dealings of or in ODIs, directly or indirectly, by entities not being eligible to issue, subscribe to, deal in or otherwise be involved in ODIs, or laws governing dealing in the securities market, including the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, Securities and Exchange Board of India (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Markets) Regulations, 2003 and Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011, each as amended from time to time, together with any modifications thereto or re-enactments thereof);

(j) that each holder is a fit and proper person based on the criteria specified in Schedule II of the Securities and Exchange Board of India (Intermediaries) Regulations, 2008;

(k) the holder undertakes and agrees to provide such information and documents (including in relation to any procedures on identification and verification of identity) as may be requested by the JPMorgan Entity or its associates/ affiliates from time to time in relation to its beneficial owners and any intermediate shareholder/ owner entity (as may be applicable), which includes but is not limited to the below:

(i) where the holder is a company, person(s), who whether acting alone or together, or through one or more person, have controlling ownership interest or exercises control through other means;

(ii) where the holder is a trust, beneficiaries/ persons exercising effective control with 15% or more interest in the holder, along with information and documents, if required, on author of the trust and the trustee;

(iii) where the holder is a partnership firm, any person who, whether acting alone or together, or through one or more person, has ownership of/entitlement to more than 15% of capital or profits of the partnership. In case the holder has a General Partner/ Limited Partnership structure, identification of beneficial owner will be on ownership or entitlement basis and control basis;

(iv) where the holder is an unincorporated association or a body of individuals, a person who, whether acting alone or together, or through one or more person, has ownership of or entitlement to more than 15% of the property or capital or profits of such association or body of individuals.

For avoidance of doubt, in case of investment by any fund, sub-fund, share class or similar structure, the information required to be provided under this paragraph shall extend to the specific fund, sub-fund, share class, or portfolio, or any other similar structure, investing in India;

(l) the holder agrees that in respect of holders coming from high risk jurisdictions (as designated by the JPMorgan Entity at its own discretion) the materiality threshold set out above for identification of beneficial owner may be reduced to 10%. The holder also undertakes and agrees that where no material shareholder/ beneficial owner is identified applying the thresholds under paragraph (l), the holder shall provide such information and documents (including in relation to any procedures on identification and verification of identity) as may be requested by the JPMorgan Entity or its associates/ affiliates including in relation to the natural person who holds the position of senior managing official of the holder, the investment manager or the investment adviser or the person controlling investments, or, the person who controls the operations;

(m) that each holder shall not, and shall ensure that none of its respective nominees, associates or affiliates shall sell, transfer, assign, novate or otherwise dispose of any ODI or any interest in any ODI to, or enter into any agreement or arrangement for the issuance of back-to-back ODIs against the relevant ODI or enter into an agreement or arrangement with respect to any of the foregoing (each, a "**Transfer**") with, any person/entity which is not eligible to, directly or indirectly, issue, subscribe to, deal in or otherwise be involved in ODIs . Save for any Transfer(s) to an Approved Entity or Pre-Approved Transferee (as defined below) pursuant to paragraph (o) below, prior to any Transfer being undertaken in respect of any ODI:

(i) the prior written consent of the JPMorgan Entity and/or its associates/affiliates shall be obtained by the holder and;

(A) the holder shall issue a written notice ("**Transfer Notice**") to the relevant Issuer in such form as the JPMorgan Entity may determine for the purpose of obtaining such prior written consent; and

(B) the JPMorgan Entity and/or its associates/affiliates shall have absolute discretion in granting or withholding such prior written consent;

(ii) upon receipt of the Transfer Notice, the JPMorgan Entity, its associates and affiliates shall have the right to require the person/entity to whom the Transfer is proposed to be made ("**Proposed Transferee**") to provide, and the relevant holder shall procure that the Proposed Transferee promptly provides the JPMorgan Entity or the JPMorgan Entity's associates/affiliates (as the case may be) with all such information that the JPMorgan Entity or its associates/affiliates (as the case may be) may require with respect to its or their client on-boarding programme, policies or procedures, anti-money laundering programme, or other such programme (as the case may be) (collectively, "**Client Identification Programme**"); and

(iii) the Proposed Transferee shall issue a written undertaking ("**Transferee Undertaking**") to the relevant Issuer or its associates/affiliates in such form as the JPMorgan Entity or its associates/affiliates may determine.

For avoidance of doubt it is clarified that this paragraph shall not apply: (i) in the event the Transfer is pursuant to a direct sale and purchase of the ODIs to and by the JPMorgan Entity or its associates/affiliates, or (ii) to the registration on behalf of the holder of any ODI in the name of any custodian, sub-custodian or nominee. Further, a Proposed Transferee who has obtained the written consent of the JPMorgan Entity or its associates/affiliates in respect of a Transfer pursuant to this paragraph shall for the purposes hereof hereafter constitute a "**Pre-Approved Transferee**";

(n) that in the case where a holder or its nominees, associates or affiliates sell, transfer, assign, novate or otherwise dispose of any ODI, or any interest in any ODI, to, or enter into any back-to-back ODI or enter into an agreement or arrangement with respect to any of the foregoing with, an Approved Entity or a Pre-Approved Transferee (each, an "**Approved Entity/Pre-Approved Transferee Transfer**"), such holder shall issue a written notice to the JPMorgan Entity in such form as the JPMorgan Entity may determine within two (2) Hong Kong business days after the Approved Entity/Pre-Approved Transferee Transfer;

(o) that the JPMorgan Entity and its associates/affiliates are authorised to provide information in their possession regarding the holder, each Proposed Transferee, the nominees or associates/affiliates of any holder and/or the Proposed Transferee, each ODI and any breach of the terms of this notice to any Indian governmental or regulatory authorities (each, an "**Authority**") as the JPMorgan Entity or its associates/affiliates reasonably deems necessary or appropriate in order to comply with regulations or requests of such Authority from time to time, including but not limited to disclosures in periodic reportings made by the JPMorgan Entity or its associates/affiliates to any Authority;

(p) that in the case where a holder changes investment managers/advisers/sub-managers/sub-advisers (each, an "**Manager/Adviser Transfer**"), such holder shall issue a written notice to the JPMorgan Entity in such form as the JPMorgan Entity may determine thirty (30) Hong Kong business days prior to the Manager/Adviser Transfer;

(q) that each holder shall ensure that investment (including, synthetically through ODIs) by such holder, whether directly in its own name as a foreign portfolio investor or as an ODI subscriber, or by entities in the Investor Group (as defined herein) to which the holder belongs, in equity shares of each Indian company is below ten per cent. of the total paid-up equity capital on a fully diluted basis of the company and the holder shall provide information in this regard to the JPMorgan Entity as and when and in such form and manner as may be required;

(r) that the holder will and shall procure the nominees or associates/affiliates of the holder to, provide the JPMorgan Entity or its associates/affiliates (as the case may be) promptly with such additional information that the JPMorgan Entity or its associates/affiliates (as the case may be) reasonably deems necessary or appropriate in order to comply with regulations or requests of any Authority from time to time;

(s) that non-compliance with, or breach, violation or contravention of, any terms or obligations under this notice (including, without limitation, any restrictions with respect to a Transfer) ("**ODI Holder Obligations**") may result in non-compliance with, or breach, violation or contravention of, applicable laws, rules, regulations, governmental orders or directions, or in regulatory sanctions or other actions against the JPMorgan Entity and/or its associates/affiliates and may cause irreparable harm to the JPMorgan Entity and/or its associates/affiliates. Accordingly, the Purchaser and each holder further acknowledge that, in the event of any non-compliance with, or breach, violation or contravention of any ODI Holder Obligations by the holder, the JPMorgan Entity and/or its associates/affiliates may notify any Authority of any such breach, violation or contravention and exercise any rights and take any measures available to it under the terms of any ODIs or this notice, or any other measures to prevent, avoid, mitigate, remedy or cure such non-compliance, breach, violation or contravention, including but not limited to termination of the ODIs by the JPMorgan Entity or its associates/affiliates;

(t) that this notice replaces and subsumes any previous notices executed by the Purchaser and/or each holder;

(u) that the JPMorgan Entity and/or its associates/affiliates may, to the extent required to comply with applicable laws, regulations, notifications, circulars, rules, guidelines, clarifications, directions, orders and/or decrees issued by a governmental or regulatory authority, issue a written notice to the holder, unilaterally amending the terms of this notice and such written notice shall be effective and deemed agreed and accepted by the holder when issued;

(v) that it shall promptly notify the JPMorgan Entity or its associates/affiliates should any of the representations, warranties, acknowledgements, agreements and undertakings and material information (including any direct or indirect change in structure or ownership or control) given by it, whether in respect of itself or otherwise, be in breach, change or no longer hold true after the day on which such representation, warranty, acknowledgement, agreement, undertaking or information was given;

(w) that all the provisions of this notice shall survive the termination of any ODI which is the subject matter of this notice and that the terms of this notice shall be deemed to be restated upon entering into/issuance of each ODI;

(x) that in the event a holder is an Approved Entity, it is duly authorised to provide and make the representations, warranties, acknowledgements, agreements and undertakings in paragraphs (a) to (x) on behalf of each such Approved Entity and these representations, warranties, agreements and undertakings shall be binding and enforceable against the Approved Entity;

(y) that if at any time, any provision of this notice is or becomes illegal, invalid or unenforceable in any respect under any law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions nor the legality, validity or enforceability of such provision under the law of any other jurisdiction will in any way be affected or impaired.

Investor Indian Access Products tax letter

Prior to agreeing to purchase any Securities which make direct or indirect reference to securities in India ("**Indian Access Products**") each purchaser (each such purchaser, the "**Purchaser**") of such Securities (whether acting in its capacity as principal, or acting as agent for and on behalf of one or more accounts (each, an "**Account**" and collectively, "**Accounts**") may be required to accept and acknowledge, whether by executing a letter of representation or otherwise, that JPMorgan Chase & Co. and/or any of its affiliates (together, "**JPMorgan**") may enter into hedging transactions in connection with such Indian Access Products and may become liable for or subject to claim of taxes and upon, maturity, settlement or unwinding (in whole or in part) of such Indian Access Products, JPMorgan will deduct from the redemption value, payable under the Indian Access Products, an amount equal to the amount of taxes as the Calculation Agent determines in its sole discretion to be attributable to the relevant transactions.

If the purchaser is acquiring instruments which directly or indirectly reference securities listed in the People's Republic of China ("**PRC Derivative Instruments**"), then prior to such acquisition, the purchaser will be required to execute and deliver to the Dealer or any of its affiliates a letter of representations, warranties and undertakings with respect to such PRC Derivative Instruments which shall contain representations, warranties and undertakings substantially in the form set out below:

Representations relating to PRC Derivative Instruments

Each holder (whether acting in its capacity as principal, or acting as agent for and on behalf of one or more principal entities or accounts as notified in writing to, and agreed by the Issuer, Dealer, Guarantor or one of their respective parents, affiliates or subsidiaries ("**JPMorgan**") from time to time (each, an "**Account**" and collectively, "**Accounts**")), may, from time to time, request JPMorgan to issue certain instruments and/or enter into certain transactions directly or indirectly referencing securities listed in the People's Republic of China (excluding Hong Kong, Macau and Taiwan) ("**PRC**"), including without limitation, instruments or transactions referencing futures and/or options over such securities and/or indices referencing such securities (together, whether or not subsequently terminated, redeemed, settled or unwound, in whole or in part, "**PRC Derivative Instruments**", and such underlying securities, "**PRC**

Reference Securities" and each of the issuers, sponsors, counterparties and other relevant parties of such PRC Reference Securities, a "**PRC Reference Issuer**").

The holder (whether acting on its own behalf or acting jointly and as agent on behalf of each Account), acknowledges, represents, warrants and agrees (all of which shall be deemed to be repeated each time the holder deals in any PRC Derivative Instrument) that:

(i) to the extent a PRC Derivative Instrument makes reference to PRC Reference Securities trading solely through "**China Connect Service**" (which means the securities trading and clearing links programme developed by the relevant PRC exchange(s), The Stock Exchange of Hong Kong Limited, China Securities Depository and Clearing Corporation and Hong Kong Securities Clearing Company Limited.), it is not a legal entity incorporated or registered in the PRC. In relation to all other PRC Derivative Instruments:

(a) it is not resident, incorporated or organised in PRC (a "**Domestic Investor**"); and

(b) it is not purchasing or entering into the PRC Derivative Instruments as a trustee, fiduciary or otherwise on behalf of a PRC resident, a PRC incorporated entity or domestic entity or any affiliate thereof as defined under the PRC Regulations on Foreign Exchange Administration Decree No. 532; no such entity shall be the beneficial owner or holder of the PRC Derivative Instruments, and all amounts paid or to be paid for or in relation to the PRC Derivative Instruments do not and will not involve monies financed by or sourced from any Domestic Investor in contravention of the laws and regulations of the PRC;

(ii) prior to any transfer or disposal of the legal or beneficial interest in any PRC Derivative Instrument to, or entry into any back-to-back derivative transactions or agreements with respect to any PRC Reference Securities with, any person or entity (other than to another Account) (each, a "**Transfer**"), the holder shall:

(a) obtain JPMorgan's prior written consent, which may be provided or refused in JPMorgan's absolute discretion;

(b) provide all information in connection with the Transfer as may be required by JPMorgan (including but not limited to information relating to client onboarding, anti-money laundering and related requirements); and

(c) ensure the proposed transferee is provided with a copy of the terms relating to the PRC Derivative Instrument, and procure the proposed transferee to promptly provide JPMorgan with a written and signed undertaking in favour of JPMorgan to assume all the rights, liabilities, duties and obligations of the holder (as transferor) in respect of any PRC Derivative Instrument being transferred.

For the avoidance of doubt, if the Transfer is pursuant to a buy-back of PRC Derivative Instruments by JPMorgan, the provisions of this paragraph (ii) shall not apply to such Transfer;

(iii) no sale of PRC Derivative Instruments shall be solicited by it in the PRC and it shall not engage in any marketing activity for PRC Derivative Instruments in the PRC;

(iv) to the extent that a PRC Derivative Instrument makes reference to PRC Reference Securities that is/are ChiNext Shares (being any securities listed and admitted to trading on the ChiNext market operated by the Shenzhen Stock Exchange which may be eligible for trading by Hong Kong and international investors through the China Connect Service) and/or STAR Shares (being any securities listed on the Science and Technology Innovation Board of Shanghai Stock Exchange which may be eligible for trading by Hong Kong and international investors through the China Connect Service), it and each Account is, and shall continue to be, a "Professional Investor" (as defined under categories (a)-(i) of the definition for "professional investor" in Part 1 of Schedule 1 to the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong));

(v) it will comply with all applicable laws and regulations in each jurisdiction in which it deals in PRC Derivative Instruments;

(vi) JPMorgan may:

(a) provide information in connection with any PRC Derivative Instrument, its investor, proposed transferee, their respective nominees or associates/affiliates and any breach of this letter to any governmental entity, regulatory authority or other similar or related authority ("**Authority**") as JPMorgan deems reasonably necessary or appropriate in order to comply with regulations, internal policy and guidelines, or requests of such Authority from time to time, including but not limited to disclosures in periodic reporting to any Authority and;

(b) to the extent permissible by applicable laws and regulations, take any measures available to it under the terms of the PRC Derivative Instruments or otherwise, including but not limited to (1) requests for additional information and/or (2) termination of the PRC Derivative Instruments;

(vii) it is duly authorised and has the full power to enter into this letter and make binding representations, warranties and agreements set forth herein (whether acting in its capacity as principal or as agent on behalf of the Accounts);

(viii) before acquiring any PRC Derivative Instruments, it has or will have all the information that it believes is necessary and has conducted its own investigation in connection with its purchase of such PRC Derivative Instruments. JPMorgan is not responsible for determining the legality or suitability of such investment by it;

(ix) JPMorgan may from time to time have a direct or indirect investment in, or a banking or other business relationship with, the PRC Reference Issuer, and, in the course of such relationships, JPMorgan may come into possession of material, non-public information. JPMorgan is not under any obligation to inform the holder either of the nature of or the fact that they may be in possession of such information; and

(x) it will indemnify and hold harmless JPMorgan as well as their respective officers, director, employees, advisors, agents and controlling persons (each an "**Indemnified Person**") from and against all costs, expenses, losses, damages, liabilities, demands, charges, expenses, actions and claims of any kind or nature whatsoever (including any legal or other costs and expenses reasonably incurred by JPMorgan in good faith) ("**Losses**") when and as incurred by such Indemnified Person, resulting from or arising out of or related to a breach of any representation, warranty or agreement made in this letter, save for where such Losses are caused by such Indemnified Person's gross negligence, willful default or fraud; and for the avoidance of doubt, such indemnity shall survive the termination of the transaction to which the relevant PRC Derivative Instrument relates and, if the holder acts as agent on behalf of the Account, any termination of relationship between the holder and the relevant Account.

Notwithstanding anything else in these representations and warranties:

(a) nothing in these representations and warranties shall exclude or restrict any duty or liability which a party may not exclude under any applicable law or regulation; and

(b) neither the holder nor JPMorgan shall be responsible or have any liability for any special, indirect, punitive, incidental, or consequential damages or loss arising out of or in connection with this letter, even if advised of the possibility thereof.

Each holder shall immediately inform JPMorgan of any addition or removal of any Account it acts as agent for and on behalf of, from time to time. Each holder warrants that each additional Account shall be bound by the terms of this letter as if it were a party hereto.

If the purchaser is acquiring instruments which directly or indirectly reference securities listed in Taiwan ("**Taiwan Access Products**"), then prior to such acquisition, the purchaser will be required to execute and deliver to the Dealer or any of its affiliates a letter of representations, warranties and undertakings with respect to such Taiwan Access Products which shall contain representations, warranties and undertakings substantially in the form set out below:

Representations relating to Taiwan Access Products

Each holder (whether acting in its capacity as principal, or acting as agent for and on behalf of one or more principal entities or accounts as notified in writing to, and agreed by the Issuer, Dealer, Guarantor or one of their respective parents, affiliates or subsidiaries ("**JPMorgan**") from time to time (each, an "**Account**" and collectively, "**Accounts**")), may, from time to time, request JPMorgan to issue certain instruments and/or enter into certain transactions directly or indirectly referencing securities listed in the Taiwan (together, whether or not subsequently terminated, redeemed, settled or unwound, in whole or in part, the "**Taiwan Access Products**").

The holder (whether acting on its own behalf or acting jointly and as agent on behalf of each Account), acknowledges, represents, warrants and agrees at all times (all of which shall be deemed to be repeated each time the holder deals in any Taiwan Access Product) that:

(i) to the extent that it is a non-Taiwan domiciled collective investment scheme, it is (A) a publicly offered fund domiciled outside Taiwan and outside the People's Republic of China (excluding Hong Kong and Macau) ("**PRC**") ("**Non-PRC Fund**") the management company of which is (1) not incorporated in the PRC and (2) not controlled, or more than thirty percent (30%) directly or indirectly owned, by persons with household registration in, or entity(ies) incorporated in, the PRC (collectively, "**PRC Person**") (without regard to the percentage of the investments by PRC Persons in the Non-PRC Fund); (B) a publicly offered Non-PRC Fund the management company of which is (1) incorporated in the PRC, or (2) incorporated outside the PRC and controlled or more than thirty percent (30%) directly or indirectly owned by PRC Person(s), but which does not have investments by PRC Persons exceeding 30% of the Non-PRC Fund's assets under management; or (C) is a privately placed Non-PRC Fund and is not controlled or more than thirty percent (30%) directly or indirectly owned by PRC Person(s);

(ii) to the extent that it is a corporation that is not a non-Taiwan domiciled collective investment scheme, it is a corporation incorporated outside Taiwan and outside the PRC and it is not entering into the Taiwan Access Product utilising funds sourced from the PRC or Taiwan;

(iii) when entering into a Taiwan Access Product, it is not (1) a shareholder holding directly or indirectly through nominees more than ten percent (10%) of the shares issued by, or a director, supervisor or manager of, a Taiwan company the shares of which are traded on the Taiwan Stock Exchange or Taipei Exchange which are the underlying of the Taiwan Access Product ("**Insider**") or (2) a person or entity which would be deemed to be a "nominee" of an Insider;

(iv) it authorises, instructs and empowers JPMorgan to submit all such information and file all such reports with the regulatory authorities of Taiwan regarding it, the Taiwan Access Products, or otherwise as may be required by the Taiwan Regulations Governing Investments in Securities by Overseas Chinese and Foreign Nationals or otherwise as may reasonably be requested by Taiwan authorities;

(v) it undertakes and agrees that it will provide JPMorgan or, to the extent permitted by the relevant governmental or regulatory authority, provide directly to such governmental or regulatory authority, such additional information, from time to time, that JPMorgan deems necessary or appropriate in order to comply with any request by any governmental or regulatory authority or the court of competent authority or if so required under application regulations in Taiwan;

(vi) it waives any objection it may have with respect to sub-paragraphs (iv) and (v) above on the grounds of confidentiality or otherwise;

(vii) it has the full power, authority and capacity to enter into this letter and make the binding representations, warranties and undertakings set forth herein (whether acting in its capacity as principal or as agent on behalf of the Accounts); and

(viii) it will indemnify and hold harmless JPMorgan as well as their respective officers, director, employees, advisors, agents and controlling persons (each an "**Indemnified Person**") from and against all costs, expenses, losses, damages, liabilities, demands, charges, expenses, actions and claims of any kind or nature whatsoever (including any legal or other costs and expenses reasonably incurred by JPMorgan in good faith) ("**Losses**") when and as incurred by such Indemnified Person, resulting from or arising out of or related to a breach of any representation, warranty or agreement made in this letter, save for where such Losses are caused by such

Indemnified Person's gross negligence, willful default or fraud; and for the avoidance of doubt, such indemnity shall survive the termination of this letter.

Notwithstanding anything else in these representations and warranties:

(a) nothing in these representations and warranties shall exclude or restrict any duty or liability which a party may not exclude under any applicable law or regulation; and

(b) neither the holder nor JPMorgan shall be responsible or have any liability for any special, indirect, punitive, incidental, or consequential damages or loss arising out of or in connection with this letter, even if advised of the possibility thereof.

Each holder shall immediately inform JPMorgan of any addition or removal of any Account it acts as agent for and on behalf of, from time to time. Each holder warrants that each additional Account shall be bound by the terms of this letter as if it were a party hereto.

Each holder will be deemed to have given the following additional representations in relation to Securities for which physical settlement of Shares is specified to be applicable in the relevant Pricing Supplement:

Representations relating to Securities that may be settled by Physical Settlement of Shares:

In relation to the purchase by you of any Securities that may be settled by way of Physical Settlement of underlying shares of a company ("**Company**"), you (where you are not an individual, including, for the purpose of the representations below, each of your affiliates) are deemed to represent to each of the Issuer, the Guarantor and the Dealer and, in any Reference Asset Transfer Notice ("**Notice**") to be provided by you prior to the Physical Settlement to you of any shares, you will represent, as of the date of the Notice and as of the date on which the shares are to be delivered, as follows (subject to certain minor changes in the terms of the Notice as the context requires) (an "**Equity Certification**"):

(i) you are not aware of any non-public information that would likely have a significant effect on the price of such shares;

(ii) you will not take any action in connection with such shares with the express intention of affecting the price (including the value) of the shares (including having an intention to raise, depress, peg or stabilise the price of such shares) or of creating a false or misleading appearance of active trading in the shares of the Company;

(iii) you are fully responsible for complying with, and will at all times fully comply with, all applicable laws and regulations in all applicable jurisdictions with regard to your Share Exposure (as defined below), including, without limitation, those obligations with regard to disclosure and reporting under all relevant laws and rules governing the listing of such shares in the Company, and, in entering into any transaction with respect to such shares (including purchasing the Securities), you will not breach any provisions of any applicable laws and regulations and exchange rules in all applicable jurisdictions;

(iv) you will not attempt to, directly or indirectly, apply the Share Exposure to direct or cause the direction of the management and policies of the Company or otherwise influence the Company (which shall not, for the avoidance of doubt, prohibit the mere voting of any shares you hold);

(v) you are acting for your own account and you have made your own independent decision to purchase the Securities, including as to whether an investment in the Securities is appropriate or proper for you based upon your own due diligence and judgment and upon advice from such tax, accounting, regulatory, legal and financial advisers as you have deemed necessary, and not upon any view expressed by the Issuer, the Guarantor, the Dealer or any of their affiliates; and

(vi) [*where you are not an individual*] you have not been, at all times beginning at least three months prior to the date of purchase by you of the Securities, and will not be, at all times up to, and including the date of the Notice and the date on which the shares are delivered to you (if applicable), an Affiliate of the Company (as such phrase is defined below).

For the purpose of the above:

"**Share Exposure**" means the ownership of any interest (beneficial or otherwise) in such shares of the Company, including any direct ownership interest, any right to vote or direct the voting of such shares, and any interest arising out of any transaction, contractual relationship or position (including but not limited to any derivative transaction) pursuant to which you are entitled to receive an economic benefit based on the value of the shares in the Company; and

"**Affiliate of the Company**" means an entity that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Company."

Saudi Arabia LEPW Investor Agreement Letter

If the relevant Pricing Supplement specifies that (i) "Saudi Arabia LEPW Provisions" are applicable and further that (ii) "Saudi Arabia LEPW Investor Agreement Letter" is applicable, purchasers and subsequent transferees of such Warrants ("**Saudi Arabia LEPWs**") will be required to execute and deliver to the Dealer for the benefit of the Dealer, the relevant Issuer and the Guarantor (if applicable) (together with their respective affiliates and control persons) (collectively, "**JPMorgan**") an approved investor letter of representations, having the terms described below (the "**Saudi Arabia LEPW Investor Agreement Letter**") prior to agreeing to purchase any such instruments.

The Saudi Arabia LEPW Investor Agreement Letter will be in the form approved by the Dealer, and shall (unless otherwise required by the Dealer in relation to any particular Warrants) contain certain representations, warranties, consents, undertakings, indemnities and other terms, including that the purchaser (for the purposes of this letter, the "**Holder**"):

(a) is aware that:

(i) if it enters into or acquires a Saudi Arabia LEPW, then JPMorgan may enter into hedging activity (the "**Related Hedging Agreement(s)**"), including by purchasing a note referencing the value of Shares listed in the Kingdom of Saudi Arabia ("**Saudi Shares**") that requires certain notifications to be made to the Capital Market Authority of the Kingdom of Saudi Arabia ("**CMA**"); and

(ii) the CMA regulates securities activity in Saudi Arabia and that any hedging activity of JPMorgan in respect of Saudi Arabia LEPWs or Related Hedging Agreement(s) may be subject to the resolutions, regulations and decisions of the CMA from time to time (the "**CMA Rules**");

(b) understands and acknowledges that the CMA Rules may require JPMorgan to provide the CMA with certain details regarding the Saudi Arabia LEPWs or the Related Hedging Agreement(s), including the full legal name of the ultimate beneficiary of each Saudi Arabia LEPW, its country of origin, the names and quantities of the underlying security, as well as any other information requested by the CMA from time to time (the "**CMA Required Information**"), and undertakes to provide JPMorgan with any CMA Required Information prior to the purchase of any Saudi Arabia LEPW (or earlier if requested by JPMorgan) and at any time thereafter if requested to do so by JPMorgan, together with any changes or amendments to the CMA Required Information prior to such change or amendment taking effect;

(c) consents to JPMorgan providing the CMA Required Information to the CMA (at such time as JPMorgan determines is appropriate in the circumstances);

(d) represents and warrants to JPMorgan on the date of purchase of a Saudi Arabia LEPW that the CMA Required Information provided to JPMorgan is accurate, complete and not misleading;

(e) agrees that it will not transfer, sell, assign, novate or otherwise dispose of (in each case, a "**Transfer**") its legal or beneficial interest in the Saudi Arabia LEPW to any person or entity without the express prior written consent of JPMorgan, and acknowledges and agrees that any consent given by JPMorgan to a Transfer will be conditional on, among other things, the proposed transferee providing JPMorgan with the same undertakings, consents, representations and warranties and acknowledgements as contained in the Saudi Arabia LEPW Investor Agreement Letter, in a form acceptable to JPMorgan, and will indemnify JPMorgan for any direct or indirect loss, costs or expenses to or claim against JPMorgan arising pursuant to its failure to comply with this paragraph;

(f) acknowledges that, in the event of a failure by the Holder to comply with the paragraph immediately above, JPMorgan may terminate the Saudi Arabia LEPW to which such failure relates in its sole and absolute discretion;

(g) acknowledges that the CMA reserves the right to instruct JPMorgan in relation to any Saudi Arabia LEPW, including imposing qualitative or quantitative restrictions or requirements on hedging activity corresponding to any Saudi Arabia LEPW purchased by the Holder, and that accordingly, JPMorgan may be obliged to give effect to such restrictions or requirements and may do so in such manner as JPMorgan deems appropriate in the circumstances, which may include terminating or amending the terms and conditions of the Saudi Arabia LEPWs in its sole and absolute discretion;

(h) acknowledges and agrees that to the extent that it has entered into any arrangements in relation to one or more Saudi Arabia LEPWs that would result in a person or entity other than the Holder ("**Third Party**") being the "Ultimate Beneficiary" (for the purposes of the resolutions, regulations and decisions of the CMA from time to time (the "**CMA Rules**")) in respect of any Saudi Shares held by JPMorgan in connection with hedging of the relevant Saudi Arabia LEPW, it will promptly notify JPMorgan of the same and will provide JPMorgan with any CMA Required Information in connection with such Third Party, and in particular, agrees that it will, or will procure that such Third Party will, notify JPMorgan of such Third Party's National Identification Number (a unique identifying number as issued by the Saudi Stock Exchange (*Tadawul*)) ("**NIN**") or, if such Third Party does not have a NIN, procure that such Third Party obtains a NIN prior to purchasing or becoming a transferee of any interest in the relevant Saudi Arabia LEPW;

(i) agrees to notify JPMorgan promptly if the Holder and/or any Third Party does not have a NIN, in which case JPMorgan may, in its sole and absolute discretion, assist the Holder and/or such Third Party in obtaining a NIN;

(j) agrees to indemnify JPMorgan for any losses arising out of or in connection with its failure to comply with any of its obligations under paragraphs (h) and (i) above;

(k) acknowledges and agrees that to the extent JPMorgan holds any Saudi Shares in connection with hedging the relevant Saudi Arabia LEPW, and (1) unless otherwise notified by the Holder pursuant to paragraph (h) above, JPMorgan will treat the Holder as being the "Ultimate Beneficiary" (for the purposes of the CMA Rules) in respect of such Saudi Shares or (2) where notified of the interest of a Third Party in accordance with paragraph (f) above, JPMorgan will treat such Third Party as being the "Ultimate Beneficiary" (for the purposes of the CMA Rules) in respect of such Saudi Shares. In each case: (i) any voting rights in relation to any such Saudi Shares will be exercised by the relevant JPMorgan entity which holds such Saudi Shares in its sole discretion without regard to instructions from the Holder; (ii) to the extent the Holder has received any amounts under a Saudi Arabia LEPW, neither the Holder nor, where the "Ultimate Beneficiary" for the purposes of the CMA Rules is an entity other than the Holder, such Ultimate Beneficiary, shall have any claim or entitlement to any Saudi Shares (or any proceeds arising out of or resulting from any disposal of or referable to such Saudi Shares) in respect of the relevant amount; (iii) the Holder's entitlement to receive, and JPMorgan's obligation to pay any amounts in respect of the relevant Saudi Arabia LEPW shall be extinguished to the extent that the Holder or the "Ultimate Beneficiary" (for the purposes of the CMA Rules) in relation to the Saudi Shares referable to such Saudi Arabia LEPW or a related hedging arrangement in respect of the Saudi Arabia LEPW (the "**Underlying Assets**") has, from time to time, recovered any amounts from sale, appropriation or a claim against or otherwise out of any Underlying Assets which might be held by JPMorgan; and (iv) JPMorgan will not have any liability to the Holder (or, where the "Ultimate Beneficiary" for the purposes of the CMA Rules is a Third Party, such Ultimate Beneficiary) in respect of or arising out of JPMorgan's (or the relevant JPMorgan entity's) management and operation of the Holder's (or, if applicable, the Third Party's) NIN where the Ultimate Beneficiary's interest in such Saudi Shares is recorded or held;

(l) acknowledges that nothing in the Saudi Arabia LEPW Investor Agreement Letter shall oblige JPMorgan to offer any Saudi Arabia LEPW;

(m) represents and warrants that the purchase by it of any Saudi Arabia LEPW and the performance by it of any obligations in relation to such Saudi Arabia LEPW or the Saudi Arabia LEPW Investor Agreement Letter is in compliance with the CMA Rules, and would not cause JPMorgan to be in breach of the CMA Rules; and in particular, it is not purchasing any Saudi Arabia LEPW for, on behalf of, or for the benefit of or for the account of any person or entity that is a Qualified Foreign Financial Institution, a citizen of a Gulf Co-Operation Council ("**GCC**") State or a foreign investor resident in the Kingdom of Saudi Arabia (an "**Ineligible Investor**") or, where the Holder is a GCC fund manager, the accounts for the benefit of whom the Holder has purchased any Saudi Arabia LEPW with JPMorgan is or are not a person or entity that is an Ineligible Investor, in each case in accordance with the conditions and requirements of resolution of the Board of Commissioners of the CMA dated 11/10/1436H corresponding to 27/7/2015G as restated in the CMA's circular dated 19 December 2016 regarding the approval for Authorised Persons to enter into Swap Agreements (as may be amended from time to time);

(n) the Holder is deemed to repeat the undertakings, consents and representations and warranties, set out in paragraphs (b) – (m) (inclusive) above in respect of each Saudi Arabia LEPW at all times until it terminates in accordance with its terms; and

(o) the Holder agrees to indemnify and hold harmless JPMorgan as well as its respective officers, director, employees, advisors, agents and controlling persons (each, an "**Indemnified Person**") from and against any and all losses, claims, damages, judgments, liabilities and expenses, including attorneys' fees and expenses (including the cost of any investigation and preparation), duties and taxes, joint or joint and several, when and as incurred by such Indemnified Person, resulting from or arising out of or related to breach of any representation, warranty, agreement or undertaking made in this letter by it on its own behalf.

Transfers of Swiss Certificates (UBS-cleared)

Swiss Certificates (UBS-cleared) are held with UBS Switzerland AG and not cleared through any clearing system. Swiss Certificates (UBS-cleared) may only be acquired by, transferred to and held by Holders having a securities account with UBS Switzerland AG or holding in a securities account with another provider which, in turn, has a securities account with UBS Switzerland AG. Any transfers or purported transfers of Swiss Certificates (UBS-cleared) will be in accordance with the terms and conditions (including any related requirements, restrictions and prohibitions) determined by UBS Switzerland AG (or, if applicable, the relevant institution other than UBS Switzerland AG where the Holder maintains a securities account), and the Issuer and Product Provider have no responsibility therefor and shall have no liability for any losses suffered by Holders or others in relation to failed or delayed transfers or other consequences of a transfer. References to UBS Switzerland AG include any affiliates of UBS Switzerland AG which may assume the relevant obligations described hereunder pursuant to the terms of the SPI Agreement and/or Custody Agreement, as applicable. References to the Product Provider mean J.P. Morgan Securities plc or any affiliate of J.P. Morgan Securities plc which assumes the duties of Product Provider under the terms of the SPI Agreement.

CERTAIN ERISA CONSIDERATIONS

The U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), imposes certain requirements on "employee benefit plans" (as defined in Section 3(3) of ERISA and subject to Title I of ERISA), including entities such as collective investment funds and separate accounts whose underlying assets include the assets of such plans and on those persons who are fiduciaries with respect to such plans. Investments by such plans are subject to ERISA's general fiduciary requirements, including the requirement of investment prudence and diversification and the requirement that such plan's investments be made in accordance with the documents governing such plan. The prudence of a particular investment must be determined by the responsible fiduciary of such plan by taking into account such plan's particular circumstances and all of the facts and circumstances of the investment including, but not limited to, the matters discussed above under "*Risk Factors*" and the fact that in the future there may be no market in which such fiduciary will be able to sell or otherwise dispose of the Securities.

Section 406 of ERISA and Section 4975 of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), prohibit certain transactions involving the assets of employee benefit plans (as defined in Section 3(3) of ERISA and subject to Title I of ERISA) as well as those plans that are not subject to ERISA but which are defined in Section 4975(e)(1) of the Code and subject to Section 4975 of the Code, such as individual retirement accounts and entities part or all of the assets of which constitute assets of any such employee benefit plan or plan by reason of Department of Labor Regulation Section 2510.3-101, Section 3(42) of ERISA or otherwise (collectively, "**Plans**") and certain persons (referred to as "**parties in interest**" or "**disqualified persons**") having certain relationships to such Plans, unless a statutory or administrative exemption is applicable to the transaction. A party in interest or disqualified person who engages in a prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and Section 4975 of the Code.

U.S. Department of Labor regulation 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA (the "**Plan Asset Regulations**"), describes what constitutes the assets of a Plan with respect to the Plan's investment in an entity for purposes of certain provisions of ERISA and Section 4975 of the Code, including the fiduciary responsibility provisions of Title I of ERISA and Section 4975 of the Code. Under the Plan Asset Regulations, if a Plan invests in an "equity interest" of an entity that is neither a "publicly offered security" nor a security issued by an investment company registered under the 1940 Act, the Plan's assets include both the equity interest and an undivided interest in each of the entity's underlying assets, unless it is established that the entity is an "operating company" or, as further discussed below, that equity participation in the entity by "benefit plan investors" is not "significant".

Prohibited transactions within the meaning of Section 406 of ERISA or Section 4975 of the Code may arise if the Securities are acquired with the assets of a Plan with respect to which the relevant Issuer, the Dealer, the Arranger, the relevant Guarantor (in relation to Securities issued by JPMCFC or JPMSP), JPMorgan Chase & Co. or any of their respective affiliates, is a party in interest or a disqualified person. JPMorgan Chase & Co. and its affiliates are considered a party in interest or a disqualified person with respect to many Plans. Certain exemptions from the prohibited transaction provisions of Section 406 of ERISA and Section 4975 of the Code may be applicable, however, depending in part on the type of Plan fiduciary making the decision to acquire a Security and the circumstances under which such decision is made. Included among these exemptions are Prohibited Transaction Class Exemption ("**PTCE**") 91-38 (relating to investments by bank collective investment funds), PTCE 84-14 (relating to transactions effected by a "qualified professional asset manager"), PTCE 90-1 (relating to investments by insurance company pooled separate accounts), PTCE 95-60 (relating to investments by insurance company general accounts), and PTCE 96-23 (relating to transactions effected by in-house asset managers) (collectively, "**Investor-Based Exemptions**"). There is also a statutory exemption that may be available under Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code to a party in interest or disqualified person that is a service provider to a Plan investing in the Securities for adequate consideration, provided such service provider is not a fiduciary (or an affiliate of a fiduciary) who has or exercises any discretionary authority or control or renders investment advice with respect to the Plan's assets used to acquire the Securities (the "**Service Provider Exemption**"). Adequate consideration means fair market value as determined in good faith by the Plan fiduciary pursuant to regulations to be promulgated by the U.S. Department of Labor. There can be no assurance that any of these Investor-Based Exemptions or the Service Provider Exemption or any other administrative or statutory exemption will be available with respect to any particular transaction involving the Securities.

Governmental, certain church, non-U.S. and other plans, while not subject to the fiduciary responsibility or prohibited transaction provisions of ERISA or the provisions of Section 4975 of the Code, may nevertheless be subject to state, local, federal or non-U.S. laws that are similar to the foregoing provisions of ERISA and the Code. Fiduciaries of any such plans should consult with their counsel before acquiring any Securities.

The U.S. Supreme Court's decision, in John Hancock Mutual Life Insurance Co. v. Harris Trust and Savings Bank, 510 U.S. 86 (1993) ("**Harris Trust**"), held that those funds allocated to the general account of an insurance company pursuant to a contract with an employee benefit plan that varies with the investment experience of the insurance company are "plan assets". The American Council of Life Insurance requested a prohibited transaction class exemption to counteract the effects of Harris Trust. In the preamble to the resulting Prohibited Transaction Class Exemption 95-60, 60 Fed. Reg. 35,925 (July 12, 1995) ("**PTCE 95-60**"), the Department of Labor noted that for purposes of calculating the 25 per cent. threshold under the significant participation test of the Plan Asset Regulations, only the proportion of an insurance company general account's equity investment in the entity that represents plan assets should be taken into account. Furthermore, a change in the level of plan investment in a general account subsequent to the general account's acquisition of an equity interest in the entity would not, by itself, trigger a new determination of whether plan participation is significant. However, it is the Department of Labor's view that an acquisition by the general account of an additional equity interest in the entity subsequent to its initial investment or an acquisition of an equity interest in the entity by any investor subsequent to the general account's initial investment would require a new determination of significant plan participation. Although the Department of Labor has not specified how to determine the proportion of an insurance company general account that represents plan assets for purposes of the 25 per cent. threshold, they have, in the case of PTCE 95-60, provided a method for determining the percentage of an insurance company's general account held by the benefit plans of an employer and its affiliates by comparing the reserves and liabilities for the general account contracts held by such plans to the total reserves and liabilities of the general account (exclusive of separate account liabilities) plus surplus. However, there is no assurance that a similar measurement would be used for purposes of the 25 per cent. threshold.

Any insurance company proposing to invest assets of its general account in Securities should consider the extent to which such investment would be subject to the requirements of Title I of ERISA and Section 4975 of the Code in light of Harris Trust and the enactment of Section 401(c) of ERISA. In particular, such an insurance company should consider (i) the exemptive relief granted by the U.S. Department of Labor for transactions involving insurance company general accounts in PTCE 95-60 and (ii) if such exemptive relief is not available, whether its acquisition of Securities will be permissible under the final regulations issued under Section 401(c) of ERISA. The final regulations provide guidance on which assets held by an insurance company constitute "plan assets" for purposes of the fiduciary responsibility and prohibited transaction provisions of ERISA and Section 4975 of the Code. The regulations do not exempt the assets of insurance company general accounts from treatment as "plan assets" to the extent they support certain participating annuities issued to Plans after 31 December 1998.

Securities Issued by JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co.

The Plan Asset Regulations define an "equity interest" as any interest in an entity other than an instrument that is treated as indebtedness under applicable local law and which has no substantial equity features. As mentioned above, if a Plan invests in an "equity interest" of an entity, the Plan's assets include both the equity interest and an undivided interest in each of the entity's underlying assets, unless the entity is an "operating company". An operating company is an entity engaged, directly or indirectly, in business activities involving the manufacture or sale of a product or service other than investment of capital. If a Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. is deemed to be an equity interest in the respective Issuer, an investment by a Plan in such equity interest should not result in such Plan having an undivided interest in either entity's assets because JPMorgan Chase Bank, N.A. and JPMorgan Chase & Co. should qualify as operating companies. In addition, a Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. may constitute a debt interest or a notional principal contract, depending on the relevant form and terms of such Security. Therefore, a Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co. may be acquired by a Plan. Nevertheless, without regard to whether such Security is considered a debt or equity interest or a notional principal contract, prohibited transactions within the meaning of Section 406 of ERISA or Section 4975 of the Code may arise if such Security is acquired with the assets of a Plan with respect to which the relevant Issuer, or in certain circumstances, any of its respective affiliates, is a party in interest or a

disqualified person. The Investor-Based Exemptions or the Service Provider Exemption may be available to cover such prohibited transactions.

By its acquisition, holding and subsequent disposition of any Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., each acquirer and subsequent transferee thereof will be deemed to have represented and warranted, at the time of its acquisition and throughout the period it holds such Security, either that (a) it is neither a Plan nor a governmental, church, non-U.S. or other plan which is subject to any federal, state, local or non-U.S. law that is similar to the provisions of Section 406 of ERISA or Section 4975 of the Code or (b) its acquisition, holding and subsequent disposition of such Security will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code (or, in the case of a governmental, church, non-U.S. or other plan, a non-exempt violation of any similar law). In addition, a Plan fiduciary relying on the Service Provider Exemption will be deemed to have represented and warranted at the time of the Plan's acquisition and throughout the period the Plan holds the Security that (x) the Plan fiduciary has made a good faith determination that the Plan is paying no more than, and is receiving no less than, adequate consideration in connection with the transaction and (y) none of JPMorgan Chase & Co. or any of its affiliates exercises discretionary authority or control or renders investment advice with respect to the assets of the Plan which the fiduciary is using to acquire the Security, both of which are necessary preconditions to utilising this exemption. Any acquirer that is a Plan is encouraged to consult with counsel regarding the application of the above representations and warranties. If any purported transfer of a Security issued by JPMorgan Chase Bank, N.A. or JPMorgan Chase & Co., or any interest therein to an acquirer or transferee does not comply with the requirements specified in the applicable documents, the relevant Issuer may, at its discretion, cause such Security to be sold to an acquirer who meets the foregoing criteria or give notice to the transferee that such Security will be redeemed.

Securities Issued by JPMCFC or JPMSP

Generally equity participation in an entity by "benefit plan investors" is "significant" and will cause the assets of the entity to be deemed the assets of an investing Plan (in the absence of another applicable Plan Asset Regulations exception) if 25 per cent. or more of the value of any class of equity interest in such entity is held by "benefit plan investors" (the "**25 per cent. Limit**"). Under Section 3(42) of ERISA, employee benefit plans that are not subject to Title I of ERISA and plans that are not subject to Section 4975 of the Code, such as U.S. governmental plans and certain church plans or non-U.S. plans, are not considered "benefit plan investors". Therefore, the term "benefit plan investor" includes (a) an "employee benefit plan" (as defined in Section 3(3) of Title I of ERISA) that is subject to the fiduciary responsibilities provisions of ERISA, (b) a "plan" as defined in Section 4975(e)(1) of the Code that is subject to Section 4975 of the Code, (c) any entity whose underlying assets include "plan assets" by reason of any such employee benefit plan's or plan's investment in the entity or (d) any other "benefit plan investor" as such term is defined in Section 3(42) of ERISA or any regulations promulgated by the U.S. Department of Labor thereunder (collectively, "**Benefit Plan Investors**"). For purposes of making the 25 per cent. determination, the value of any equity interests held by a person (other than a Benefit Plan Investor) who has discretionary authority or control with respect to the assets of the Issuer or any person who provides investment advice for a fee (direct or indirect) with respect to the Issuer's assets, or any affiliate of such a person (a "**Controlling Person**"), shall be disregarded. Under the Plan Asset Regulations, an "affiliate" of a person includes any person, directly or indirectly through one or more intermediaries, controlling, controlled by or under common control with the person, and "control" with respect to a person, other than an individual, means the power to exercise a controlling influence over the management or policies of such person.

The Securities issued by JPMCFC or JPMSP, as the case may be, may be considered to have substantial equity features under the Plan Asset Regulations and, accordingly, should not be acquired by any benefit plan investor other than an insurance company general account, provided that in the case of a Security issued by JPMCFC or JPMSP, as the case may be, less than 25 per cent. of the assets in such general account constitute "plan assets" (as defined in the Plan Asset Regulations) for purposes of ERISA and/or Section 4975 of the Code. There are no assurances that any of the exceptions to the look-through rule (other than the exception for equity participation in an entity by Benefit Plan Investors that is less than 25 per cent.) applies to the investment by an investor in a Security issued by JPMCFC or JPMSP, as the case may be. Furthermore, there can be no assurance that, despite the purchaser representations and requirements and transfer restrictions relating to acquisitions by Benefit Plan Investors and procedures to be employed to attempt to limit the ownership by Benefit Plan Investors in the Securities issued by JPMCFC or JPMSP, as the case may be, to less than 25 per cent. of each class of the Securities issued

by JPMCFC or JPMSP, as the case may be, Benefit Plan Investors will not in actuality own 25 per cent. or more of the value of any class of the Securities issued by JPMCFC or JPMSP, as the case may be.

JPMCFC/JPMSP Standard Restrictions

Each acquirer and subsequent transferee of a Security issued by JPMCFC or JPMSP, as the case may be, will be deemed to have represented and warranted that (1) (A) it is not a Benefit Plan Investor or (B) (i) it is an insurance company acting on behalf of its general account, (ii) it is not a Controlling Person, (iii) as of the date it acquires and throughout the period it holds the Security, or any interest therein, less than 25 per cent. of the assets of such general account constitutes "plan assets" (as defined in 29 C.F.R. Section 2510.3-101, as modified by Section 3(42) of ERISA) for purposes of ERISA and/or Section 4975 of the Code, (iv) it agrees that if, after its initial acquisition of the Security, or any interest therein, at any time during any month, 25 per cent. or more of the assets of such general account constitute "plan assets", then such insurance company shall, in a manner consistent with the restrictions on transfer set forth herein, dispose of the Security, or any interest therein, held in its general account by the end of the next following month, and (v) the acquisition, holding and subsequent disposition of the Security, or any interest therein, will not constitute or result in a prohibited transaction under ERISA or Section 4975 of the Code which is not covered under PTCE 95-60 or some other applicable exemption; and (2) if it is a governmental, church, non-U.S. or other plan which is subject to any federal, state, local or non-U.S. law similar to the provision of Section 406 of ERISA or Section 4975 of the Code, (A) it is not, and for so long as it holds such Security or interest therein will not be, subject to any federal, state, local, non-U.S. or other law or regulation that could cause the underlying assets of the Issuer to be treated as assets of the investor in any Security (or any interest therein) by virtue of its interest and thereby subject the Issuer or any person responsible for the investment and operation of the Issuer's assets to laws or regulations that are similar to the fiduciary responsibility or prohibited transaction provisions of ERISA or Section 4975 of the Code; and (B) its acquisition, holding and subsequent disposition of such Security will not constitute or result in a non-exempt violation under any such similar federal, state, local or non-U.S. law. Any acquirer that is a Plan is encouraged to consult with counsel regarding the application of the above representations and warranties. If any purported transfer of a Security issued by JPMCFC or JPMSP, as the case may be, or any interest therein, to an acquirer or transferee does not comply with the requirements of this paragraph, the relevant Issuer may, at its discretion, cause such Security to be sold to an acquirer who meets the foregoing criteria or give notice to the transferee that such Security will be redeemed. (The foregoing are the "**JPMCFC/JPMSP Standard Restrictions**".)

JPMCFC/JPMSP Special Restrictions

Provided however, if (i) JPMCFC determines that a Security issued by JPMCFC is not an equity interest for purposes of ERISA or (ii) JPMSP determines that a Security issued by JPMSP is not an equity interest for purposes of ERISA, in each case, each acquirer and subsequent transferee of a Security issued by JPMCFC or JPMSP, as the case may be, will be deemed to have represented and warranted that it shall not acquire, hold or subsequently dispose of such Security for, on behalf of, or with the assets of any Plan or any governmental, church, non-U.S. or other plan subject to any federal, state, local or non-U.S. law similar to Section 406 of ERISA or Section 4975 of the Code, unless such acquisition, holding and subsequent disposition of the Security will not constitute or result in any non-exempt prohibited transaction under Section 406 of ERISA or under Section 4975 of the Code (or in the case of a governmental, church, non-U.S. or other plan, a non-exempt violation of any similar federal, state, local or non-U.S. law). Any fiduciary of a Plan acquiring a Security in reliance upon the statutory "service provider exemption" under Section 408(b)(17) of ERISA or Section 4975(d)(20) of the Code represents and warrants at the time of the Plan's acquisition and throughout the period the Plan holds the Security that (x) the Plan fiduciary has made a good faith determination that the Plan is paying no more than, and is receiving no less than, adequate consideration in connection with the transaction and (y) none of JPMorgan Chase & Co. or any of its affiliates exercises discretionary authority or control or renders investment advice with respect to the assets of the Plan which the fiduciary is using to acquire the Security, both of which are necessary preconditions to utilising this exemption. Any acquirer that is a Plan is encouraged to consult with counsel regarding the application of the above representations and warranties. If any purported transfer of a Security issued by JPMCFC or JPMSP, as the case may be, or any interest therein, to an acquirer or transferee does not comply with the requirements of this paragraph, the relevant Issuer may, at its discretion, cause such Security to be sold to an acquirer who meets the foregoing criteria or give notice to the transferee that such Security will be redeemed. (The foregoing are the "**JPMCFC/JPMSP Special Restrictions**".)

Other Considerations

There can be no assurance that, despite the prohibitions relating to acquisitions by Benefit Plan Investors, that Benefit Plan Investors will not in actuality own 25 per cent. or more of a class of outstanding Securities issued by JPMCFC or JPMSP, as the case may be. If for any reason the assets of JPMCFC or JPMSP are deemed to be "plan assets" of a Plan because the 25 per cent. Limit is exceeded, certain transactions that might be entered into by, or on behalf of, such Issuer in the ordinary course of its business might constitute non-exempt "prohibited transactions" under Section 406 of ERISA or Section 4975 of the Code and might have to be rescinded at significant cost to the Issuer. In addition, an Issuer may be prevented from engaging in certain investments (as not being deemed consistent with the ERISA prudent investment standards) or engaging in certain transactions or fee arrangements because they might be deemed to cause non-exempt prohibited transactions. It also is not clear that Section 403(a) of ERISA, which generally requires that all of the assets of a Plan be held in trust and limits delegation of investment management responsibilities by fiduciaries of Plans, would be satisfied. In addition, it is unclear whether Section 404(b) of ERISA, which generally provides that no fiduciary may maintain the indicia of ownership of any assets of a plan outside the jurisdiction of the district courts of the United States, would be satisfied or any of the exceptions to the requirement set forth in 29 C.F.R. Section 2550.404b-1 would be available.

THE PRECEDING DISCUSSION IS ONLY A SUMMARY OF CERTAIN OF THE ERISA AND OTHER IMPLICATIONS OF AN INVESTMENT IN THE SECURITIES AND DOES NOT PURPORT TO BE COMPLETE. MOREOVER, THE MATTERS DISCUSSED ABOVE MAY BE AFFECTED BY FUTURE REGULATIONS, RULINGS AND COURT DECISIONS, SOME OF WHICH MAY HAVE RETROACTIVE APPLICATION AND EFFECT. POTENTIAL ACQUIRERS SHOULD CONSULT WITH THEIR OWN LEGAL AND OTHER ADVISORS PRIOR TO INVESTING TO DETERMINE THE ERISA IMPLICATIONS OF SUCH INVESTMENTS IN LIGHT OF SUCH POTENTIAL ACQUIRER'S CIRCUMSTANCES.

THE SALE OF SECURITIES TO A PLAN IS IN NO RESPECT A REPRESENTATION BY THE ISSUERS, JPMCFC, JPMSP, JPMORGAN CHASE & CO., JPMORGAN CHASE BANK, N.A., THE ARRANGER OR THE DEALER THAT THIS INVESTMENT MEETS ALL RELEVANT REQUIREMENTS WITH RESPECT TO INVESTMENTS BY PLANS GENERALLY OR ANY PARTICULAR PLAN OR THAT THIS INVESTMENT IS APPROPRIATE FOR PLANS GENERALLY OR ANY PARTICULAR PLAN.

TAXATION

Investors should be aware that the tax legislation of the country in which the investor is resident and of the Issuer's country of incorporation may have an impact on the income received from the Securities.

The tax summaries below address only certain aspects of the taxation of income from Securities in a limited number of jurisdictions and are included in this Offering Circular solely for information purposes. These summaries cannot replace individual legal or tax advice, which is able to take into account the exact content of the Pricing Supplement or become a sole base for any investment decisions and/or assessment of any potential tax consequences thereof.

Securities may have terms and conditions that result in tax consequences that differ from those described below.

In order to facilitate the reading of the tax summaries and provide investors with an indication as to which country-specific tax summaries might be of particular interest to such investor, the introductory paragraph of each tax summary describes what the tax section relates to, for example, whether it applies to any Issuer of the Securities, the relevant jurisdiction in which an investor is resident and the relevant jurisdiction in which the Paying Agent is located. The introductory paragraphs are for information purposes only, in order to provide guidance in reading this section of the Offering Circular and are not intended to be authoritative. Investors should evaluate independently which tax summaries might be relevant to them. In particular, investors should read the tax summary applicable to the relevant Issuer of the Securities, the tax summary for the relevant jurisdiction in which the investor is resident in and in all cases the US tax summary.

The tax overviews below assume there has been no substitution of the Issuer.

INVESTORS IN THE SECURITIES ARE ADVISED TO CONSULT THEIR OWN ADVISERS AS TO THE TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSAL OF A SECURITY

Republic of Ireland Taxation

The following discussion is a summary of certain material Irish tax considerations relating to (i) Securities issued by any of the Issuers where the Holder is tax resident in Ireland or has a tax presence in Ireland or (ii) Securities where the Paying Agent or custodian is located in Ireland.

The discussion is based on Irish law and the practice of the Irish Revenue Commissioners in effect on the date of this Offering Circular. The discussion relates only to the position of persons who are the absolute beneficial owners of their Securities (other than dealers in securities) and is for general information only. The discussion does not address other Irish tax aspects of acquiring, holding, disposing, abandoning, exercising or dealing in Securities. The discussion does not constitute taxation or legal advice.

Securities issued to Irish Holders

This section addresses the Irish tax treatment of Holders who are Irish tax resident ("**Irish Resident Holders**") who acquire or hold Securities issued by any of the Issuers. This section also addresses the Irish tax treatment of Holders who are not tax resident in Ireland but hold Securities issued by an Issuer as part of a trade carried on through an Irish branch or agency ("**Irish Branch Holders**" and, together with Irish Resident Holders, "**Irish Holders**").

Irish Withholding Tax

Where Irish Resident Holders acquire or hold Securities and appoint an Irish collection agent, then Irish encashment tax (currently 25 per cent.) may be deducted by that collection agent.

Irish Corporation Tax and Income Tax

Irish Holders will generally be liable to Irish income tax or corporation tax in respect of income payable on Securities.

Irish Holders who acquire Securities issued by JPMorgan Chase Bank, N.A. should consider whether the Irish tax regime relating to 'specified interest' or 'foreign deposit interest' (under section 267M of the Taxes Consolidation Act 1997 of Ireland) could apply to such Securities. If the return constitutes 'specified interest' or 'foreign deposit interest' for these purposes, the rate of tax specified in section 267M may apply to such return.

Irish Capital Gains Taxation

Irish Resident Holders of Securities will generally be liable to Irish capital gains taxation in respect of any capital gains arising on the disposal of Securities (assuming that Securities which are Notes constitute 'debts on a security'). The Notes should be treated as 'debts on a security' if the value of the Notes can vary in accordance with market conditions so that a holder of the Notes could make a profit on their disposal.

Irish Branch Holders are generally subject to Irish capital gains taxation on the disposal of Irish situate assets which are (or were) used for the purposes of their Irish trade. Once the Securities do not become Irish situate assets, Irish Branch Holders should not become subject to Irish capital gains taxation on the disposal of Securities.

Irish Stamp Duty

Where Securities constitute 'marketable securities', no Irish stamp duty should apply on the transfer of such Securities once the transfer does not relate to (a) Irish land or rights or interests in Irish land, or (b) any stocks or marketable securities of an Irish incorporated company (other than a regulated Irish investment fund or a 'qualifying company' within the meaning of section 110 of the Taxes Consolidation Act 1997 of Ireland). 'Marketable securities' means securities of such a description as to be capable of being sold in any Irish stock market.

Alternatively, if the capital raised by the issue of the Securities has the character of borrowed money but are not 'marketable securities', no Irish stamp duty should arise once:

(a) the Securities do not carry any rights of conversion into stocks or marketable securities (other than loan capital) of a company having a register in Ireland or into loan capital having such a right;

(b) the Securities do not carry rights of the same kind as shares in the capital of a company (including rights such as voting rights, a share in the profits or a share in the surplus on liquidation);

(c) the Securities are not issued for a price which is less than 90 per cent. of their nominal value; and

(d) the Securities do not carry a right to a sum in respect of repayment or interest which is related to certain movements in an index or indices (based wholly or partly and directly or indirectly on stocks or marketable securities) specified in any instrument or other document relating to the Securities.

Irish Gift / Inheritance Tax

Irish Resident Holders will generally be subject to Irish capital acquisitions taxation on any gift or inheritance of Securities which they receive.

Securities where the Paying Agent or custodian is located in Ireland.

Withholding Tax on Securities

Payments made through a Paying Agent located in Ireland in respect of Securities may result in Irish withholding tax (in the form of encashment tax) being deducted. An exemption from this withholding tax can be claimed in advance by Holders who are not tax resident in Ireland and an exemption also applies for Holders who are within the charge to Irish corporation tax in respect of the relevant interest payment. The appointment of an Irish custodian through which Securities are held could result in various Irish tax issues if an Irish situate asset arises by virtue of that arrangement.

The Netherlands Taxation

The following discussion is a summary of certain material Dutch tax considerations relating to (i) Securities issued by JPMSP, (ii) Securities issued by any of the Issuers where the Holder is tax resident in The Netherlands or has a tax presence in The Netherlands, or (iii) Securities held through a Paying Agent or custodian located in The Netherlands.

This summary is based on the laws and practice in force as of the date of this Offering Circular and is subject to any changes in law and the interpretation and application thereof, which changes could be made with retroactive effect. This summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to acquire, hold or dispose of a Security, and does not purport to deal with the tax consequences applicable to all categories of investors, some of which may be subject to special rules.

For the purpose of the paragraph "Taxes on Income and Capital Gains" below it is assumed that no Holder, being an individual or a non-resident entity, has or will have a substantial interest (*aanmerkelijk belang*), or - in the case of a Holder being an entity - a deemed substantial interest, in the Issuer and that no connected person (*verbonden persoon*) to the Holder has or will have a substantial interest in the Issuer.

With respect to Securities for which it is specified that physical settlement of shares of a company is applicable, it is furthermore assumed that (i) no Holder being a Dutch resident individual has or will have a substantial interest (*aanmerkelijk belang*) or a deemed substantial interest in such company and that no connected person (*verbonden persoon*) to such Holder has or will have a substantial interest in such company and (ii) where such company is a Dutch resident company no Holder being a non-resident individual or entity has or will have a substantial interest (*aanmerkelijk belang*) or a deemed substantial interest in such company and that no connected person (*verbonden persoon*) to such Holder being an individual has or will have a substantial interest in such company.

Generally speaking, individuals have a substantial interest (*aanmerkelijk belang*) in a company if (a) such individuals, either alone or together with their partner, directly or indirectly have, or are deemed to have or (b) certain relatives of such individuals or their partners directly or indirectly have or are deemed to have (i) the ownership of, a right to acquire the ownership of, or certain rights over, shares representing 5 per cent. or more of either the total issued and outstanding capital of the company or the issued and outstanding capital of any class of shares of the company, or (ii) the ownership of, or certain rights over, profit participating certificates (*winstbewijzen*) that relate to 5 per cent. or more of either the annual profit or the liquidation proceeds of the company. Generally, an individual has a deemed substantial interest in a company if (i) such individual or such individual's predecessor has disposed of or is deemed to have disposed of all or part of a substantial interest or (ii) such individual has transferred an enterprise in exchange for shares in such company, in each case, on a non-recognition basis.

Generally speaking, a non-resident entity has a substantial interest (*aanmerkelijk belang*) in a company if such entity, directly or indirectly has (i) the ownership of, a right to acquire the ownership of, or certain rights over, shares representing 5 per cent. or more of either the total issued and outstanding capital of the company or the issued and outstanding capital of any class of shares of the company, or (ii) the ownership of, or certain rights over, profit participating certificates (*winstbewijzen*) that relate to 5 per cent. or more of either the annual profit or the liquidation proceeds of the company. Generally, an entity has a deemed substantial interest in a company if such entity has disposed of or is deemed to have disposed of all or part of a substantial interest on a non-recognition basis.

This summary does not address the Dutch tax consequences for a Holder who is an affiliated (*gelieerde*) entity of JPMSP within the meaning of the Withholding Tax Act 2021 (*Wet bronbelasting 2021*). Generally, a Holder is regarded as 'affiliated' for these purposes if such Holder, whether alone or together with related parties or as part of a collaborating group (*samenwerkende groep*), can exercise decisive influence over JPMSP's activities (or if JPMSP can, either alone or together with related parties or as part of a collaborating group, exercise such influence over the activities of such Holder, or if there is a third party, either alone or together with related parties or as part of a collaborating group, that can exercise such control over both JPMSP and such Holder).

For the purpose of the paragraph "Taxes on Income and Capital Gains" below, the term "entity" means a corporation as well as any other person that is taxable as a corporation for Dutch corporate tax purposes.

Where this summary refers to a Holder, such reference is restricted to an individual or entity holding legal title to as well as an economic interest in Securities or otherwise being regarded as owning Securities for Dutch tax purposes. It is noted that for purposes of Dutch income, corporate, gift and inheritance tax, assets legally owned by a third party such as a trustee, foundation or similar entity, may be treated as assets owned by the (deemed) settlor, grantor or similar originator or the beneficiaries in proportion to their interest in such arrangement.

Where the summary refers to "The Netherlands" or "Dutch" it refers only to the European part of the Kingdom of the Netherlands.

Withholding Taxes

Securities issued by JPMSP

All payments by JPMSP under the Securities can be made without withholding or deduction of any taxes of whatever nature imposed, levied, withheld or assessed by The Netherlands or any political subdivision or taxing authority thereof or therein, unless the Securities qualify as debt effectively functioning as equity within the meaning of article 10, paragraph 1, sub-paragraph (d), of the Corporate Tax Act 1969 (*Wet op de vennootschapsbelasting 1969*). According to Supreme Court case law, the Securities effectively function as equity if (a) the Securities are subordinated to all other non-subordinated creditors of the Issuer, (b) the Securities do not have a fixed maturity or have a maturity of more than 50 years, and (c) payments under the Securities are entirely or almost entirely dependent on the Issuer's profits.

Securities issued by Issuers other than JPMSP whether or not the Paying Agent or Custodian is located in The Netherlands

All payments by Issuers other than JPMSP under the Securities, to the extent these payments are not attributable to a permanent establishment in the Netherlands and whether or not through a Paying Agent or custodian in The Netherlands, can be made without withholding or deduction of any taxes of whatever nature imposed, levied, withheld or assessed by The Netherlands or any political subdivision or taxing authority thereof or therein.

Taxes on Income and Capital Gains

This section applies to Securities issued by JPMSP as well as Securities issued by Issuers other than JPMSP, whether or not the Paying Agent or Custodian is located in The Netherlands.

Resident entities

A Holder which is an entity and is or is deemed to be resident in The Netherlands for Dutch corporate tax purposes and is not tax exempt, will generally be subject to Dutch corporate tax in respect of income or a capital gain derived from a Security at the prevailing statutory rates (up to 25.8 per cent. in 2022).

Resident individuals

A Holder who is an individual and is or is deemed to be resident in The Netherlands for Dutch income tax purposes will be subject to Dutch income tax in respect of income or a capital gain derived from a Security at the prevailing statutory rates (up to 49.50 per cent. in 2022) if:

(i) the income or capital gain is attributable to an enterprise from which the Holder derives profits (other than as a shareholder); or

(ii) the income or capital gain qualifies as income from miscellaneous activities (*belastbaar resultaat uit overige werkzaamheden*) as defined in the Income Tax Act 2001 (*Wet inkomstenbelasting 2001*), including, without limitation, activities that exceed normal, active asset management (*normaal, actief vermogensbeheer*).

If neither condition (i) nor (ii) applies, such individual will generally be subject to Dutch income tax on the basis of a deemed return, regardless of any actual income or capital gain derived from a Security. For 2022, the deemed return ranges from 1.82 per cent. to 5.53 per cent. of the value of the individual's net assets as at the beginning of the relevant fiscal year (including the Securities). The applicable rates will be updated annually on the basis of historic market yields. Subject to application of certain allowances,

the deemed return will be taxed at the prevailing statutory rate (31 per cent. in 2022). Based on a decision of the Dutch Supreme Court (*Hoge Raad*) of 24 December 2021 (ECLI:NL:HR:2021:1963), the current system of taxation based on a deemed return may under specific circumstances contravene with Section 1 of the First Protocol to the European Convention on Human Rights in combination with Section 14 of the European Convention on Human Rights. In reaction to this case law, the Dutch State Secretary for Finance announced in the Decree dated 28 June 2022, no. 2022-176296 (*Besluit rechtsherstel box 3*) that for the year 2022 separate deemed return percentages for savings, debts and investments will be applicable if the newly calculated deemed return based on the Decree is lower than the deemed return based on current law, which may result in a lower taxable income, and thus a lower amount of income tax due, than under current law.

Non-resident entities or individuals

A Holder which is not and is not deemed to be resident in The Netherlands for the relevant tax purposes will not be subject to Dutch taxation on income or a capital gain derived from a Security unless:

(i) the income or capital gain is attributable to an enterprise or part thereof which is either effectively managed in The Netherlands or carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) taxable in The Netherlands and the Holder derives profits from such enterprise (other than by way of the holding of securities); or

(ii) the Holder is an individual and the income or capital gain qualifies as income from miscellaneous activities (*belastbaar resultaat uit overige werkzaamheden*) in The Netherlands as defined in the Income Tax Act 2001 (*Wet inkomstenbelasting 2001*), including, without limitation, activities that exceed normal, active asset management (*normaal, actief vermogensbeheer*).

Stamp/Transfer Taxes

This section applies to Securities issued by JPMSP as well as Securities issued by Issuers other than JPMSP

The subscription, issue, placement, allotment, delivery or transfer of a Security will not be subject to stamp tax, transfer tax or any other similar tax or duty payable in The Netherlands.

Gift and Inheritance Taxes

This section applies to Securities issued by JPMSP as well as Securities issued by Issuers other than JPMSP

Dutch gift or inheritance taxes will not be levied on the occasion of the transfer of a Security by way of gift by, or on the death of, a Holder, unless:

(i) the Holder is or is deemed to be resident in The Netherlands for the purpose of the relevant provisions; or

(ii) the transfer is construed as an inheritance or gift made by, or on behalf of, a person who, at the time of the gift or death, is or is deemed to be resident in The Netherlands for the purpose of the relevant provisions.

United States Federal Income Taxation

THE SUMMARY OF U.S. FEDERAL INCOME TAX CONSEQUENCES SET OUT BELOW IS FOR GENERAL INFORMATION ONLY. INVESTORS SHOULD CONSULT THEIR TAX ADVISERS AS TO THE PARTICULAR TAX CONSEQUENCES TO THEM OF OWNING THE SECURITIES, THE APPLICABILITY AND EFFECT OF STATE, LOCAL, FOREIGN AND OTHER TAX LAWS AND POSSIBLE CHANGES IN TAX LAW.

General

The following is a summary of certain U.S. federal income tax consequences that may be relevant to the purchase, ownership and disposition of Securities. This summary does not purport to be a comprehensive description of all of the U.S. federal income tax consequences that may be relevant to the acquisition, ownership or disposition of Securities by any particular investor, including tax consequences that arise from rules of general application to all taxpayers or to certain classes of taxpayers or that are generally believed to be known by investors. For example, this summary does not address tax considerations applicable to (i) persons that may be subject to special treatment under the U.S. federal income tax laws, such as financial institutions, insurance companies, investors liable for the alternative minimum tax, individual retirement accounts and other tax-deferred accounts, tax-exempt organisations, and dealers in securities or currencies, (ii) investors that will hold Securities as part of a straddle, hedging, conversion or other integrated investment transaction or a constructive sale for U.S. federal income tax purposes, (iii) U.S. Holders (as defined below) whose functional currency is not the U.S. dollar, (iv) Non-U.S. Holders (as defined below) who recognise gain in respect of a Security in a taxable year in which the Non-U.S. Holder is present in the United States for 183 days or more, (v) persons that do not hold the Securities as capital assets, (vi) investors that own or are treated as owning (directly or indirectly) 10 per cent. or more, by vote or value, of the stock of the relevant Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) or (vii) except where the context indicates otherwise, persons that did not purchase the Securities in the initial offering.

This summary does not address the material U.S. federal income tax consequences of every type of Security which may be issued under the Programme, and the relevant Pricing Supplement may contain additional or modified disclosure concerning the material U.S. federal income tax consequences relevant to such type of Security as appropriate. This summary also does not address the considerations that may be applicable to holders of equity or other interests in an owner of a Security.

This summary is based on the Code, U.S. Treasury regulations and judicial and administrative interpretations thereof, in each case as in effect and available on the date hereof. Changes to any of the foregoing could affect the tax consequences described below, possibly with retroactive effect. Further, this summary does not describe any tax consequences arising out of the tax laws of any U.S. state or local or non-U.S. jurisdiction, or any U.S. federal taxes other than income taxes and, to a limited extent, estate taxes. This summary does not address alternative minimum tax consequences and discusses to a limited extent, the Medicare tax on investment income. Prospective purchasers of Securities should consult their tax advisors regarding the U.S. federal, state, local and non-U.S. tax consequences of owning Securities in light of their own particular circumstances.

The Securities are complex derivative instruments the relevant terms and conditions for which may vary materially among different Series of Securities. There is limited U.S. federal income tax authority directly applicable to the Securities and such authority may not directly address Securities with terms substantially similar to those of a particular Security. Accordingly, the proper characterisation for federal income tax purposes of the Securities may be unclear under current law. The timing and character of income recognised by a Holder for U.S. federal income tax purposes may be uncertain and also may vary depending on the precise terms of a Security. No rulings will be sought from the IRS regarding the characterisation of any of the Securities issued hereunder for U.S. federal income tax purposes, and the IRS or a court might not agree with the treatments described below. Accordingly, each prospective purchaser is urged to consult its own tax advisor regarding all aspects of the U.S. federal income tax consequences of acquiring, holding or disposing of Securities.

As used herein, the term "**U.S. Holder**" means a beneficial owner of Securities that is for U.S. federal income tax purposes (i) a citizen or resident of the United States, (ii) a corporation, or other entity treated as a corporation, created or organised under the laws of the United States or any political subdivision thereof, (iii) an estate the income of which is subject to U.S. federal income tax without regard to its source or (iv) a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for U.S. federal income tax purposes.

The term "**Non-U.S. Holder**" means a beneficial owner of Securities that is neither a U.S. Holder nor a partnership. The U.S. federal income tax treatment of a partner in a partnership that holds Securities will depend on the status of the partner and the activities of the partnership. Investors that are partnerships should consult their tax adviser concerning the U.S. federal income tax consequences to their partners of the acquisition, ownership and disposition of Securities by the partnership.

An accrual method taxpayer may be required to recognise income for U.S. federal income tax purposes no later than the taxable year in which such income is taken into account on its applicable financial statements. This rule could potentially require such a taxpayer to recognise income for U.S. federal income tax purposes prior to the time such income otherwise would be recognised pursuant to the rules described below. U.S. holders should consult their own tax advisers regarding the potential applicability of these rules to their investment in the Securities.

Depending on their terms, Securities of a particular Series or Tranche may be characterised as debt for U.S. federal income tax purposes, notwithstanding that the form of the Securities may be something other than debt, e.g., Warrants or Certificates. For the U.S. federal income tax treatment of such a security, see "*U.S. Federal Income Tax treatment of Securities Treated as Debt*" below. Conversely, a Security in the form of a Note may be characterised as something other than debt for U.S. federal income tax purposes. For the U.S. tax treatment of such a Security, see "*U.S. Federal Income Tax Treatment of Securities Treated as other than Debt*" below. A Security may be characterised as debt for federal income tax purposes if the relevant Issuer is legally obliged to pay unconditionally amounts at least equal to, or substantially equal to, the Holder's principal amount invested (or, possibly, if the likelihood that such an amount will not be repaid is remote). Under the relevant authorities, the determination of whether an instrument is properly characterised as debt is made on the basis of all the facts and circumstances. The courts and the IRS have identified a number of factors as relevant to such a determination. However, these authorities generally have concluded that no one factor is controlling for purposes of determining whether an instrument is properly characterised as debt for U.S. federal income tax purposes. Rather, they typically weigh the various factors to determine whether, on balance, the debt features of an instrument predominate. As a result, even in those instances, alternative characterisations are possible.

Securities characterised as other than debt may, depending on their precise terms, properly be characterised as options or collateralised options written or held by the U.S. Holder, forward contracts (including prepaid forward contracts), or some other form of derivative financial contract. If a Security provides for interim payments, the Security may instead be characterised as a notional principal contract or as consisting of units comprised of a derivative and a separate interest-bearing deposit that collateralises a Holder's obligations under that derivative. Alternative characterisations are also possible.

Under one alternative characterisation, the IRS may treat a Holder as the beneficial owner of an underlying security for U.S. federal income tax purposes. In the case of a Security that references an entity treated as a partnership for U.S. federal income tax purposes, a Holder could be deemed to own an interest in such partnership. Where the partnership is engaged in a U.S. trade or business, a Holder could be subject to U.S. federal and state tax return filing and payment obligations on account of the activities of the partnership, including in the case of certain Non-U.S. Holders, a branch profits tax. A Non-U.S. Holder may also be subject to a 10% withholding tax on a portion of the amount realised on a sale, exchange or redemption of a Security. Holders should consult their tax advisors as to the possible characterisations of a Security and the consequences arising therefrom.

For a Series or a Tranche of Securities that is not properly treated as debt, investors should be aware that the IRS issued a notice requesting comments from the public with respect to issues in connection with prepaid forward contracts and similar derivatives. Among other things, the notice states that the IRS is considering whether parties to such transactions should be required to accrue income/expense over the term of such instruments and that consideration is also being given to the source of such income. A bill was also introduced in Congress to require holders of prepaid derivative contracts acquired after the enactment of the bill to accrue interest currently over the term of such instrument notwithstanding that the instrument does not bear interest and is not treated as debt for U.S. federal income tax purposes. It is not possible to predict what, if any, legislative or regulatory action will result from the proposals above or from other governmental action from time-to-time, but it is possible that any such action could materially alter the tax consequences of Securities discussed below and any such change could have a material adverse effect on a U.S. Holder.

Securities that reference a benchmark index are subject to certain fallback provisions in the event the relevant benchmark index becomes unavailable. U.S. Treasury regulations address modifications to obligations or contracts that reference an interbank offered rate in connection with the impending unavailability of such rates, and, among other things, whether a modification would be treated as an exchange of the obligation or contract for U.S. federal income tax purposes. For Securities that reference a benchmark index (including, for example, GBP LIBOR or USD LIBOR), it is possible that application of the fallback provisions or transition to a fallback rate may result in a deemed exchange of the Securities

for U.S. federal income tax purposes. In such case, a U.S. holder may, among other consequences, be required to recognise taxable gain with respect to the deemed exchange of such Securities. U.S. holders should consult their tax advisors regarding the consequences of holding Securities that reference a benchmark index.

Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.

Except as specifically limited or noted, the discussion under this section entitled "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.*" addresses Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A. (each, a "**U.S. Issuer**"). Solely for U.S. federal income tax purposes, JPMorgan Chase & Co. is treated as the "Issuer" of the of Securities issued by JPMCFC, and the discussion herein should be read consistently with such treatment.

Taxation of U.S. Holders

Information Reporting and Backup Withholding

Amounts payable on, and the proceeds of a sale, redemption or other taxable disposition of, Securities may be subject to information reporting. Such amounts may also be subject to backup withholding if a Holder fails to provide certain identifying information (such as an accurate taxpayer identification number) or meets certain other conditions. Holders should consult their tax advisers as to their qualification for exemption from backup withholding and the procedure for obtaining an exemption. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against a Holder's U.S. federal income tax liability, provided the relevant information is timely furnished to the IRS. Holders should consult their tax advisors regarding the application of information reporting and backup withholding to their particular situations, the availability of an exemption therefrom, and the procedure for obtaining an exemption, if available.

U.S. Federal Income Tax Treatment of Securities Treated as Debt

The following discussion applies to Securities that are properly treated as debt for U.S. federal income tax purposes. The general discussion below is subject to special rules applicable to Variable Interest Rate Securities, Contingent Securities, Short-Term Securities, Foreign Currency Securities, and Foreign Currency Contingent Securities, as described below.

Payments of Interest

Interest on a Security, whether payable in U.S. dollars or a currency, composite currency or basket of currencies other than U.S. dollars (a "**foreign currency**"), other than interest on a "Discount Security" that is not "qualified stated interest" or on a "Contingent Security" (each as defined below under "Original Issue Discount—General"), will be taxable to a U.S. Holder as ordinary income at the time it is received or accrued, depending on the Holder's method of accounting for tax purposes. Interest paid by the relevant Issuer on Securities and original issue discount ("**OID**"), if any, accrued with respect to Securities (as described below under "—Original Issue Discount") generally will constitute income from sources within the United States.

Original Issue Discount

The following is a summary of the principal U.S. federal income tax consequences of the ownership of Securities issued with OID.

A Security, other than a Security with a term of one year or less (a "**Short-Term Security**"), will be treated as issued with OID (a "**Discount Security**") if the excess of the Security's "stated redemption price at maturity" over its issue price is equal to or more than a *de minimis* amount (0.25 per cent. of the Security's stated redemption price at maturity multiplied by the number of complete years to its maturity). An obligation that provides for the payment of amounts other than qualified stated interest before maturity (an "**instalment obligation**") will be treated as a Discount Security if the excess of the Security's stated redemption price at maturity over its issue price is greater than 0.25 per cent. of the Security's stated redemption price at maturity multiplied by the weighted average maturity of the Security. A Security's weighted average maturity is the sum of the following amounts determined for each payment on a Security (other than a payment of qualified stated interest): (i) the number of complete years from

the issue date until the payment is made multiplied by (ii) a fraction, the numerator of which is the amount of the payment and the denominator of which is the Security's stated redemption price at maturity. Generally, the issue price of a Security will be the first price at which a substantial amount of Securities included in the issue of which the Security is a part is sold for cash to persons other than bond houses, brokers, or similar persons or organisations acting in the capacity of underwriters, placement agents, or wholesalers. The stated redemption price at maturity of a Security is the total of all payments provided by the Security that are not payments of "qualified stated interest". A qualified stated interest payment is generally any one of a series of stated interest payments on a Security that are unconditionally payable in cash or property, other than debt instruments of the issuer, at least annually at a single fixed rate (with certain exceptions for lower rates paid during some periods), or a variable rate (in the circumstances described below under "-- Variable Interest Rate Securities"), applied to the outstanding principal amount of the Security. Solely for the purposes of determining the amount of OID, if any, on a Security, an Issuer generally will be deemed to exercise any option that has the effect of decreasing the yield on the Security, and the U.S. Holder generally will be deemed to exercise any option that has the effect of increasing the yield on the Security.

A U.S. Holder of a Discount Security generally must accrue OID in gross income over the term of the Discount Security on a constant-yield basis, regardless of the U.S. Holder's regular method of tax accounting. As a result, a U.S. Holder may recognise taxable income in respect of a Discount Security before the receipt of the cash to which the income is attributable. The amount of OID includible in income by a U.S. Holder of a Discount Security is the sum of the daily portions of OID with respect to the Discount Security for each day during the taxable year or portion of the taxable year in which the U.S. Holder holds the Discount Security ("**accrued OID**"). The daily portion is determined by allocating to each day in any "accrual period" a pro rata portion of the OID allocable to that accrual period. Accrual periods with respect to a Security may be of any length selected by the U.S. Holder and may vary in length over the term of the Security as long as (i) no accrual period is longer than one year and (ii) each scheduled payment of interest or principal on the Security occurs on either the final or first day of an accrual period. The amount of OID allocable to an accrual period is equal to the excess of (a) the product of the Discount Security's adjusted issue price at the beginning of the accrual period and the Discount Security's yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period and, in some cases, taking account of any options that may be exercised by the relevant Issuer or the U.S. Holder) over (b) the sum of the payments of qualified stated interest on the Security allocable to the accrual period. The "**adjusted issue price**" of a Discount Security at the beginning of any accrual period is the issue price of the Security increased by (x) the amount of accrued OID for each prior accrual period and decreased by (y) the amount of any payments previously made on the Security that were not qualified stated interest payments.

Each payment on a Discount Security, other than payments of qualified stated interest, generally will be viewed first as a payment of previously accrued OID to the extent thereof, with the payment attributed first to the earliest accrued OID, and then as a payment of principal. The Securities may have special redemption, repayment or interest rate reset features, as indicated in the applicable Pricing Supplement, that may affect whether a Security is an Discount Security and, if so, the proper timing of recognition of the OID by a U.S. Holder. Securities containing such features may be subject to special rules that differ from the general rules discussed herein. Accordingly, prospective purchasers of Securities with such features should consult their tax advisors regarding these special rules.

Market Discount

A Security, other than a Short-Term Security, Contingent Security or Foreign Currency Contingent Security, generally will be treated as purchased at a market discount (a "**Market Discount Security**") if the Security's stated redemption price at maturity or, in the case of a Discount Security, the Security's "revised issue price", exceeds the amount for which the U.S. Holder purchased the Security by at least 0.25 per cent. of the Security's stated redemption price at maturity or revised issue price, respectively, multiplied by the number of complete years to the Security's maturity (or, in the case of a Security that is an instalment obligation, the Security's weighted average maturity) (the "*de minimis* threshold"). If this excess is not larger than the *de minimis* threshold, then the excess constitutes "*de minimis* market discount". For this purpose, the "revised issue price" of a Security generally is equal to its issue price, increased by the amount of any OID that has accrued on the Security and decreased by the amount of any payments previously made on the Security other than qualified stated interest payments.

Any gain recognised by a U.S. Holder on the maturity or disposition of a Market Discount Security (including, for this purpose, the receipt of any payment on the Security that is not qualified stated interest) generally will be treated as ordinary income to the extent of the market discount that accrued on the Security while held by such U.S. Holder.

Alternatively, a U.S. Holder of a Market Discount Security may elect to include market discount in income currently over the term of the Security. Such an election will apply to all debt instruments with market discount acquired by the electing U.S. Holder on or after the first day of the first taxable year to which the election applies, and may be revoked only with the consent of the IRS. Market discount will accrue on a straight-line basis unless the U.S. Holder elects to accrue the market discount on a constant-yield method. A U.S. Holder of a Market Discount Security that does not elect to include market discount in income currently generally will be required to defer the deduction of a portion of the interest paid or accrued on indebtedness incurred or maintained to purchase or carry the Market Discount Security.

Acquisition Premium

A U.S. Holder that purchases a Discount Security for an amount less than or equal to the sum of all amounts payable on the Security after the purchase date, other than payments of qualified stated interest, but in excess of its adjusted issue price (any such excess being "acquisition premium") and that does not make the election described below under "Ele*ction to Treat All Interest as Original Issue Discount*", is permitted to reduce the daily portions of OID by a fraction, the numerator of which is the excess of the U.S. Holder's adjusted basis in the Security immediately after its purchase over the Security's adjusted issue price, and the denominator of which is the excess of the sum of all amounts payable on the Security after the purchase date, other than payments of qualified stated interest, over the Security's adjusted issue price.

Election to Treat All Interest as Original Issue Discount

A U.S. Holder may elect to include in gross income all interest that accrues on a Security using the constant yield method described above under "Original Issue Discount", with certain modifications. For purposes of this election, interest includes stated interest, OID, *de minimis* OID, market discount, *de minimis* market discount and unstated interest, as adjusted by any amortisable bond premium or acquisition premium. This election generally will apply only to the Security with respect to which it is made and may not be revoked without the consent of the IRS. If the election to apply the constant-yield method to all interest on a Security is made with respect to a Market Discount Security, the electing U.S. Holder will be treated as having made the election discussed above under "**Market Discount**" to include market discount in income currently over the life of all debt instruments with market discount held or thereafter acquired by the U.S. Holder. U.S. Holders should consult their tax advisers concerning the propriety and consequences of this election.

Variable Interest Rate Securities

A Security that provides for interest at one or more variable rates may be treated as a "variable rate debt instrument" under Treasury regulations governing the accrual of OID (such a Security, a "**Variable Interest Rate Security**"). A Security may qualify as a Variable Interest Rate Security if (a) its issue price does not exceed the total non-contingent principal payments due under the Security by more than a specified *de minimis* amount, (b) it provides for stated interest, paid or compounded at least annually, at (i) one or more qualified floating rates, (ii) a single fixed rate and one or more qualified floating rates, (iii) a single objective rate, or (iv) a single fixed rate and a single objective rate that is a qualified inverse floating rate, and (c) it does not provide for any principal payments that are contingent (other than as described in (a) above).

A "**qualified floating rate**" is any variable rate where variations in the value of the rate can reasonably be expected to measure contemporaneous variations in the cost of newly borrowed funds in the currency in which the Security is denominated. A fixed multiple of a qualified floating rate will constitute a qualified floating rate only if the multiple is greater than 0.65 but not more than 1.35. A variable rate equal to the product of a qualified floating rate and a fixed multiple that is greater than 0.65 but not more than 1.35, increased or decreased by a fixed rate, will also constitute a qualified floating rate. In addition, two or more qualified floating rates that can reasonably be expected to have approximately the same values throughout the term of the Security (e.g., two or more qualified floating rates with values within 25 basis points of each other as determined on the Security's issue date) will be treated as a single

qualified floating rate. Notwithstanding the foregoing, a variable rate that would otherwise constitute a qualified floating rate but which is subject to one or more restrictions such as a maximum numerical limitation (i.e., a cap) or a minimum numerical limitation (i.e., a floor) may, under certain circumstances, fail to be treated as a qualified floating rate unless the cap or floor is fixed throughout the term of the Security.

An "**objective rate**" is a rate that is not itself a qualified floating rate but which is determined using a single fixed formula and which is based on objective financial or economic information (e.g., one or more qualified floating rates or the yield of actively traded personal property). A rate will not qualify as an objective rate if it is based on information that is within the control of the relevant Issuer (or a related party) or that is unique to the circumstances of the relevant Issuer (or a related party), such as dividends, profits or the value of the relevant Issuer's stock (although a rate does not fail to be an objective rate merely because it is based on the credit quality of the relevant Issuer). Other variable interest rates may be treated as objective rates if so designated by the IRS in the future. Despite the foregoing, a variable rate of interest on a Security will not constitute an objective rate if it is reasonably expected that the average value of the rate during the first half of the Security's term will be either significantly less than or significantly greater than the average value of the rate during the final half of the Security's term. A "**qualified inverse floating rate**" is any objective rate where the rate is equal to a fixed rate minus a qualified floating rate, as long as variations in the rate can reasonably be expected to inversely reflect contemporaneous variations in the qualified floating rate. If a Security provides for stated interest at a fixed rate for an initial period of one year or less followed by a variable rate that is either a qualified floating rate or an objective rate for a subsequent period and if the variable rate on the Security's issue date is intended to approximate the fixed rate (e.g., the value of the variable rate on the issue date does not differ from the value of the fixed rate by more than 25 basis points), then the fixed rate and the variable rate together will constitute either a single qualified floating rate or objective rate, as the case may be.

A qualified floating rate or objective rate in effect at any time during the term of the instrument must be set at a "**current value**" of that rate. A "current value" of a rate is the value of the rate on any day that is no earlier than three months prior to the first day on which that value is in effect and no later than one year following that first day.

If a Variable Interest Rate Security provides for stated interest at either a single qualified floating rate or a single objective rate throughout the term thereof, then any stated interest on the Variable Interest Rate Security which is unconditionally payable in cash or property (other than debt instruments of the relevant Issuer) at least annually will constitute qualified stated interest and will be taxed accordingly. Thus, a Variable Interest Rate Security that provides for stated interest at either a single qualified floating rate or a single objective rate throughout the term thereof generally will not be treated as having been issued with OID unless the Variable Interest Rate Security is issued at a "true" discount (i.e., at a price below the Security's stated principal amount) in excess of a specified *de minimis* amount. OID on a Variable Interest Rate Security arising from "true" discount is allocated to an accrual period using the constant yield method described above by assuming that the variable rate is a fixed rate equal to (i) in the case of a qualified floating rate or qualified inverse floating rate, the value, as of the issue date, of the qualified floating rate or qualified inverse floating rate, or (ii) in the case of an objective rate (other than a qualified inverse floating rate), a fixed rate that reflects the yield that is reasonably expected for the Variable Interest Rate Security.

In general, any other Variable Interest Rate Security will be converted into an "equivalent" fixed rate debt instrument for the purposes of determining the amount and accrual of OID and qualified stated interest on the Variable Interest Rate Security. Such a Variable Interest Rate Security must be converted into an "equivalent" fixed rate debt instrument by substituting any qualified floating rate or qualified inverse floating rate provided for under the terms of the Variable Interest Rate Security with a fixed rate equal to the value of the qualified floating rate or qualified inverse floating rate, as the case may be, as of the Variable Interest Rate Security's issue date. Any objective rate (other than a qualified inverse floating rate) provided for under the terms of the Variable Interest Rate Security is converted into a fixed rate that reflects the yield that is reasonably expected for the Variable Interest Rate Security. In the case of a Variable Interest Rate Security that provides for stated interest at a fixed rate in addition to either one or more qualified floating rates or a qualified inverse floating rate, the fixed rate is initially converted into a qualified floating rate (or a qualified inverse floating rate, if the Variable Interest Rate Security provides for a qualified inverse floating rate). Under these circumstances, the qualified floating rate or qualified inverse floating rate that replaces the fixed rate must be such that the fair market value of the

Variable Interest Rate Security as of the Variable Interest Rate Security's issue date is approximately the same as the fair market value of an otherwise identical debt instrument that provides for either the qualified floating rate or qualified inverse floating rate rather than the fixed rate. Subsequent to converting the fixed rate into either a qualified floating rate or a qualified inverse floating rate, the Variable Interest Rate Security is converted into an "equivalent" fixed rate debt instrument in the manner described above.

Once the Variable Interest Rate Security is converted into an "equivalent" fixed rate debt instrument pursuant to the foregoing rules, the amount of OID and qualified stated interest, if any, are determined for the "equivalent" fixed rate debt instrument by applying the general OID rules to the "equivalent" fixed rate debt instrument and a U.S. Holder of the Variable Interest Rate Security will account for the OID and qualified stated interest as if the U.S. Holder held the "equivalent" fixed rate debt instrument. In each accrual period, appropriate adjustments will be made to the amount of qualified stated interest or OID assumed to have been accrued or paid with respect to the "equivalent" fixed rate debt instrument in the event that these amounts differ from the actual amount of interest accrued or paid on the Variable Interest Rate Security during the accrual period.

If a Security that provides for interest at one or more variable rates does not qualify as a Variable Interest Rate Security, then the Security could be treated as a contingent payment debt obligation provided that the Security is properly treated as debt for U.S. federal income tax purposes. See "*Contingent Payment Debt Instruments*" below for a discussion of the U.S. federal income tax treatment of such Securities. In addition, a U.S. Holder of certain Securities that do not qualify as Variable Interest Rate Securities and that are subject to an alternative payment schedule or schedules applicable upon the occurrence of a contingency or contingencies may be required to determine the yield and maturity of the Securities assuming that the payments will be made according to the payment schedule that is most likely to occur if the timing and amounts of the payments that comprise each schedule are known as of the issue date, and one of such schedules is significantly more likely than not to occur.

Short-Term Securities

In general, an individual or other cash basis U.S. Holder of a Short-Term Security is not required to accrue OID for U.S. federal income tax purposes unless it elects to do so, but may be required to include any stated interest in income as the interest is received. An accrual basis U.S. Holder and certain other U.S. Holders are required to accrue OID on Short-Term Securities on a straight-line basis or, if the U.S. Holder so elects, under the constant-yield method (based on daily compounding). In the case of a U.S. Holder not required and not electing to include OID in income currently, any gain realised on the sale or retirement of the Short-Term Security will be ordinary income to the extent of the OID accrued on a straight-line basis (unless an election is made to accrue the OID under the constant-yield method) through the date of sale or retirement. A U.S. Holder who is not required and does not elect to accrue OID on Short-Term Securities will be required to defer deductions for interest on borrowings allocable to Short-Term Securities in an amount not exceeding the deferred income until the deferred income is realised.

For purposes of determining the amount of OID subject to these rules, all interest payments on a Short-Term Security are included in the Short-Term Security's stated redemption price at maturity. A U.S. Holder may elect to determine OID on a Short-Term Security as if the Short-Term Security had been originally issued to the U.S. Holder at the U.S. Holder's purchase price for the Short-Term Security. This election shall apply to all obligations with a maturity of one year or less acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies, and may not be revoked without the consent of the IRS.

Contingent Payment Debt Instruments

Certain Series or Tranches of Securities that provide for certain contingencies that affect the timing and amount of payments, including Securities with a variable rate or rates that do not qualify as Variable Interest Rate Securities as described above, may be treated as contingent payment debt instruments ("**Contingent Securities**"), as opposed to Variable Interest Rate Securities, for U.S. federal income tax purposes. Under applicable U.S. Treasury regulations, interest on the Contingent Securities is treated as OID. The U.S. Holder must accrue OID on a constant-yield basis using (i) a yield to maturity that reflects the rate at which the relevant Issuer would issue a comparable fixed-rate instrument with no contingent payments but with terms and conditions otherwise similar to the Contingent Security (the "**comparable yield**") and (ii) a projected payment schedule determined by the relevant Issuer at the time the Contingent

Security is issued (the "**projected payment schedule**"). This projected payment schedule must include each non-contingent payment on the Contingent Security and an estimated amount for each contingent payment, and must produce the comparable yield. Interest inclusions will be adjusted upward and downward to reflect the difference, if any, between the actual payments received and the projected amount of such payments on the Contingent Securities under the projected payment schedule. Special rules apply to the sale or other disposition of a Contingent Security. See "*Sale, Retirement or Other Taxable Disposition of Securities*" below.

The relevant Issuer generally is required to provide to Holders, solely for U.S. federal income tax purposes, a schedule of the projected amounts of payments on Contingent Securities. A U.S. Holder of a Contingent Security may submit a written request for the schedule to the attention of J.P. Morgan Securities LLC at 383 Madison Avenue, 5th Floor, New York, New York 10179, United States of America, or such other address as may be provided in the relevant Pricing Supplement.

THE COMPARABLE YIELD AND PROJECTED PAYMENT SCHEDULE WILL NOT BE DETERMINED FOR ANY PURPOSE OTHER THAN FOR THE DETERMINATION OF INTEREST ACCRUALS AND ADJUSTMENTS THEREOF IN RESPECT OF CONTINGENT SECURITIES FOR UNITED STATES FEDERAL INCOME TAX PURPOSES AND WILL NOT CONSTITUTE A PROJECTION OR REPRESENTATION REGARDING THE ACTUAL AMOUNTS PAYABLE TO THE HOLDERS OF THE SECURITIES.

A U.S. Holder generally will be bound by the comparable yield and the projected payment schedule determined by the relevant Issuer unless the U.S. Holder determines its own comparable yield and projected payment schedule and explicitly discloses such schedule to the IRS, and explains to the IRS the reason for preparing its own schedule. The relevant Issuer's determination, however, is not binding on the IRS, and it is possible that the IRS could conclude that some other comparable yield or projected payment schedule should be used instead.

A U.S. Holder of a Contingent Security generally will be required to include in income the sum of the daily portions of OID with respect to the Contingent Security for each day during the taxable year or portion of the taxable year in which the U.S. Holder holds the Contingent Security, generally as described above in "Original Issue Discount" above. For these purposes, the "**adjusted issue price**" of a Contingent Security at the beginning of any accrual period is the issue price of the Security increased by the amount of accrued OID for each prior accrual period, and decreased by the projected amount of any payments made on the Security. No additional income will be recognised upon the receipt of payments of stated interest in amounts equal to the annual payments included in the projected payment schedule described above. Any net differences between actual payments received by the U.S. Holder on the Contingent Security in a taxable year and the projected amounts of those payments will be accounted for as additional interest (in the case of a net positive adjustment) or as an offset to interest income in respect of the Security (in the case of a net negative adjustment), for that taxable year. If the net negative adjustment for a taxable year exceeds the amount of interest on the Contingent Security for that year, the excess will be treated as an ordinary loss in that year, but only to the extent the U.S. Holder's total interest inclusions on the Contingent Security exceed the total amount of any ordinary loss in respect of the Contingent Security claimed by the U.S. Holder under this rule in prior taxable years. Any net negative adjustment that is not allowed as an ordinary loss for the taxable year is carried forward to the next taxable year, and is taken into account in determining whether the U.S. Holder has a net positive or negative adjustment for that year. Any net negative adjustment that is carried forward to a taxable year in which the U.S. Holder sells or taxably disposes of the Contingent Security reduces the U.S. Holder's amount realised on the sale or other taxable disposition.

If a U.S. Holder purchases a Contingent Security for an amount that differs from the Security's adjusted issue price at the time of the purchase, such U.S. Holder must determine the extent to which the difference between the price it paid for the Security and the adjusted issue price of the Security is attributable to a change in expectations as to the projected payment schedule, a change in interest rates, or both, and reasonably allocate the difference accordingly. A safe-harbour may apply to permit the allocation of this difference pro-rata to OID accruals if the Contingent Security is exchange listed property, as defined in applicable U.S. Treasury Regulations.

If a U.S. Holder purchases a Contingent Security for an amount that is less than the adjusted issue price of the Security, the amount of the difference allocated to a daily portion of OID or to a projected payment is treated as a positive adjustment to such Holder's income inclusion on the date the OID accrues or the

payment is made. If a U.S. Holder purchases a Contingent Security for an amount that is more than the adjusted issue price of the Security, the amount of the difference allocated to a daily portion of OID or to a projected payment is treated as a negative adjustment to such U.S. Holder's income inclusion on the date the OID accrues or the payment is made.

Because any Form 1099-OID that a U.S. Holder receives will not reflect the effects of positive or negative adjustments resulting from its purchase of a Contingent Security at a price other than the adjusted issue price as determined for U.S. federal income tax purposes, U.S. Holders are urged to consult with their tax advisors as to whether and how adjustments should be made to the amounts reported on any Form 1099-OID.

Special rules may apply if all the remaining payments on a Contingent Security become fixed substantially contemporaneously. For this purpose, payments will be treated as fixed if the remaining contingencies with respect to them are remote or incidental. Under these rules, a U.S. Holder would be required to account for the difference between the original projected payments and the fixed payments in a reasonable manner over the period to which the difference relates. In addition, a U.S. Holder would be required to make adjustments to, among other things, its accrual periods and its tax basis in the Contingent Security. The character of any gain or loss on a sale or other taxable disposition of the Contingent Security also might be affected. If one or more (but not all) contingent payments on a Contingent Security became fixed more than six months prior to the relevant payment date(s), a U.S. Holder would be required to account for the difference between the original projected payment(s) and the fixed payment(s) on a present value basis. Prospective purchasers of Contingent Securities should consult their tax advisors regarding the application of these rules.

Foreign Currency Securities Other than Foreign Currency Contingent Securities

If payments of qualified stated interest are made in respect of a Security that is denominated in a single currency other than the U.S. dollar (for purposes of this discussion, a "foreign currency"), the amount of interest income realised by a U.S. Holder that uses the cash method of tax accounting (a cash-method holder) will be the U.S. dollar value of the currency payment based on the spot rate of exchange on the date of receipt regardless of whether the payment in fact is converted into U.S. dollars. No foreign currency gain or loss should be recognised by a cash-method holder with respect to the receipt of such payment (other than foreign currency gain or loss realised on the disposition of the currency received). In the case of a Security that provides for payments in U.S. dollars determined by reference to a single foreign currency, a cash-method holder generally should recognise interest income on the Security in an amount equal to the U.S. dollars received. Both types of Securities are referred to herein as "**Foreign Currency Securities**".

A U.S. Holder that uses the accrual method of tax accounting (an accrual-method holder) will accrue interest income (other than OID) on a Foreign Currency Security in the relevant foreign currency. In the case of a Foreign Currency Security (other than a Foreign Currency Contingent Security) that is also a Discount Security, a U.S. Holder should determine the U.S. dollar amount includible in income as OID for each accrual period by calculating the amount of OID allocable to that accrual period in the relevant foreign currency, using the constant-yield method described above under "Original Issue Discount". The interest income accrued or amount of OID determined should then be translated into U.S. dollars based on (i) the average exchange rate in effect during the interest accrual period, or portion thereof within the holder's taxable year, or (ii) at the holder's election, at the spot rate of exchange on (1) the last day of the accrual period, or the last day of the taxable year within the accrual period if the accrual period spans more than one taxable year, or (2) the date of receipt (or, in the case of OID, on the date such OID is treated as paid, as described above under "Original Issue Discount"), if that date is within five business days of the last day of the accrual period. Such an election must be applied consistently by the U.S. Holder to all Foreign Currency Securities from year to year and can be revoked only with the consent of the IRS.

Upon receipt of an amount attributable to OID (whether in connection with a payment on the Security or a sale or other taxable disposition of the Security), a U.S. Holder may recognise U.S. source foreign currency gain or loss (taxable as ordinary income or loss) in an amount equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the corresponding amount(s) previously accrued, regardless of whether the payment is in fact converted into U.S. dollars. Upon a sale or other taxable disposition of the Security, the amount of foreign currency gain

or loss recognised will be limited by the overall amount of gain or loss recognised on the taxable disposition.

Market Discount on a Security that is denominated in, or determined by reference to, a foreign currency, will be accrued in the foreign currency. If the U.S. Holder elects to include market discount in income currently, the accrued market discount will be translated into U.S. dollars at the average exchange rate for the accrual period (or portion thereof within the U.S. Holder's taxable year). Upon the receipt of an amount attributable to accrued market discount, the U.S. Holder may recognise U.S. source exchange gain or loss (which will be taxable as ordinary income or loss) determined in the same manner as for accrued interest or OID. A U.S. Holder that does not elect to include market discount in income currently will recognise, upon the disposition or maturity of the Security, the U.S. dollar value of the amount accrued, calculated at the spot rate on that date, and no part of this accrued market discount will be treated as exchange gain or loss.

Bond premium (including acquisition premium) on a Security that is denominated in, or determined by reference to, a foreign currency, will be computed in units of the foreign currency, and any such bond premium that is taken into account currently will reduce interest income in units of the foreign currency. On the date bond premium offsets interest income, a U.S. Holder may recognise U.S. source exchange gain or loss (taxable as ordinary income or loss) measured by the difference between the spot rate in effect on that date, and on the date the Securities were acquired by the U.S. Holder. A U.S. Holder that does not elect to take bond premium (other than acquisition premium) into account currently will recognise a loss when the Security matures.

Foreign Currency Contingent Securities

Special rules apply to determine the accrual of OID, and the amount, timing, and character of any gain or loss on a Contingent Security that is denominated in, or determined by reference to, a foreign currency (a "**Foreign Currency Contingent Security**"). The rules applicable to Foreign Currency Contingent Securities are complex, and U.S. Holders are urged to consult their tax advisers concerning the application of these rules. The term "Foreign Currency Contingent Security" also applies to certain debt instruments denominated in, or providing for payments determined by reference to, multiple currencies.

Under these rules, a U.S. Holder of a Foreign Currency Contingent Security generally will be required to accrue OID in the foreign currency in which the Foreign Currency Contingent Security is denominated, if applicable, or in the foreign currency with reference to which payments on the Security are determined (or, in the case of a Foreign Currency Contingent Security that has payments determined by reference to more than one foreign currency, in the "predominant currency" determined under applicable Treasury regulations) (the relevant foreign currency). A U.S. Holder of a Foreign Currency Contingent Security will apply rules similar to those applicable to Contingent Securities, as described above under "Contingent Payment Debt Instruments", to determine OID accruals, account for net positive or net negative adjustments, and calculate income or loss on the taxable disposition of the Foreign Currency Contingent Security. All such determinations are made in the relevant foreign currency.

A highly complex set of rules governs the translation into U.S. dollars of the amounts determined in the relevant foreign currency and the related determination of foreign currency gain or loss. Prospective purchasers of Foreign Currency Contingent Securities should consult their tax advisors regarding these rules. A U.S. Holder might be required to file a disclosure statement with the IRS if the U.S. Holder recognises foreign currency loss above certain thresholds (as described below under "Reportable Transactions").

Fungibility Issue

The relevant Issuer may, without the consent of the Holders of outstanding Securities, issue additional Securities with identical terms. These additional Securities, even if they are treated for non-tax purposes as part of the same series as the original Securities, in some cases may be treated as part of a separate issue for U.S. federal income tax purposes. In such a case, the additional Securities may be considered to have been issued with OID even if the original Securities had no OID, or the additional Securities may have a greater amount of OID than the original Securities. These differences may affect the market value of the original Securities if the additional Securities are not otherwise distinguishable from the original Securities.

Amortisable Bond Premium

A U.S. Holder that purchases a Security for an amount in excess of its principal amount, or for a Discount Security, its stated redemption price at maturity, may elect to treat the excess as "**amortisable**" within the meaning of section 171 of the Code in which case the amount required to be included in the U.S. Holder's income each year with respect to interest on the Security will be reduced by the amount of amortisable bond premium allocable (based on the Security's yield to maturity or in some cases its earlier call date) to that year. Any election to amortise bond premium will apply to all bonds held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder, and is irrevocable without the consent of the IRS.

Sale, Retirement or Other Taxable Disposition of Securities

A U.S. Holder generally will recognise gain or loss on the sale, retirement or other taxable disposition of a Security equal to the difference between the amount realised on the sale or retirement and the tax basis of the Security. Except to the extent described above under "Market Discount" or "Short Term Securities" or described below in relation to Contingent Securities or attributable to accrued but unpaid interest or changes in exchange rates, gain or loss recognised on the sale or retirement of a Security will be capital gain or loss and will be long-term capital gain or loss if the U.S. Holder's holding period in the Securities exceeds one year. Gain or loss realised by a U.S. Holder on the sale or retirement of a Security generally will be U.S. source. A U.S. Holder's tax basis in a Security generally will be its cost, increased by the amount of any OID or market discount included in the U.S. Holder's income with respect to the Security and the amount, if any, of income attributable to *de minimis* OID and *de minimis* market discount included in the U.S. Holder's income with respect to the Security, and reduced by (i) the amount of any payments that are not qualified stated interest payments, and (ii) the amount of any amortisable bond premium applied to reduce interest on the Security.

Gain from the sale, retirement or other taxable disposition (including an exchange of the Contingent Security for an underlier) of a Contingent Security will be treated as interest income taxable at ordinary income (rather than capital gains) rates. Any loss will be ordinary loss to the extent that the U.S. Holder's total interest inclusions to the date of sale or retirement exceed the total net negative adjustments that the U.S. Holder took into account as ordinary loss, and any further loss will be capital loss. Gain or loss realised by a U.S. Holder on the sale or retirement of a Contingent Security will be U.S. source. A U.S. Holder's tax basis in a Contingent Security generally will be equal to its cost, increased by the amount of OID previously accrued with respect to the Security (determined without regard to any positive or negative adjustments reflecting the difference between actual payments and projected payments), increased or decreased by the amount of any positive or negative adjustment that the U.S. Holder is required to take into account for the difference between such U.S. Holder's purchase price for the Security and the adjusted issue price of the Security at the time of the purchase, and decreased by the amount of any projected payments scheduled to be made on the Security to the U.S. Holder (without regard to the actual amount paid). At maturity, a U.S. Holder of a Contingent Security will be treated as receiving the projected amount for that date (reduced by any carryforward of a net negative adjustment), and any difference between the amount received and that projected amount will be treated as a positive or negative adjustment.

For purposes of determining gain or loss upon the sale, retirement or other taxable disposition of a Foreign Currency Security other than a Foreign Currency Contingent Security (a "**noncontingent Foreign Currency Security**"), a U.S. Holder's tax basis in the Foreign Currency Security will be determined by reference to the U.S. dollar cost of the Foreign Currency Security. The U.S. dollar cost of a Security purchased with foreign currency generally will be the U.S. dollar value of the purchase price on the date of purchase, or on the settlement date in the case of a purchase by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects) of a Security traded on an established securities market, as defined in applicable Treasury regulations (a "**traded Security**"). The amount realised on a sale, retirement or other taxable disposition of a noncontingent Foreign Currency Security for an amount in foreign currency will be the U.S. dollar value of the foreign currency amount on the date of the sale, retirement or disposition, or the settlement date in the case of a sale or other taxable disposition by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects) of a traded Security. Such an election by an accrual basis U.S. Holder must be applied consistently from year to year and cannot be revoked without the consent of the IRS. A U.S. Holder will recognise U.S. source exchange rate gain or loss (taxable as ordinary income or loss) on the sale, retirement or other taxable disposition of a noncontingent Foreign Currency Security in amount equal to the difference, if any, between the U.S. dollar value of the

U.S. Holder's purchase price for the Foreign Currency Security (or, if less, the principal amount of the Foreign Currency Security) (i) on the date of sale, retirement or disposition and (ii) the date on which the U.S. Holder acquired the Foreign Currency Security. Any such exchange rate gain or loss will be realised only to the extent of total gain or loss realised on the sale, retirement or disposition. A U.S. Holder that does not determine its amount realised on the settlement date of the sale, retirement or disposition will also recognise U.S. source exchange rate gain or loss on the difference between the U.S. dollar amount realised and the U.S. dollar value of the foreign currency on the settlement date.

For purposes of determining gain or loss upon a sale, retirement or other taxable disposition of a Foreign Currency Contingent Security, a U.S. Holder's tax basis and amount realised for the Security will be translated into U.S. dollars. Special rules apply to determine the amount, timing, and character of any such gain or loss. A U.S. Holder of a Foreign Currency Contingent Security will apply rules similar to those applicable to Contingent Securities, as described above, to calculate such gain or loss. Such calculation is made in the relevant foreign currency. A highly complex set of rules governs the translation into U.S. dollars of the amount of gain or loss calculated in the relevant foreign currency, and the determination of related foreign currency gain or loss. Prospective purchasers of Foreign Currency Contingent Securities should consult their tax advisors regarding these rules. A U.S. Holder may be required to file a disclosure statement with the IRS if the U.S. Holder recognises foreign currency loss above certain thresholds (as described below under "**Reportable Transactions**").

Receipt of Foreign Currency

Upon receipt of an interest payment (including a payment attributable to accrued but unpaid interest upon the sale or retirement of a Security) denominated in, or determined by reference to, a foreign currency, a U.S. Holder may recognise U.S. source exchange gain or loss (taxable as ordinary income or loss) in an amount equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the amount previously accrued, regardless of whether the payment is in fact converted into U.S. dollars.

Disposition of Foreign Currency

Foreign currency received as interest on a Security or on the sale or retirement of a Security will have a tax basis equal to its U.S. dollar value at the time the foreign currency is received. Foreign currency that is purchased generally will have a tax basis equal to the U.S. dollar value of the foreign currency on the date of purchase. Any gain or loss recognised on a sale or other disposition of a foreign currency (including its use to purchase Securities or upon exchange for U.S. dollars) will be U.S. source ordinary income or loss.

U.S. Federal Income Tax Treatment of Securities Treated as other than Debt

The following summary may apply to certain Securities that are not treated as debt for U.S. federal income tax purposes. This summary does not discuss all types of Securities that may be treated as other than debt for U.S. federal income tax purposes.

Securities properly characterised as other than debt, depending on their precise terms, may be characterised as options (or collateralised options written or held by the U.S. Holder), or as forward contracts (including prepaid forward contracts). A Security that provides for a payment in redemption at maturity and does not provide for a current coupon may constitute an option or a forward contract for U.S. Federal income tax purposes. A Security may also be characterised as some other form of derivative financial contract including perhaps, if the Security provides for interim payments, as notional principal contracts or as consisting of a unit comprised of a derivative and a separate interest-bearing deposit that collateralises a Holder's obligations under that derivative. Alternative characterisations are also possible.

In general, in the case of a Security that does not provide for payments prior to maturity and is properly treated as a forward contract, variable prepaid forward contract or option contract, a U.S. Holder generally should not recognise income until maturity. At maturity, if the Security is physically settled by delivery of the reference property to the Holder, no gain or loss generally would be recognised and the U.S. Holder would have a basis in the property delivered equal to its tax basis in the Security (but the holding period of the property may not include the holding period for the Security). To the extent that the Security is treated as including, in addition to the option or instrument being settled, other additional options that are deemed to lapse, it is possible that some amount attributable to the premium on those

other options would be recognised even if no cash premium is stated to be payable to the Holder. Otherwise, gain or loss to a Holder generally would be recognised and determined when the Security is settled based on the difference between the amounts received under the Security and the Holder's tax basis in the Security. Such gain or loss generally would be capital gain or loss. Certain legislative and regulatory proposals intended to address the treatment of income from prepaid derivatives could alter the foregoing treatment of Securities, possibly retroactively. It is not possible to predict whether or when such proposals will be adopted.

However, a Security that provides for a single payment or settlement at maturity and interim payments could also perhaps be treated as a notional principal contract, or as a unit comprised of an option or forward contract collateralised by an interest bearing deposit, in which case all or a portion of the interim payments may be treated as interest on the deposit. Amounts not treated as deposit interest could still constitute ordinary income. In either case, income could be recognised in advance of maturity as ordinary income rather than taken into account in computing the gain or loss from the Security.

If a Security were treated as a notional principal contract, a U.S. Holder also may also be required to treat as ordinary income, rather than capital gain, payments received pursuant to the terms of the Security at maturity. To the extent the Holder were treated as having made (or received) a "nonperiodic payment" under the notional principal contract (for example, an upfront payment), the Issuer currently intends to bifurcate the payment and the notional principal contract into a loan and a separate contract only if the nonperiodic payment is "significant." However, it is possible that notional principal contracts with any nonperiodic payment (including a payment that is not significant) may, subject to certain limited exceptions, become subject to bifurcation. Amounts deemed to be interest on the loan generally would be characterised as such for most federal income tax purposes. To the extent the Holder were treated as having made (or received) a nonperiodic payment that was not treated as a separate loan, the nonperiodic payment would generally be amortised into income or as an expense over time with any income being treated as ordinary income and any expense being treated as an ordinary investment expense, which in the case of an individual is treated as a miscellaneous itemised deduction. Miscellaneous itemised deductions are denied for alternative minimum tax purposes and, for calendar years 2018 through 2025, for regular tax purposes.

The IRS also has issued proposed regulations governing the treatment of swaps that provide for contingent nonperiodic payments which could alter the timing and character of payments under Securities treated as notional principal contracts. The proposed regulations would generally require taxpayers either to accrue contingent payments under a complex "noncontingent swap method" in advance of receiving the income or, if certain requirements are met, account for the swap on a mark to market basis. The noncontingent swap method and mark-to-market method are not mandated until 30 days after the proposed regulations are finalised. However, the preamble to the proposed regulations states that taxpayers that have not previously adopted a method of accounting for contingent swaps must immediately begin accruing contingent nonperiodic payments under any "reasonable amortisation method" (including the noncontingent swap method or the mark-to-market method) and the preamble indicates that the IRS does not consider a "wait and see" method to be reasonable for this purpose. It is unclear when the proposed regulations will be finalised and whether final regulations will differ from the proposed regulations.

Notwithstanding the general discussion above, in the case of a Security that permits the relevant Issuer or Holder to vary the terms, for example by allowing discretionary substitution of reference property, such changes could be deemed to result in a deemed exchange of the Security for a new Security for federal income tax purposes and gain or loss could be recognised in advance of maturity. If a Security is treated as exchanged for a new Security reissued, the characterisation of the "new" Security as debt, option, forward agreement, notional principal contract or other derivative financial product may change and the "new" Security may be treated as being issued with original issue discount or bond premium or having significant nonperiodic payments or other nonperiodic payments. U.S. Holders should consult their tax advisers concerning the U.S. federal income tax consequences to them of changes in certain terms of the Securities.

In the case of a Security denominated in a currency other than the United States dollar, all or a portion of the amount recognised may be treated as foreign currency gain or loss. Foreign currency gain or loss recognised by a U.S. Holder (generally, the gain or loss attributable to changes in value of the foreign currency relative to the dollar) would be treated as ordinary income rather than capital gain.

Subject to the foregoing and the special rules discussed below, provided that Security references a Reference Asset that would be a capital asset if held directly by the Holder, gain or loss with respect to the Securities resulting from the settlement of the Security at maturity generally should be capital gain or loss.

Constructive Ownership Transactions

To the extent that a Security is treated as a "constructive ownership transaction", any gain on disposition (or deemed disposition) may be treated as ordinary income and an interest charge may be imposed on a deemed underpayment of tax for each taxable year during which the Security was held. For the purposes of determining the interest charge, gain treated as ordinary income is allocated to each such taxable year during which the Security was held so that the amount of gain accrued from each year to the next increases at a constant rate equal to the "applicable federal rate" (a rate published monthly by the IRS based on prevailing Treasury yields) in effect at the time the Security is issued.

A Security could be treated in whole or in part as a constructive ownership transaction if the issuer of a Reference Asset is treated, for U.S. federal income tax purposes, among others, as any of the following:

- a passive foreign investment company,
- a real estate investment trust,
- a registered investment company,
- a partnership,
- a trust, or
- a common trust fund.

The relevant Issuer does not intend to determine whether the issuers of the Reference Assets in fact fall in any of these categories. Investors should consult their tax advisers regarding the status of the Reference Assets and the application of the constructive ownership transaction rules to ownership of the Security.

To the extent the issuer of a Reference Asset is deemed to be a "passive foreign investment company" and the Security is determined to be an option for purposes of applicable regulations, certain payments received prior to the maturity date of the Security and any gains may be subject to adverse tax treatment under the rules for investments in passive foreign investment companies. In the case of an excess distribution or any gain, (i) the excess distribution or gain is allocated rateably over the U.S. Holder's holding period, (ii) the amount allocated to the current tax year is taxed as ordinary income, and (iii) the amount allocated to each previous tax year is taxed at the highest applicable marginal rate in effect for that year and an interest charge is imposed to recover the deemed benefit from the deferred payment of the tax. These rules also may effectively prevent a U.S. Holder from treating the gain realised on the disposition of the Security as capital gain. A U.S. Holder would not be able to elect to treat such an issuer of a Reference Asset as a qualified electing fund ("**QEF**") in these circumstances to avoid these consequences. The relationship between these rules and the rules for "constructive ownership transaction" is unclear under current law. The relevant Issuer does not intend to determine whether the issuers of the Reference Assets in fact are passive foreign investment companies. Investors should consult their tax advisers regarding the status of the Reference Assets and the application of these rules to ownership of the Security.

Specific Considerations for U.S. Holders of LEPWs

The discussion below addresses LEPWs with a nominal exercise price. The discussion below does not address, among other things, Warrants requiring the payment of a substantial exercise price. The discussion below assumes the relevant Pricing Supplement will provide with respect to the applicable LEPW that the relevant Issuer pay an amount, in redemption of the LEPW, that is determined by reference to the fair market value of the Reference Asset for the LEPW.

Under current law, U.S. Holders should not be required to recognise income or loss upon the acquisition of a LEPW, and (except as provided below) U.S. Holders should not be required to accrue income with respect to a LEPW over the life of the LEPW. Certain legislative and regulatory proposals intended to

address the treatment of income from prepaid derivatives could alter the foregoing treatment of Securities, possibly retroactively. It is not possible to predict whether or when such proposals will be adopted.

The U.S. federal income tax characterisation of any payments made by the terms of a LEPW prior to its stated maturity date (if any) is unclear. To the extent we are required to do so, we will report such amounts to holders and the IRS as ordinary income. Other characterisations of a LEPW that provides for such amounts are possible that could result in the timing and character of income recognised being different than that described above. U.S. Holders should consult their own tax advisers about the timing and character of income recognised with respect to LEPWs.

A U.S. Holder's tax basis in a LEPW generally will be the LEPW's U.S. dollar cost. The U.S. dollar cost of a LEPW purchased with a foreign currency generally will be the U.S. dollar value of the purchase price on the date of purchase plus the U.S. dollar value of any nominal exercise price paid by the U.S. Holder. A U.S. Holder will recognise gain or loss on the sale or exercise of a LEPW equal to the difference between the amount of cash received upon sale or exercise (generally, determined net of applicable related expenses) and the U.S. Holder's tax basis in the LEPW. Except as provided under the discussion of "constructive ownership transactions" above, any gain or loss recognised on the sale or exercise of a LEPW should be capital gain or loss and should be long-term capital gain or loss if the U.S. Holder's holding period in the LEPW exceeds one year.

To the extent that a LEPW is treated as a "constructive ownership transaction", under the rules discussed above, any gain on disposition (or deemed disposition) may be treated as ordinary income and an interest charge may be imposed on a deemed underpayment of tax for each taxable year during which the LEPW was held.

To the extent the issuer of a Reference Asset is deemed to constitute a passive foreign investment company and the LEPW is determined to be an option for purposes of applicable regulations, certain payments received prior to the maturity date of the LEPW and any gains may be subject to adverse tax treatment under the rules for investments in passive foreign investment companies discussed above. These rules also may effectively prevent a U.S. Holder from treating the gain realised on the disposition of the LEPW as capital gain. The relationship between these rules and the rules for "constructive ownership transaction" is unclear under current law.

Medicare Tax on Net Investment Income

A U.S. Holder that is an individual or estate and certain trusts will be subject to a 3.8 per cent. tax on the lesser of (i) the U.S. Holder's "net investment income" for the relevant taxable year and (ii) the excess of the U.S. Holder's modified adjusted gross income for the taxable year over the applicable threshold amount. A U.S. Holder's net investment income generally will include any income and gain on a Security, unless such income or gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). U.S. Holders are urged to consult their tax advisors regarding the applicability of the Medicare tax to an investment in the Securities.

Substitution of Issuer

The terms of the Securities provide that, in certain circumstances, the obligations of the relevant Issuer under the Securities may be assumed by another entity. Any such assumption might be treated for U.S. federal income tax purposes as a deemed disposition of Securities by a U.S. Holder in exchange for new Securities issued by the new obligor. As a result of this deemed disposition, a U.S. Holder could be required to recognise capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the issue price of the new Securities (as determined for U.S. federal income tax purposes), and the U.S. Holder's tax basis in the Securities. If a Security is treated as reissued, it may be treated as being issued with original issue discount or bond premium or having significant nonperiodic payments or other nonperiodic payments. In addition, the characterisation of a Security as debt, option, forward agreement, notional principal contract or other derivative financial product may change on account of a substitution of an Issuer. U.S. Holders should consult their tax advisers concerning the U.S. federal income tax consequences to them of a change in obligor with respect to the Securities.

Reportable Transactions

A U.S. taxpayer that participates in a "reportable transaction" will be required to disclose this participation to the IRS. The scope and application of these rules is not entirely clear. A U.S. Holder that is an individual or trust may be required to treat a foreign currency exchange loss from the Securities as a reportable transaction if the loss exceeds U.S.$50,000 in a single taxable year (or higher amounts for other types of U.S. Holders). In 2015, the U.S. Treasury Department and the IRS released notices designating certain "basket options", "basket contracts" and substantially similar transactions as reportable transactions. The notices apply to specified transactions in which a taxpayer or its "designee" has, and exercises, discretion to change the assets or an algorithm underlying the transaction. While an exercise of the type of discretion that would give rise to such reporting requirements in respect of the Securities is not expected, if the relevant Issuer, an Index Sponsor or Calculation Agent or other person were to exercise discretion under the terms of a Security or an Index underlying a Security and were treated as a Holder's "designee" for these purposes, unless an exception applied certain holders of the relevant Securities may be required to report certain information to the IRS, as set forth in the applicable Treasury regulations, or be subject to penalties. In addition, in the event the acquisition, holding or disposition of Securities otherwise constitutes participation in a "reportable transaction" for the purposes of these rules, a U.S. Holder may be required to disclose its investment by filing Form 8886 with the IRS. The relevant Issuer might also be required to report information regarding the transaction to the IRS. A penalty in the amount of U.S.$10,000 for natural persons and U.S.$50,000 for other persons (increased to U.S.$100,000 and U.S.$200,000, respectively, if the reportable transaction is a "Listed Transaction") may be imposed on any taxpayer that fails to timely file an information return with the IRS with respect to a transaction that is treated as a reportable transaction. Investors are urged to consult their tax advisers regarding the application of these rules to the acquisition, holding or disposition of Securities.

Taxation of Non-U.S. Holders

U.S. Withholding Taxes

Subject to the discussions below in "*U.S. Withholding under FATCA*", "U*.S. Withholding on Dividend Equivalent Payments*", "U*.S. Foreign Investment in Real Property Tax Act*", "*U.S. Information Reporting and Backup Withholding*", and "*FATCA*", the relevant Issuer expects that payments on the Securities to a Non-U.S. Holder generally will not be subject to U.S. federal withholding tax, provided that, in the case of payments treated as interest for U.S. federal income tax purposes with respect to Securities with a maturity at issue of more than 183 days, the following conditions are satisfied such that the interest payments qualify as "portfolio interest":

- the amount of the payment is not determined by reference to any receipts, sales or other cash flow, income or profits, change in value of any property of, or dividend or similar payment made by the relevant Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) or a person related to the Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) (other than, among other things, certain property that is traded on an exchange or interdealer market that satisfies the requirements necessary for the property to qualify as "actively traded property" or property held as a hedging transaction to manage interest rate or currency fluctuations with respect to an Security);

- the Non-U.S. Holder does not actually or constructively own 10 per cent. or more of the total combined voting power of all classes of stock of the relevant Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) entitled to vote;

- the Non-U.S. Holder is not for U.S. federal income tax purposes a controlled foreign corporation related to the relevant Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) through stock ownership;

- the Non-U.S. Holder is not a bank receiving interest on an extension of credit pursuant to a loan agreement entered into in the ordinary course of its business;

- the Non-U.S. Holder is not within a foreign country with respect to which the United States Secretary of the Treasury has made a determination under Section 871(h)(6) of the Code or Section 881(c)(6) of the Code that payments to any person within such foreign country (or payments addressed to, or for the account of, persons within such foreign country) shall not constitute as portfolio interest under either Section 871(h) or Section 881(c) of the Code ;

- in certain cases (i) the Non-U.S. Holder has provided the appropriate and properly completed and executed U.S. Internal Revenue Service Form W-8 on which it certifies, under penalties of perjury, that it is not a U.S. person, and (ii) in the case of payments made to an intermediary, a properly completed intermediary certification (such as U.S. Internal Revenue Service Form W-8IMY) and any other required documentation has been provided by the intermediary to the relevant Issuer (or JPMorgan Chase & Co. in the case of Securities issued by JPMCFC) or its paying agent; and

- the Security is treated as issued in registered form for U.S. federal income tax purposes.

Accordingly, except to the extent the Pricing Supplement indicates otherwise and subject to the discussions in the sections entitled "*U.S. Withholding Under FATCA*", "U*.S. Withholding on Dividend Equivalent Payments*", "*U.S. Foreign Investment in Real Property Tax Act*", "*U.S. Information Reporting and Backup Withholding*", and "*FATCA*", below, the relevant Issuer generally does not intend to withhold any amounts with respect to payments made to Non-U.S. Holders under the Securities, provided that Non-U.S. Holders provide the relevant Issuer, following a specific reasonable request by, or on behalf of, the relevant Issuer, a certification on the appropriate IRS Form W-8 or other reasonably requested certification regarding their nationality or identity.

Notwithstanding the discussion above, payments on a Security treated as U.S source income, other than amounts specifically exempted from U.S. withholding, including portfolio interest and interest on certain short-term debt obligations issued by a U.S. Issuer, could be subject to U.S. withholding tax generally.

Further, subject to the discussions in the sections entitled "*U.S. Withholding under FATCA*", "*U.S. Withholding on Dividend Equivalent Payments*", "*U.S. Foreign Investment in Real Property Tax Act*", and "*FATCA*", gain realised on the sale, retirement or other taxable disposition of a Security by a Non-U.S. Holder generally will not be subject to U.S. federal income tax unless (i) such income is effectively connected with a trade or business conducted by the Non-U.S. Holder in the United States, or (ii) the Non-U.S. Holder has or had a current or former relationship with the United States, including a relationship as a citizen or resident thereof or based on an individual's presence in the United States for 183 days or more in the taxable year of the sale.

U.S. Withholding under FATCA

As further described in "*FATCA*" below, payments to a non-U.S. entity could be subject to a separate 30 per cent. U.S. withholding tax without regard to the exemptions from U.S. withholding that may otherwise be available (including exemptions for amounts treated as portfolio interest).

U.S. Withholding on Dividend Equivalent Payments

Under Section 871(m) of the Code and regulations thereunder (collectively, "**Section 871(m)**"), payments on financial instruments that reference shares of one or more U.S. corporations may be treated as "dividend equivalent" payments that are subject to U.S. withholding tax at a rate of 30 per cent. For these purposes, a financial instrument that references certain funds or other investment vehicles that hold an interest in shares of a U.S. corporation, whether directly or synthetically through a financial instrument, may be treated as referencing the shares of the U.S. corporation. Generally, a "dividend equivalent" is a payment that is directly or indirectly contingent upon a U.S. source dividend or is determined by reference to a U.S. source dividend. For financial instruments issued on or after 1 January 2017 but prior to 1 January 2025, regulations and guidance under Section 871(m) provide that dividend equivalent payments will be subject to withholding if the instrument has a "delta" of one with respect to either an underlying U.S. stock or a U.S. stock component of an underlying index or basket. For financial instruments issued on or after 1 January 2025, dividend equivalent payments on (i) a "simple" financial instrument that has a delta of 0.8 or greater with respect to an underlying U.S. stock or a U.S. stock component of an underlying index or basket and (ii) a "complex" financial instrument that meets the "substantial equivalence" test with respect to an underlying U.S. stock or a U.S. stock component of an underlying index or basket, will be subject to withholding tax under Section 871(m). A simple financial instrument is an instrument which, with respect to each underlying U.S. stock or U.S. stock component of an underlying index or basket, all amounts to be paid or received on maturity, exercise, or any other payment determination date are calculated by reference to a single, fixed number of shares of the underlying U.S. stock or U.S. stock component, provided that the number of shares can be ascertained at the calculation time for the instrument, and there is a single maturity or exercise date with respect to

which all amounts (other than any upfront payment or any periodic payments) are required to be calculated with respect to the underlying U.S. stock or U.S. stock component. An example of a simple financial instrument is an instrument that entitles the holder to all of the appreciation (or a reduction in the principal payment equal to all of the depreciation) in the value of 100 shares of a U.S. stock and any periodic dividends on such shares. Very generally, a complex financial instrument is an instrument that is not a simple financial instrument as described above.

The delta of a financial instrument generally is defined as the ratio of the change in the fair market value of the instrument to a small change in the fair market value of the number of shares of the underlying U.S. corporation. A financial instrument generally will be treated as having a delta of one if it provides for 100 per cent. participation in all of the appreciation and depreciation of one or more underlying U.S. stocks. Very broadly, the substantial equivalence test for complex financial instruments analyses whether a financial instrument has a correlation to the applicable underlying U.S. stock that is at least as great as that of a simple financial instrument with a delta of at least 0.8.

The delta or substantial equivalence of a financial instrument generally is determined either as of the pricing or issue date of the instrument, in accordance with the regulations. However, the issue date must be used as the determination date if a financial instrument is priced more than 14 calendar days before it is issued. In addition, the delta or substantial equivalence of Securities that are held in inventory by an affiliate of the Issuer (between issuance and sale to an investor) may be required to be retested at the time of sale or disposition from inventory by such affiliate. If Securities sold from inventory are determined to be subject to withholding under Section 871(m) and the same Series of Securities sold at issuance were determined not to be subject to Section 871(m), Holders of Securities sold at issuance may be adversely affected to the extent the Issuer does not, or is unable to, separately track and distinguish Securities sold to investors at issuance from those sold out of inventory. Further, a Security may be treated as reissued for purposes of Section 871(m) upon a significant modification of the terms of the Security. In this context, a rebalancing or adjustment to the components of an underlying index or basket may result in the deemed reissuance of the Security (including for purposes of applying the effective dates provided in Section 871(m)). The Issuer intends to take the position that a Security should not be treated as reissued for this purpose as a result of a non-discretionary rebalancing or adjustment to the components of an underlying index or basket, an exercise of discretion by the index or basket provider or a board or committee responsible for maintaining the index or basket in interpreting its published, predefined criteria, or an exercise of discretion otherwise required as a result of a Market Disruption Event or similar events. Upon a significant modification, a Security that was not subject to withholding under Section 871(m) at issuance may become subject to withholding at the time of the deemed reissuance.

A Series of Securities that references an index or basket that is treated as a "qualified index" will not be subject to withholding under Section 871(m), even if such Securities meet, as applicable, the delta or substantial equivalence test with respect to a U.S. stock component of the index. In general, a qualified index is a diverse, passive, and widely used index that satisfies, as of the applicable determination date, the technical requirements prescribed by regulations. Whether a Series of Securities is treated as referencing a qualified index is determined at pricing or issuance of the Securities, in accordance with the regulations. If a Series of Securities is treated as referencing a qualified index, such Securities generally will not become subject to withholding under Section 871(m) in a subsequent year after such determination unless (i) the Securities are treated as significantly modified (including by certain changes to the index), (ii) the Securities are determined to meet the delta or substantial equivalence test, as applicable, at the time they are significantly modified and (iii) the index referenced by the Securities is no longer treated as a qualified index. In addition, if a Holder or a related party enters into one or more transactions in connection with a Security that reduce exposure to any component of an underlying index that is otherwise treated as a qualified index, the Security will not, subject to certain limited exceptions (such as transactions that reduce exposure to the entire index or that reduce exposure to components of the underlying index by five percent or less of the value of the index), be treated as referencing a qualified index. In such case, the Holder may be subject to Section 871(m) tax even though the Issuer and other withholding agents may not withhold with respect to the Security.

In addition, a Security that in isolation is not subject to Section 871(m) may nonetheless be subject to Section 871(m) if the Holder has engaged, or engages, in other transactions in respect of an underlying U.S. stock or component of an underlying index or basket in connection with the Security. For these purposes, a Security and such other transactions will be subject to withholding under Section 871(m) if, in the aggregate, they replicate the economics of a transaction that would be a Section 871(m) simple

financial instrument. In such situations, such Holders could be subject to Section 871(m) tax even if the Issuer does not withhold in respect of the Security. Further, a Holder may be required, including by custodians and other withholding agents with respect to the Security, to make representations regarding the nature of any other positions with respect to U.S. stock directly or indirectly referenced (including components of any index or basket) by such Security. A Holder that enters, or has entered, into other transactions in respect of a U.S. stock, component of an underlying index or basket, or the Securities should consult its own tax advisor regarding the application of Section 871(m) to the Securities and such other transactions.

The relevant Pricing Supplement will indicate if the Issuer has determined that the particular issue of Securities is expected to be subject to withholding under Section 871(m). For Securities deposited with the Relevant Clearing System(s) that are determined to be subject to withholding under Section 871(m), unless otherwise indicated in the Pricing Supplement, the Issuer will withhold at source on any dividend equivalent amounts and comply with certain related reporting requirements imposed by the clearing organisation in respect of such Securities. For Securities deposited with other clearing organisations, the Pricing Supplement may describe alternative withholding procedures based on any requirements of such organisations. Any determination by the Issuer on the application of Section 871(m) to a particular Security generally is binding on Holders, but is not binding on the IRS. The Section 871(m) regulations require complex calculations to be made with respect to Securities referencing shares of U.S. corporations and their application to a specific issue of Securities may be uncertain. Accordingly, even if the Issuer determines that a Security is not subject to Section 871(m), the IRS could assert that withholding is required in respect of such Security, including where the IRS concludes that the delta or substantial equivalence with respect to the Security was determined more than 14 days prior to the Security's issue date.

For Securities deposited with the Relevant Clearing System(s), unless indicated otherwise in the relevant Pricing Supplement, the rate of any withholding generally will not be reduced even if the Holder is not subject to (or exempted from) the withholding tax (such as beneficial owners or Holders that are "United States persons" and certain intermediaries) or is eligible for a reduction under an applicable treaty. In certain limited circumstances, and regardless of the Relevant Clearing System with whom the Securities are deposited, the Pricing Supplement may specify if the Issuer or other withholding agent will be able to withhold based on lower treaty rates to which Holders may be entitled or to take account of a Holder's exemption from the withholding tax. In general, Holders may be able to claim a refund for any excess amounts withheld by filing a U.S. tax return. However, Holders and beneficial owners may not receive the necessary information to properly claim a refund for excess withholding taxes. In addition, the IRS may not credit a Holder with withholding taxes remitted in respect of its Security for purposes of claiming a refund. Finally, a Holder's resident tax jurisdiction may not permit the holder to take a credit for U.S. withholding taxes related to the dividend equivalent amount. In any event, the Issuers will not be required to pay any additional amounts in respect of amounts withheld under Section 871(m) unless (i) "gross up" is specified to be applicable in the relevant Pricing Supplement, (ii) "Exclude Section 871(m) Taxes from Gross Up" is specified not to be applicable therein, and (iii) the withholding is not treated by the Issuer as occurring due to actions of such investor (as described in General Condition 18.2(n) (*Circumstances in which Additional Amounts will not be paid*)).

If a Series of Securities is determined to be subject to U.S. withholding tax under Section 871(m), information regarding the amount of each dividend equivalent, the delta of the Securities, the amount of any tax withheld and deposited, the estimated dividend amount (if applicable), and any other information required under the regulations, will be provided, communicated, or made available to Holders in a manner permitted by applicable regulations. The Pricing Supplement will specify how such information will be made available to Holders. Withholding on payments will be based on actual dividends on the underlying U.S. stock or, if otherwise notified by the Issuer in accordance with applicable regulations, on estimated dividends used in pricing the Securities. Where a Series of Securities that references estimated dividend amounts also provides for any additional payments to reflect actual dividends on the underlying U.S. stock (e.g., extraordinary dividends), withholding tax will also apply to any additional payments.

If the Issuer determines that a Security is subject to withholding under Section 871(m), withholding tax will apply in respect of the actual (or estimated, as described above) dividends that are paid on the underlying U.S. stock and may apply even if the Issuer does not make a concurrent payment to the Holder. In addition, the U.S. tax may be withheld on any portion of a payment or deemed payment that is a dividend equivalent. Withholding under Section 871(m) generally will be required when payments

are made on the Security or upon maturity, lapse or other disposition by the Holder of the Security. Alternatively, such withholding may occur in certain cases at the time a dividend is paid on the relevant U.S. stock (or, in certain other cases, at the close of the quarter upon which the dividend is paid). Upon remitting the taxes withheld to the IRS, any increase in value of the relevant asset, index or basket or distributions to a Holder in respect of a dividend equivalent will reflect the amount of the dividend net of the withholding described above.

Holders should consult with their tax advisers regarding the potential application of Section 871(m) to the Securities.

U.S. Foreign Investment in Real Property Tax Act

Under Section 897 of the Code, commonly referred to as the U.S. Foreign Investment in Real Property Tax Act ("**FIRPTA**"), a Non-U.S. Holder may be subject to U.S. federal income tax on a disposition of a United States real property interest (a "**USRPI**"). Very generally, a USRPI may be an interest in U.S. real property or an interest in a United States real property holding corporation (a "**USRPHC**") within the meaning of section 897 of the Code. However, an interest in a USRPHC that does not exceed generally 5 per cent. of the corporation's regularly traded stock is not a USRPI, after taking into account shares or interests of the underlying issuer that are directly, indirectly or constructively owned by such Non-U.S. Holder. In addition, holding the Securities may also impact the taxation of such other shares or interests.

The Issuer will not attempt to ascertain whether an issuer of reference shares, or an issuer of shares that are components of an Index or basket of securities, is a USRPHC. To the extent a Security is treated as a USRPI, any gain from the disposition thereof generally would be subject to U.S. federal income tax and required to be reported by the Non-U.S. Holder on a U.S. federal income tax return, and the amount realised on such disposition would in certain cases be subject to withholding at a rate of 15 per cent. Even if the Issuer does not withhold, there can be no assurance that a withholding agent will not withhold in respect of a Security. A Non-U.S. Holder may have U.S. income tax liability that exceeds amounts withheld, if any. Neither the Issuer, the Guarantor nor a withholding agent will pay any additional amounts in respect of amounts withheld or any tax liability arising under section 897 of the Code.

Non-U.S. Holders should consult with their tax advisors regarding the application of section 897 to an investment in their Securities.

U.S. Information Reporting and Backup Withholding

Amounts payable on, and the proceeds of a sale, redemption or other taxable disposition of, Securities may be subject to information reporting. Such amounts may also be subject to backup withholding if a Holder fails to provide certain identifying information (such as an accurate taxpayer identification number) or meets certain other conditions. Holders should consult their tax advisers as to their qualification for exemption from backup withholding and the procedure for obtaining an exemption. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against a Holder's U.S. federal income tax liability, provided the relevant information is timely furnished to the IRS.

Taxation of Securities issued by JPMSP

The summary below addresses purchasers of Securities issued by JPMSP.

Taxation of U.S. Holders

U.S. Holders generally should see the discussion under "General" and "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of U.S. Holders*" for the U.S. federal income tax treatment of the Securities, although the source of income may differ than as described therein.

Foreign Financial Asset Reporting Requirements

A U.S. Holder that is an individual and holds certain foreign financial assets must file new IRS Form 8938 to report the ownership of such assets if the total value of those assets exceeds the applicable threshold amounts. In general, specified foreign financial assets include stocks or securities issued by a

non-U.S. person, any interest in a foreign entity, any financial instrument or contract that has an issuer or counterparty that is not a U.S. person. Certain domestic corporations, partnerships and trusts that hold, directly or indirectly, specified foreign financial assets may be required to file IRS Form 8938. In addition, certain non-resident alien individuals may be required to file Form 8938, notwithstanding the availability of any special treatment under an income tax treaty. Such form generally is not required to be filed with respect to a Security that is held through a U.S. payer, such as a U.S. financial institution, a U.S. branch of a non-U.S. bank, and certain non-U.S. branches or subsidiaries of U.S. financial institutions.

Taxpayers who fail to make the required disclosure with respect to any taxable year are subject to certain penalties. In addition, the failure to file Form 8938 will extend the statute of limitations for a taxpayer's entire related income tax return until at least three years after the date on which the Form 8938 is filed.

All U.S. holders are urged to consult with their own tax advisors with respect to whether a Security is a foreign financial asset that (if the applicable threshold was met) would be subject to this rule.

Taxation of Non-U.S. Holders

U.S. Withholding Taxes

Subject to the discussions above in "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding under FATCA*", "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding on Dividend Equivalent Payments*", and "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Foreign Investment in Real Property Tax Act*", and the discussion in "*U.S. Information Reporting and Backup Withholding*", below, and generally without regard to whether interest qualifies as portfolio interest, the relevant Issuer expects that payments on the Securities to a Non-U.S. Holder generally will not be subject to U.S. federal withholding tax. Accordingly, except to the extent the Pricing Supplement indicates otherwise and subject to the discussions above in the sections entitled "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding under FATCA*", "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding on Dividend Equivalent Payments*", and "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Foreign Investment in Real Property Tax Act*" (but generally without regard to whether interest qualifies as portfolio interest), the Issuer generally does not intend to withhold any amounts with respect to payments made to Non-U.S. Holders under the Securities.

Further, subject to the discussion in the sections entitled "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding under FATCA*", "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Withholding on Dividend Equivalent Payments*", and "*Taxation of Securities issued by JPMCFC, JPMorgan Chase & Co. or JPMorgan Chase Bank, N.A.—Taxation of Non-U.S. Holders—U.S. Foreign Investment in Real Property Tax Act*", gain realised on the sale, retirement or other taxable disposition of a Security by a Non-U.S. Holder generally will not be subject to U.S. federal income tax unless (i) such income is effectively connected with a trade or business conducted by the Non-U.S. Holder in the United States, or (ii) the Non-U.S. Holder has or had a current or former relationship with the United States, including a relationship as a citizen or resident thereof or based on an individual's presence in the United States for 183 days or more in the taxable year.

U.S. Information Reporting and Backup Withholding

In the case of a Security that is treated as debt and in registered form for U.S. federal income tax purposes, payments of principal, OID, and interest made by a non-U.S. payor (other than a U.S. Controlled Person) outside the United States to a Non-U.S. Holder will not be subject to information reporting or backup withholding. Payments on such Securities made within the United States or by a U.S. Controlled Person may be subject to information reporting and backup withholding.

Payments on the sale, retirement or other taxable disposition of a Security made to a Non-U.S. Holder by a non-U.S. broker (other than a U.S. Controlled Person) generally will not be subject to information

reporting or backup withholding. However, if the broker is a U.S. Controlled Person, payments on the sale, exchange or other disposition of such a security made by such U.S. Controlled Person may be subject to information reporting unless the beneficial owner has furnished the broker with documentation upon which the broker can rely to treat the payment as made to a beneficial owner that is a foreign person.

For purposes of this discussion, a "**U.S. Controlled Person**" means (i) a U.S. person (as defined in the Code, and for this purpose includes a foreign branch or office of such person), (ii) a controlled foreign corporation for U.S. federal income tax purposes, (iii) a foreign person 50 per cent. or more of whose gross income was effectively connected with the conduct of a United States trade or business for a specified three-year period, (iv) a foreign partnership, if at any time during its tax year, one or more of its partners are U.S. persons who, in the aggregate, hold more than 50 per cent. of the partnership's income or capital interest or if, at any time during its tax year, it is engaged in the conduct of a trade or business in the United States, or (v) a U.S. branch of a foreign bank or a foreign insurance company.

Any amounts withheld under the backup withholding rules may be allowed as a credit against the Holder's U.S. federal income tax liability, and may entitle the Holder to a refund, provided that the required information is furnished to the IRS.

U.S. Estate Tax Considerations for Non-U.S. Holders

Generally, absent an applicable treaty benefit, a Security may be treated as U.S. situs property subject to U.S. federal estate tax. Non-U.S. Holders should consult their own tax advisors regarding the U.S. federal estate tax consequences of investing in the Securities.

FATCA

General

Under FATCA, the Issuers may be required to deduct a withholding tax of 30 per cent. on payments made to certain Holders in respect of the Securities. Subject to certain exceptions, the withholding tax may apply on payments to (i) a Holder or beneficial owner that is a foreign financial institution (an "**FFI**") (as defined under FATCA) that is not in compliance with applicable reporting and withholding obligations (such a holder, a "**Non-Participating FFI**") and (ii) any other Holder or beneficial owner that does not comply with the Issuer's or an intermediary's requests for ownership certifications and identifying information (such a holder, a "**Recalcitrant Holder**").

JPMSP may also be subject to withholding if it does not comply with the relevant requirements under FATCA. In the event JPMSP determines that there is a substantial likelihood that payments made to it would be subject to withholding tax under FATCA or if it otherwise determines that there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA, it is possible that a portion or all Securities of a series issued by JPMSP will be redeemed or terminated at the Early Payment Amount.

Withholding and/or termination under FATCA may also apply to payments made under the relevant Guarantee.

Reporting, Withholding and Potential Redemptions Under FATCA

Under FATCA, certain payments on U.S. assets and certain payments on non-U.S. assets made to non-U.S. persons may be subject to a 30 per cent. withholding tax. Withholding generally applies to payments of U.S. source interest, dividends (including payments treated as "dividend equivalents" under section 871(m) of the Code) and other passive income. Withholding on "foreign passthru payments" will apply no earlier than two years after the date on which final U.S. Treasury regulations defining foreign passthru payments are published. Withholding, however, will not apply to payments on certain U.S. obligations that are outstanding as of 30 June 2014 or to certain non-U.S. obligations that are outstanding as of the date that is six months after the date on which final U.S. Treasury regulations addressing "foreign passthru payments" are issued, in each case, so long as such obligations are not treated as reissued after the relevant date (such obligations, "**Grandfathered Obligations**").

Investors should be aware that the effective date for withholding on "foreign passthru payments" above reflects proposed U.S. Treasury regulations ("**Proposed FATCA Regulations**") which delay the effective date for withholding on foreign passthru payments. The Proposed FATCA Regulations also

eliminate FATCA withholding on gross proceeds from, or final payments, redemptions, or other principal payments made in respect of, the disposition of an instrument that may produce U.S. source interest or dividends ("**U.S. Gross Proceeds**"). The U.S. Treasury have indicated that taxpayers may rely on the Proposed FATCA Regulations until final regulations are issued. The discussion above assumes that the Proposed FATCA Regulations will be finalised in their current form and that such final regulations will be effective retroactively. No assurance can be given that the Proposed FATCA Regulations will be finalised in their current form or that any such final regulations will be effective retroactively.

The Netherlands and the United States have signed an intergovernmental agreement ("**IGA**") for the automatic exchange of data between the tax authorities of both countries in relation to the implementation of FATCA. Pursuant to the IGA, JPMSP has registered with the IRS to be treated as a deemed compliant FFI for FATCA purposes. As a registered deemed compliant FFI, JPMSP should not be subject to the 30 per cent. FATCA withholding tax, provided that it is not designated as a "nonparticipating FFI" for FATCA purposes. The obligations of JPMSP under the IGA and its implementation in Dutch legislation include obtaining information from the Holders and/or beneficial owners of Securities and may include withholding on payments to Holders and/or beneficial owners of Securities that are not compliant with any applicable requirements under FATCA.

To the extent any payments in respect of Securities are made to a beneficial owner by an intermediary financial institution, broker or agent (each, an "**Intermediary**"), such beneficial owner will be required to comply with the Intermediary's requests for identifying information that would permit the Intermediary to comply with its own FATCA obligations.

Any Holder or beneficial owner of Securities that is a Recalcitrant Holder or a Non-Participating FFI may be subject to a 30 per cent. withholding tax with respect to payments on the Securities. Holders should also be aware that it may be necessary for JPMSP to redeem Recalcitrant Holders or Non-Participating FFIs if such a Holder's non-compliance may cause the Issuer to be subject to withholding or if the Issuer otherwise determines that there is a substantial likelihood that it will violate any requirement of, or an agreement entered into with a taxing authority with respect to, FATCA, as described in General Condition 18.3 (*Early Redemption or Termination for Taxation – FATCA*). Any redemption will be at the Early Payment Amount. In addition, compliant Holders may also be subject to the redemption of their Securities in such an event, as set out in General Condition 18.3 (*Early Redemption or Termination for Taxation - FATCA*).

Uncertain Application

No assurance can be given that the Issuers will be able to take all necessary actions or that actions taken will be successful in minimising the impact of FATCA on the Holders or the Issuers. *Each potential investor in Securities should consult its own tax advisor to determine how FATCA may affect an investment in the Securities in such investor's particular circumstance.*

Austria Taxation

The following summary does not purport to be a comprehensive description of all Austrian tax considerations that may be relevant for the decision to acquire, to hold and to dispose of the Securities and does not constitute legal or tax advice. The summary is based on Austrian tax law and practice and official interpretation currently in effect, all of which are subject to change. Future legislative, judicial or administrative changes could modify the tax treatment described below and could affect the tax consequences for investors. Prospective investors should consult their own independent advisers as to the implications of their subscribing for, purchasing, holding, exchanging or disposing of the Securities under the laws of the jurisdictions in which they may be subject to tax. The discussion of certain Austrian taxes set forth below is included for information purposes only.

This summary of Austrian tax issues is based on the assumption that the Securities are at the time of their issuance legally and factually offered in the form of securities to an indefinite number of persons (public offer) and do not qualify as equity or units in a non-Austrian investment fund within the meaning of § 188 of the Austrian Investment Fund Act 2011 (*Investmentfondsgesetz 2011, InvFG 2011*) for Austrian tax purposes. The tax consequences may substantially differ if the Securities are at the time of their issuance not legally and factually publicly offered in the form of securities or if the Securities are qualified as equity instruments or (in particular if issued by a non-Austrian entity) units in a non-Austrian

investment fund within the meaning of § 188 InvFG 2011. The Issuer does not assume responsibility for withholding tax at source.

Income tax treatment of Securities

Income classification in general

Income from Securities is generally taxable as income from capital investments (*Einkünfte aus Kapitalvermögen*) (i.e. as interest, capital gains or income from derivatives) pursuant to § 27 Austrian Income Tax Act (*Einkommensteuergesetz, EStG*). The physical settlement of a Warrant or Security is not considered a taxable event if the amount of the received Securities is predefined in the terms and conditions. The acquisition cost of the settled Warrants or Securities has to be carried forward as the acquisition cost of the received Securities. Additionally received cash payments of up to 10 per cent. of the total nominal value of the received Securities reduce the acquisition cost of the received Securities.

Austrian tax resident individual investors

In case of an individual investor holding the Securities as private (i.e. non-business) assets, income tax is levied at the time the interest, the capital gains or the income from the derivatives is received (i.e. upon receipt of a cash payment).

If interest is paid by a paying agent (*auszahlende Stelle*) in Austria (e.g. an Austrian credit institution or an Austrian issuer) Austrian withholding tax (*Kapitalertragsteuer*) at a rate of 27.5 per cent. is triggered (provided that the Securities are at the time of their issuance both legally and factually publicly offered in the form of securities). In relation to capital gains and income from derivatives Austrian withholding tax at a rate of 27.5 per cent. is triggered if (i) an Austrian securities depository (*depotführende Stelle*) (e.g. an Austrian credit institution or Austrian branch of a non-Austrian credit institution) is involved in the execution of the respective transaction (e.g. if the Securities are deposited with an Austrian securities depository) or (ii) in the absence of an Austrian securities depository involved in the execution of the respective transaction, if the payment is credited by an Austrian paying agent and the non-Austrian securities depository is a non-Austrian branch or group company of such Austrian paying agent and processes the realisation in cooperation with the Austrian paying agent. Such Austrian withholding tax is final (i.e., the investor does not have to include such income in the income tax return). In the absence of an Austrian paying agent or securities depository (i.e. if no Austrian withholding tax is deducted), the investor must include interest, capital gains or income from derivatives (e.g. in case of Warrants or Certificates) in the income tax return and such income is taxed at a rate of 27.5 per cent. unless a Liechtenstein paying agent (*Zahlstelle*, within the meaning of Art 2(1)(m) of the bilateral Treaty between the Republic of Austria and the Principality of Liechtenstein on Cooperation in the Area of Taxation (in force since 1 January 2014), which has been set up no later than 31 December 2016 has withheld final withholding tax under the Liechtenstein withholding tax act implementing the treaty which final withholding tax discharges the investor's Austrian income tax liability. If realised as business income or employment income, capital gains and income from derivatives need to be included in the income tax return in any case.

The 27.5 per cent. (Austrian withholding) tax rate is subject to the relevant Securities being at the time of their issuance both legally and factually publicly offered. An investor may opt for taxation at the progressive income tax rate of up to 55 per cent. (so-called option for regular taxation, *Regelbesteuerungsoption*). However, the option may not be exercised for particular interest payments from the Securities only. Rather, if this option is exercised, the individual's regular progressive income tax rate will apply to any other income from capital investments which would otherwise be subject to the special 27.5 per cent. (including but not limited to any capital gains realised upon the sale of stocks or bonds, dividends or income from derivatives) or 25 per cent. tax rate (i.e. interest income from savings accounts or other non-securitised debt claims against credit institutions). Whether the use of the option is beneficial from a tax perspective should be determined by consulting a tax advisor. Expenses that are directly economically connected to income from the Securities, e.g., interest expenses from third-party financing or banking fees, are not deductible for income tax purposes (which also applies in the case of the exercise of the option for regular taxation).

Withdrawals and other transfers of Securities from the securities account (*Entnahmen und sonstiges Ausscheiden aus dem Depot*) are in general deemed as a disposal of the Securities resulting in taxation of any unrealised capital gains in the Securities.

As an exception to this general rule, withdrawals and other transfers of Securities from the securities account are not treated as taxable disposals (sales), if Austria's taxation right with respect to the Securities is not being restricted and if specified exemptions pursuant to § 27(6)(2) EStG will be fulfilled, such as (a) the transfer of the Securities to a securities account owned by the same taxpayer with the same securities depository (bank), (b) the transfer of the Securities to a securities account owned by the same taxpayer with an Austrian securities depository (bank) if the account holder has instructed the transferring securities depository to disclose the acquisition costs to the receiving securities depository, (c) the transfer of the Securities from an Austrian securities depository to a securities account owned by the same taxpayer with a non-Austrian securities depository (bank) provided that the account holder has instructed the transferring securities depository to transmit the pertaining information to the competent Austrian tax office within one month, (d) the transfer from a non-Austrian securities depository to a securities account owned by the same taxpayer with another non-Austrian securities depository (bank) provided that the taxpayer has himself notified the competent Austrian tax office within a month, or (e) the transfer without consideration to a securities account held by another taxpayer, if the fact that the transfer has been made without consideration has been evidenced to the securities depository or if the securities depository has been instructed by the taxpayer to inform the Austrian tax office thereof within a month.

Furthermore, the transfer of the investor's tax residence or deposit account outside of Austria, the transfer of the Securities to a non-resident for no consideration or any other circumstances which lead to a restriction of Austria's taxing right with respect to the Securities are in general deemed as disposal of the Securities resulting in the taxation of any unrealised capital gains inherent in the Securities (exit taxation). Upon application of the taxpayer, the assessment of exit taxation of the Securities held as private assets can be deferred until the actual disposal of the Securities in case the investor transfers his or her tax residence outside of Austria to an EU Member State or a member state of the European Economic Area or transfers the Securities for no consideration to another individual resident in an EU Member State or a member state of the European Economic Area. In all other cases leading to a restriction of Austria's taxation right in respect of the Securities vis-à-vis an EU Member State or a member state of the European Economic Area the taxpayer may apply for a payment of the triggered income tax in instalments over a period of five years. In the event that the Securities represent current business assets (*Umlaufvermögen*), a payment period of two years applies instead.

An investor may file an application to offset losses from the Securities in the course of the tax assessment, however, limitations apply pursuant to which negative income from the alienation of Securities or from derivatives may not be set-off against interest income from savings accounts or other non-securitised debt claims against credit institutions (except for manufactured payments and lending fees), from participations as a silent partner or distributions effected by foundations within the meaning of § 27(5)(7) EStG. Further, losses from Securities that qualify for the 27.5 per cent. tax rate may not be offset against income subject to the progressive income tax rate, e.g. income from securities that were at the time of their issuance legally or factually not publicly offered. In addition, losses may not be offset against any income from other income categories (*Einkunftsarten*). These restrictions equally apply in case of an exercise of the option for regular taxation. Furthermore, losses from the sale of the Securities held as private assets may not be carried forward to subsequent years. Austrian securities depositories are obliged to automatically offset losses pursuant to § 93(6) EStG (subject to certain exemptions).

Austrian private foundations

Private foundations pursuant to the Austrian Private Foundations Act (*Privatstiftungsgesetz*) fulfilling the prerequisites provided by § 13(6) Austrian Corporate Income Tax Act (*Körperschaftsteuergesetz, KStG*) and holding Securities as a non-business asset are subject to interim taxation at a rate of 25 per cent. with interest income, income from realised capital gains and income from derivatives (the income subject to interim taxation is reduced by the amount of distributions by the private foundation to beneficiaries to the extent that Austrian withholding tax was levied on such distributions). According to the wording of the statute, interest income from Securities that are at the time of their issuance not legally and factually publicly offered is not subject to interim taxation but rather to corporate income tax at a rate of 25 per cent. Under the conditions set forth in § 94(12) EStG no Austrian withholding tax is levied on the interest income, income from realised capital gains and income from derivatives generated in connection with the Securities.

Austrian tax resident corporate investors

A corporation subject to unlimited corporate income tax liability in Austria will be subject to Austrian corporate income tax at a rate of 25 per cent. If the requirements for Austrian withholding tax (see already the section "Austrian tax resident individual investors" above) are met, corporate investors are equally subject to Austrian withholding tax. In case of corporations (within the meaning of § 1(1) KStG) receiving income from the Securities, the Austrian paying agent or securities depository shall be entitled to withhold Austrian withholding tax at a rate of only 25 per cent. (instead of the general Austrian withholding tax rate of 27.5 per cent.). The Austrian withholding tax may be triggered but is creditable against the corporate investor's Austrian corporate income tax liability or, if and to the extent it exceeds such corporate income tax liability, refundable. A corporation may file an exemption declaration pursuant to the requirements set forth in § 94(5) EStG in order to avoid that Austrian withholding tax is levied.

Non-Austrian tax resident investors

Pursuant to § 98 EStG, non-Austrian resident individuals are not subject to Austrian limited income tax liability on interest income, income from realised capital gains and income from derivatives received for tax purposes from the Securities provided that (i) the respective income is not attributable to an Austrian located permanent establishment of the recipient and not received as part of taxable employment income, and (ii) only with regard to interest income (including accrued interest), the debtor has its domicile, seat and place of effective management outside of Austria and is not an Austrian branch of a non-Austrian credit institution and the underlying financial instrument has not been issued by an Austrian issuer. Furthermore, interest income received by non-Austrian resident individuals that are resident in a state with which an automatic exchange of information is in place is only taxable in Austria if the respective interest income is attributable to a permanent establishment in Austria or if received as part of taxable employment income.

Non-Austrian resident corporate investors are, under § 21 KStG in connection with § 98 EStG, not subject to Austrian corporate income tax liability on interest income, income from realised capital gains and income from derivatives received for tax purposes from the Securities provided that the respective income is not attributable to an Austrian located permanent establishment.

An Austrian paying agent or securities depository may abstain from levying 27.5 per cent. Austrian withholding tax under § 94(5) and/or (13) EStG. If any Austrian withholding tax is deducted by an Austrian paying agent or securities depository on income received by a non-resident investor not subject to limited Austrian (corporate) income tax liability, the non-resident investor can apply for a refund by filing an application with the competent Austrian tax authority (within five calendar years following the year of the imposition of the Austrian withholding tax).

Where non-residents receive income from the Securities as part of business income taxable in Austria (e.g. due to the attribution to an Austrian located permanent establishment), they will, in general, be subject to the same tax treatment as resident investors.

Austrian Stamp and Transfer Taxes

The subscription, issue, placement, allotment, delivery or transfer (unless by way of a cession) of a Security will not be subject to stamp tax, transfer tax or any other similar tax or duty payable in Austria.

Austrian Gift, Inheritance and Wealth Taxes

Austria does not levy any gift, inheritance or wealth taxes.

However, certain gratuitous transfers of assets to (Austrian or foreign) private law foundations and comparable legal estates (*privatrechtliche Stiftungen und damit vergleichbare Vermögensmassen*) are subject to foundation entrance tax (*Stiftungseingangssteuer*) pursuant to the Austrian Foundation Entrance Tax Act (*Stiftungseingangssteuergesetz, StiftEG*). Such tax is triggered if the transferor and/or the transferee at the time of transfer have their domicile, their habitual abode, their legal seat or their place of effective management in Austria. The tax basis is the fair market value of the assets transferred minus any debts, calculated at the time of transfer. The tax rate is in general 2.5 per cent., with a higher rate of 25 per cent. applying in special cases.

In addition, a special notification obligation exists for gifts of money, receivables, shares in corporations, participations in partnerships, businesses, movable tangible assets and intangibles. The notification

obligation applies if the donor and/or the donee have a domicile, their habitual abode, their legal seat or their place of effective management in Austria. Not all gifts are covered by the notification obligation: In case of gifts to certain related parties, a threshold of € 50,000 per year applies; in all other cases, a notification is obligatory if the value of gifts made exceeds an amount of € 15,000 during a period of five years. Furthermore, gratuitous transfers to foundations falling under the StiftEG described above are also exempt from the notification obligation. Intentional violation of the notification obligation may lead to the levying of penalties of up to 10 per cent. of the fair market value of the assets transferred.

Belgium Taxation

The following summary describes the principal Belgian tax considerations with respect to the holding of the Securities.

This information is of a general nature and does not purport to be a comprehensive description of all Belgian tax considerations that may be relevant to a decision to acquire, to hold or to dispose of the Securities. In some cases, different rules can be applicable. Furthermore, the tax rules can be amended in the future, possibly implemented with retroactive effect, and the interpretation of the tax rules may change.

This summary is based on Belgian tax legislation, treaties, rules, and administrative interpretations and similar documentation, in force as of the date of the publication of this Offering Circular, without prejudice to any amendments introduced at a later date, even if implemented with retroactive effect.

Unless otherwise stated herein, this summary does not describe the tax consequences for a holder of Securities that are redeemable in exchange for, or convertible into assets, of the exercise, settlement or redemption of such Securities or any tax consequences after the moment of exercise, settlement or redemption.

Each prospective holder of Securities should consult a professional adviser with respect to the tax consequences of an investment in the Securities, taking into account the influence of each regional, local or federal law.

Belgian tax regime regarding Notes and Certificates

Belgian withholding tax and income tax treatment

(i) Tax treatment of Belgian resident individuals

Individuals who are Belgian residents for tax purposes, i.e. individuals subject to the Belgian individual income tax ("*Personenbelasting*" / "*Impôt des personnes physiques*"), and who hold the Notes and/or Certificates as a private investment are subject to the following tax treatment in Belgium with respect to the Notes and/or Certificates. Other tax rules apply to Belgian resident individuals holding the Notes and/or Certificates not as a private investment but in the framework of their professional activity or when the transactions with respect to the Notes and/or Certificates fall outside the scope of the normal management of their own private estate or have a speculative character.

Under Belgian tax law, "interest" income includes: (i) periodic interest income, (ii) any amount paid by the Issuer in excess of the Issue Price (whether or not on the Maturity Date), and (iii) if the Notes and/or Certificates qualify as "fixed income securities" (in the meaning of article 2, §1, 8° Belgian Income Tax Code), in the case of a realisation of the Notes and/or Certificates prior to repurchase or redemption by the Issuer, the income equal to the pro rata of accrued interest corresponding to the holding period. In general, Notes and/or Certificates are qualified as fixed income securities if there is a causal link between the amount of interest income and the detention period of the Notes and/or Certificates, on the basis of which it is possible to calculate the amount of pro rata interest income at the moment of the sale of the Notes and/or Certificates during their lifetime. In addition, based on its circular letter of 25 January 2013 on the tax treatment of income of structured securities, the Belgian Tax Administration is of the opinion that securities with a return linked to one or more underlying reference assets, such as a basket of shares, a share index, etc., should also be considered as fixed income securities.

Payments of interest on the Notes and/or Certificates as referred to under (i) and (ii) above made through a paying agent or other financial intermediary in Belgium will in principle be subject to a 30 per cent. withholding tax in Belgium (calculated on the interest received after deduction of any non-Belgian

withholding taxes). The Belgian withholding tax constitutes in principle the final income tax for Belgian resident individuals, who do not have to report the interest income in their personal income tax return provided the withholding tax was effectively levied, save where declaring the interest and crediting the retained withholding tax would be more beneficial from a tax perspective.

If the interest is paid outside of Belgium without the intervention of a paying agent or other financial intermediary in Belgium or if otherwise no withholding tax is levied, the interest received on the Notes and/or Certificates (after deduction of any non-Belgian withholding tax) must be declared in the personal income tax return of the holder of Notes and/or Certificates and will in principle be taxed at a flat rate of 30 per cent.

Capital gains realised upon the sale of the Notes and/or Certificates are in principle tax exempt, unless the capital gains are realised outside the scope of the normal management of one's private estate or are speculative in nature or unless and to the extent the capital gains qualify as interest (as defined above). Capital losses are in principle not tax deductible.

(ii) *Tax treatment of Belgian resident corporations*

Corporations that are Belgian residents for tax purposes, i.e., corporations subject to Belgian Corporate Income Tax ("*Vennootschapsbelasting*" / "*Impôt des sociétés*"), are subject to the following tax treatment in Belgium with respect to the Notes and/or Certificates.

Interest derived by Belgian corporate investors on the Notes and/or Certificates and capital gains realised on the Notes and/or Certificates will be subject to Belgian Corporate Income Tax at the ordinary rate of 25 per cent.. Small and medium-sized companies are taxable – subject to conditions – at a reduced corporate tax rate of 20 per cent. for the first EUR 100,000 of taxable profits. Capital losses on the Notes and/or Certificates are in principle tax deductible.

Payments of interest (as defined in (i) and (ii) of the section "Tax treatment of Belgian resident individuals") on the Notes and/or Certificates made through a paying agent or other financial intermediary in Belgium will in principle be subject to a 30 per cent. withholding tax in Belgium (calculated on the interest received after deduction of any non-Belgian withholding taxes). However, the interest can under certain circumstances be exempt from withholding tax, provided a special certificate is delivered. The Belgian withholding tax that has been levied is creditable and refundable in accordance with the applicable legal provisions. Any non-Belgian withholding tax could form the object of a Belgian foreign tax credit.

(iii) *Tax treatment of Organisations for Financing Pensions*

Belgian pension fund entities that have the form of an Organisation for Financing Pensions ("**OFP**") are in general subject to Belgian Corporate Income Tax ("*Vennootschapsbelasting*" / "*Impôt des sociétés*"). OFPs are subject to the following tax treatment in Belgium with respect to the Notes and/or Certificates.

Interest derived on the Notes and/or Certificates and capital gains realised on the Notes and/or Certificates will not be subject to Belgian Corporate Income Tax in the hands of OFPs. Any Belgian withholding tax that has been levied is creditable and refundable in accordance with the applicable legal provisions. Capital losses on the Notes and/or Certificates are in principle not tax deductible.

(iv) *Tax treatment of other Belgian legal entities*

Legal entities that are Belgian residents for tax purposes, i.e. that are subject to the Belgian tax on legal entities ("*Rechtspersonenbelasting*" / "*Impôt des personnes morales*"), are subject to the following tax treatment in Belgium with respect to the Notes and/or Certificates.

Payments of interest (as defined in (i) and (ii) of the section "Tax treatment of Belgian resident individuals") on the Notes and/or Certificates made through a paying agent or other financial intermediary in Belgium will in principle be subject to a 30 per cent. withholding tax in Belgium and no further tax on legal entities will be due on the interest.

However, if the interest is paid outside Belgium, i.e. without the intervention of a Belgian paying agent or other financial intermediary and without deduction of the Belgian withholding tax, or if otherwise no

Belgian withholding tax is levied, the legal entity itself is liable for the payment of the Belgian 30 per cent. withholding tax.

Capital gains realised on the sale of the Notes and/or Certificates are in principle tax exempt, unless and to the extent the capital gain qualifies as interest (as defined in the section entitled "Tax treatment of Belgian resident individuals"). Capital losses on the Notes and/or Certificates are in principle not tax deductible.

(v) *Tax treatment of Belgian non-residents*

The interest income on the Notes and/or Certificates paid to a Belgian non-resident outside of Belgium, i.e. without the intervention of a paying agent or other financial intermediary in Belgium, is not subject to Belgian withholding tax.

Interest income on the Notes and/or Certificates paid through a Belgian paying agent or other financial intermediary will in principle be subject to a 30 per cent. Belgian withholding tax, unless the holder is resident in a country with which Belgium has concluded a double taxation agreement which is in force and delivers the requested affidavit.

Non-resident holders that have not allocated the Notes and/or Certificates to business activities in Belgium can also obtain an exemption from Belgian withholding tax on interest if the interest is paid through a Belgian credit institution, a Belgian stock broker company or a licensed Belgian clearing or settlement institution and provided that the non-resident (i) is the full legal owner or usufructor of the Notes and/or Certificates, (ii) has not allocated the Notes and/or Certificates to business activities in Belgium and (iii) delivers an affidavit confirming his non-resident status and the fulfilment of conditions (i) and (ii).

Non-resident holders using the Notes and/or Certificates to exercise a professional activity in Belgium through a permanent establishment are subject to the same tax rules as the Belgian resident corporations (see above).

Non-resident holders who do not allocate the Notes and/or Certificates to a professional activity in Belgium are not subject to Belgian income tax, save, as the case may be, in the form of withholding tax.

Belgian tax regime regarding Warrants

Investors are in principle subject to the following tax treatment with respect to the Warrants. Other rules can be applicable in special situations, such as when the return on the underlying is fixed in advance, in which case the holders of the Warrants may be subject to the tax regime applicable to the Notes and Certificates.

This summary does not address the tax consequences after the moment of exercise, settlement or redemption of the Warrants.

Belgian withholding tax and income tax treatment

(i) *Tax treatment of Belgian resident individuals*

Individuals who are Belgian residents for tax purposes, i.e. individuals subject to the Belgian individual income tax ("*Personenbelasting*" / "*Impôt des personnes physiques*"), and who hold the Warrants as a private investment, are in principle subject to the following tax treatment in Belgium with respect to Warrants.

Private individual investors are in principle not liable to income tax on gains realised on the disposal or settlement of Warrants held as a private investment, unless and to the extent that the gain qualifies as interest income. Losses are not tax deductible.

Other tax rules may be applicable with respect to Warrants that are held for professional purposes and transactions with Warrants falling outside the scope of the normal management of one's own private estate or which are speculative in nature.

(ii) *Tax treatment of Belgian resident corporations*

Corporations that are Belgian residents for tax purposes, i.e., corporations subject to Belgian Corporate Income Tax ("*Vennootschapsbelasting*" / "*Impôt des sociétés*"), are in principle subject to the following tax treatment in Belgium with respect to Warrants. Belgian corporations will be subject to the ordinary Belgian corporate income tax of 25 per cent. (or 20 per cent. on the first EUR 100,000 of profits for small and medium-sized companies) on the gains realised on the disposal or cash settlement of the Warrants. Losses are in principle deductible.

However, in the event of a physical settlement of assets upon exercise of Warrants, Belgian corporations in principle have to record the assets received upon exercise at a value equal to the premium paid for the Warrants increased with the strike price of the Warrants.

(iii) *Tax treatment of Organisations for Financing Pensions*

Belgian pension fund entities that have the form of an OFP are subject to Belgian Corporate Income Tax ("*Vennootschapsbelasting*" / "*Impôt des sociétés*"). OFPs are in principle subject to the following tax treatment in Belgium with respect to Warrants.

Belgian OFPs are not liable for income tax on gains realised on the disposal or settlement of the Warrants.

(iv) *Tax treatment of other Belgian legal entities*

Legal entities that are Belgian residents for tax purposes, i.e. that are subject to the Belgian tax on legal entities ("*Rechtspersonenbelasting*" / "*Impôt des personnes morales*"), are in principle subject to the following tax treatment in Belgium with respect to Warrants.

Belgian legal entities are in principle not liable to income tax on gains realised on the disposal or settlement of the Warrants, unless and to the extent that the gain qualifies as interest. Losses are not tax deductible.

(v) *Tax treatment of Belgian non-residents*

Non-resident Warrant holders who do not allocate the Warrants to a professional activity in Belgium are in principle not subject to Belgian income tax on gains realised on the disposal or settlement of the Warrants.

Non-residents who hold the Warrants in exercise of a professional activity in Belgium through a permanent establishment are subject to the same tax rules as the Belgian residents.

Stock exchange tax and tax on repurchase transactions

A stock exchange tax ("*Taks op de beursverrichtingen*" / "*Taxe sur les operations de bourse*") is levied on the purchase and sale in Belgium of the Securities on a secondary market through a professional intermediary. A transaction is deemed to take place in Belgium if the order is transmitted directly or indirectly to an intermediary established outside of Belgium by a physical person with normal residence in Belgium or by a legal person on behalf of a seat or establishment located in Belgium.

The rate applicable for secondary sales and purchases in Belgium through a professional intermediary is 0.35 per cent., with a maximum amount of EUR 1,600 per transaction and per party. The tax rate is 0.12 per cent. for bonds and similar debt instruments, with a maximum of EUR 1,300 per transaction and per party. A separate tax is due from each of the seller and the purchaser, both collected by the professional intermediary.

A tax on repurchase transactions ("*Taks op de reporten*" / "*Taxe sur les reports*") at the rate of 0.085 per cent. subject to a maximum of EUR 1,600 (or EUR 1,300, depending on the type of security) per party and per transaction, will be due from each party to any such transaction entered into or settled in Belgium in which a professional intermediary for stock transactions acts for either party.

However, the tax on stock exchange transactions and the tax on repurchase transactions referred to above will not be payable by certain exempt persons acting for their own account, including non-residents (subject to certain formalities) and certain Belgian institutional investors, as defined in Articles 126-1.2 and 139 of the Code of various duties and taxes ("*Wetboek diverse rechten en taksen*" / "*Code des droits et taxes divers*").

The Law of 17 February 2021 (see below under "Annual tax on securities accounts") introduced a general anti-abuse provision in the Code of various duties and taxes with effect from 30 October 2020.

Annual tax on securities accounts

The Law of 17 February 2021 introduced an annual tax on securities accounts. An annual tax of 0.15% will be levied on securities accounts of which the average value of the taxable financial instruments (covering, amongst others, financial instruments such as bonds, notes and warrants) held thereon during a reference period of twelve consecutive months (in principle) starting on 1 October and ending on 30 September of the subsequent year, would exceed EUR 1 million. The tax base will be established by reference to four reference dates, i.e. 31 December, 31 March, 30 June and 30 September. The amount of the tax due will be limited to 10% of the difference between said average value of the taxable financial instruments and the threshold of EUR 1 million. The tax will target securities accounts held by resident individuals, companies and other legal entities, irrespective as to whether these accounts are held with a financial intermediary which is incorporated or established in Belgium or abroad. The tax will also apply to securities accounts held by non-resident individuals, companies and other legal entities with a financial intermediary incorporated or established in Belgium. There are various exemptions, such as securities accounts held by specific types of regulated entities for their own account.

A financial intermediary is defined as (i) the National Bank of Belgium, the European Central Bank and foreign central banks performing similar functions, (ii) a central securities depository included in Article 198/1, §6, 12° of the Belgian Income Tax Code, (iii) a credit institution or a stockbroking firm as defined by Article 1, §3 of the Law of 25 April 2014 on the status and supervision of credit institutions and stockbroking firms and (iv) the investment companies as defined by Article 3, §1 of the Law of 25 October 2016 on access to the activity of investment services and on the legal status and supervision of portfolio management and investment advice companies, which are, pursuant to national law, admitted to hold financial instruments for the account of clients.

A Belgian intermediary is an intermediary incorporated under Belgian law, as well as an intermediary established in Belgium. A Belgian intermediary withholds, declares and pays the tax to the Belgian treasury. In all other cases, the holder of the securities account must declare and pay the tax, unless evidence of the fact that the tax was already declared and paid by an intermediary incorporated or established in Belgium or not.

Intermediaries not incorporated or established in Belgium can appoint a responsible representative established in Belgium, who will be jointly and severally liable for the declaration and payment of the tax and for all other formalities.

Certain transactions regarding securities accounts executed as from 30 October 2020 are not effective vis-à-vis the Belgian tax authorities, i.e. splitting of a securities account in multiple securities accounts held with the same intermediary and the conversion of taxable financial instruments held in a securities account in financial instruments in registered form. In addition, a general anti-abuse provision is introduced with effect from 30 October 2020.

The Law of 17 February 2021 entered into force on 26 February 2021, i.e. the day following its publication on the Belgian State Gazette, with the exception of the general anti-abuse provision which took effect on 30 October 2020 in relation to the annual tax on securities accounts.

Estate and gift tax

(A) *Individuals resident in Belgium*

An estate tax is levied on the value of the Securities transferred as part of a Belgian resident's estate.

Gifts of Securities in Belgium are subject to gift tax, unless the gift is made by way of a purely physical delivery of bearer Securities (if any) or otherwise without written evidence of the gift being submitted to the Belgian Tax Administration. However, estate taxes on donated Securities are not due if a person can demonstrate that the gift occurred more than three years preceding the death of the grantor (five years as from 2022 in the Walloon Region).

(B) *Individuals not resident in Belgium*

There is no Belgian estate tax on the transfer of Securities on the death of a Belgian non-resident. Gifts of Securities in Belgium are subject to gift tax, unless the gift is made by way of a purely physical delivery of bearer Securities (if any) or otherwise without written evidence of the gift being submitted to the Belgian Tax Administration.

Denmark Taxation

The following is a summary description of general Danish tax rules applicable to individual investors and corporate investors resident in Denmark according to the Danish tax laws in force as of the date of this Offering Circular and is subject to any changes in law and the interpretation and application thereof, which changes could be made with retroactive effect. The following summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to acquire, hold or dispose of the Notes, Certificates and Warrants, and does not purport to deal with the tax consequences applicable to all categories of investors. Investors are, under all circumstances, strongly advised to contact their own tax advisor to clarify the individual consequences of their investment, holding and disposal of the Notes, Certificates and Warrants. The Issuer makes no representations regarding the tax consequences of purchase, holding or disposal of the Notes, Certificates and Warrants.

The comments in the following apply only to (i) investors who are resident in Denmark, and (ii) investors who have a permanent establishment in Denmark to which the Notes, Certificates and Warrants can be attributed.

Withholding tax

When the Issuer is not a Danish tax resident person, Denmark does not levy withholding tax on payments on Notes, Certificates or non-share Warrants.

Taxation of Securities in General

(A) *Individual investors resident in Denmark*

Notes, Certificates and Warrants owned by individual investors who are resident in Denmark for Danish tax purposes may generally fall within two general categories depending on whether the interest rate and/or the principal is adjusted according to certain reference assets.

For tax purposes a distinction is made between:

i) Notes and Certificates considered to be regular cash receivables or debt; and
ii) Financial contracts, including warrants, options, and similar derivative contracts.

(i) Taxation of Notes and Certificates considered to be regular cash receivables or debt

To the extent gains and losses deriving from the Notes and Certificates are included in the taxable income of the investor, they will be taxable as capital income. Income taxable as interest is taxed as capital income in the income year in which it falls due. Capital income is taxed at a rate of up to 42 per cent (2022). However, an immateriality threshold will apply to the effect that net gains and losses on (a) receivables not taxable according to Section 29, subsection 3 of the Capital Gains Tax Act ("*kursgevinstloven*"); (b) debt in currency other than Danish kroner ("**DKK**"); and (c) certain units in certain types of investment funds comprised by Section 22 of the Act on Capital Gains on Shares Act, see Consolidated Act no. 172 of 29 January 2021 as amended from time to time ("*aktieavancebeskatningsloven*"), that are below DKK 2,000 per year will not be included in the taxable income.

Further, tax deductibility of losses realised on Notes and Certificates which are traded on a regulated market is subject to the Danish tax authorities having been notified of the acquisition of the Notes or Certificates as further outlined in Section 15 of the Capital Gains Tax Act. Further, losses realised on Notes and Certificates on which Denmark pursuant to a tax treaty is prevented from taxing interest or gains will not be deductible.

The Notes and Certificates are taxed upon realisation, i.e. redemption or disposal. Gains and losses are calculated in DKK as the difference between the acquisition sum and the value at realisation.

For individuals holding Notes and Certificates as part of their trade, if an original issue of Notes and Certificates and a new issue of Notes and Certificates are listed under the same ID code, the acquisition sum for all such Notes and Certificates is calculated on an average basis. Furthermore, if an original and a new issue of Notes and Certificates, issued by the same issuer, are not listed under the same ID code, but denominated in the same foreign currency, the acquisition sum for all such Notes and Certificates is calculated on an average basis, provided that the issues are identical. Issues are as a general rule deemed identical if the currency, interest and term are identical.

Individuals not holding Notes and Certificates as part of their trade use the "*first-in, first-out*" principle when calculating the gain on the Notes and Certificates, and therefore the earliest acquired Notes and Certificates are considered the first disposed.

Individuals may elect to apply a mark-to-market principle for all receivables (including Notes and Certificates) and bonds traded on a regulated market and/or currency exchange gains and losses on receivables and debt (including Notes and Certificates) denominated in other currencies than Danish kroner (DKK). The election of the mark-to-market principle must be made collectively for all the receivables and bonds respectively traded on a regulated market. Once the mark-to-market principle is elected, a change back to the realisation principle requires approval from the Danish tax authorities.

Under the mark-to-market principle, a gain or a loss is calculated as the difference between the value of the Note or Certificate at the beginning and the end of the income year, beginning with the difference between the acquisition sum of the Note or Certificate and the value of Note or Certificate at the end of the same income year. Upon realisation of the Note or Certificate, i.e. redemption or disposal, the taxable income of that income year equals the difference between the value of the Note or Certificate at the beginning of the income year and the value of the Note or Certificate at realisation. If the Note or Certificate has been acquired and realised in the same income year, the taxable income equals the difference between the acquisition sum and the value at realisation.

(ii) Taxation of Financial Contracts

Gains on Notes, Certificates, and Warrants that are considered financial contracts will be included in the calculation of capital income and must be taxed in accordance with a mark-to-market principle.

Financial contracts in this context comprise put options, call options and forward contracts that are separately taxable as well as claims taxable as financial contracts in Section 29, subsection 3 of the Capital Gains Tax Act, excluding claims where the first creditor has acquired the claim before 4 May 2005. Any remaining net loss (not deducted) can be offset in net gains obtained by a spouse in the same income year.

Certain restrictions on the deductibility of losses apply to financial contracts, under which the net loss on financial contracts in an income year can only be deducted to the extent the net loss does not exceed the net gains on financial contracts in previous income years (after 2002). Losses not deducted in one income year can be carried forward indefinitely to be set off against net gains on financial contracts of the following income years for the tax-payer and the tax-payer's spouse. Further losses can be set off against gains realised on shares traded on a regulated market if the financial contract solely contemplates a right or an obligation to purchase or sell shares or is based on a share index and if the underlying shares or the shares that the index is based on are traded on a regulated market. Such losses can also be deducted in the income of a spouse, subject to the conditions above.

Individual investors who are subject to the special business tax regime ("*virksomhedsskatteordningen*") may invest in the Notes and Certificates that are considered financial contracts within the said tax regime, cf. Section 1, subsection 2 of the Business Tax Regime Act ("*virksomhedsskatteloven*"). Gains and losses on Notes and Certificates that are deemed to have relation to the business are included when calculating the annual taxable income of the business. A gain or a loss is calculated according to the abovementioned rules. Income taxable as interest is taxed in the income year in which it accrues. Gains and interests that form part of an annual profit that remains within the tax regime, set out in Section 10, subsection 2 of the Business Tax Regime Act are subject to a provisional tax of 22 per cent.

Please note that under Danish law, financial instruments in the form of forward contracts or options in a broad sense, are generally governed by the Capital Gains Tax Act. Basically, this entails that gains and losses on the financial instruments (including any premium paid or received) are taxed separately from the underlying asset.

Notes and Certificates that would be considered regular cash receivables or debt, may instead be taxed as financial contracts, cf. section 29, subsection 3 of the Danish Capital Gains Tax Act. This will be the case where the Notes or Certificates are adjusted in accordance with price development on securities, goods, indices, or assets etc. as long as the price development can be subject to a financial contract, whether this is in the form of an adjustment of the principal or other payments under the Notes and Certificates and irrespectively of whether the Notes and Certificates are fully or only partially adjusted in accordance therewith. Certain exceptions apply with respect to Notes and Certificates adjusted according to the development of certain official indexes within the European Union (the "**EU**").

(B) *Pension funds and life insurance companies*

Income on Notes, Certificates, and Warrants held by individual pension fund schemes as well as by multi-employer occupational pension funds or mutual insurance companies are taxed under the rules of the Pension Yield Taxation Act ("*pensionsafkastbeskatningsloven*").

The calculation of the tax base as well as the payment of tax on Notes, Certificates and Warrants held by individual pension funds is handled by the bank managing the pension funds separately from the other (free) assets of the individual.

Income on Notes, Certificates and Warrants held by multi-employer occupational pension funds or mutual insurance companies is primarily taxed upon allocation to the individual provisions of the policy holders with a secondary taxation of income allocated to the non-individualised reserves. The same method of calculation of the tax base applies to Notes, Certificates and Warrants held by life insurance companies. A 15.3 per cent tax rate (2022) is applied to the part of the income allocated to the non-individualised reserves, and a 22 per cent (2022) corporate income tax rate is applied to the income allocated to the equity of the life insurance company.

(C) *Corporate investors resident in Denmark*

Gains and losses on Notes, Certificates, and Warrants are included in the calculation of taxable income using the mark-to-market principle. The tax rate is 22 per cent (2022). Income taxable as interest is taxed in the income year in which it accrues.

Please refer to section (A)(i) above for a description of the mark-to-market calculation.

Corporate investors holding Notes, Certificates and Warrants that are wholly or partly adjusted in accordance with developments in prices of securities, commodities and other assets which can be made subject to a derivative, cf. section 29, subsection 3 of the Capital Gains Tax Act, may not be entitled to deduct losses on such Notes, Certificates and Warrants when linked to certain types of shares or share indices, and the Notes, Certificates and Warrants are not held in a professional trading capacity for Danish tax purposes.

Notes, Certificates, and Warrants falling outside the scope of the Capital Gains Tax Act

The Danish Capital Gains Tax Act does not apply with respect to certain financial instruments, including, *inter alia*, Warrants that are exercisable for shares, Certificates entailing a right to purchase or sell shares, or certain currency exchange contracts in connection with purchase and sale of Notes, Certificates, and Warrants, in any case provided:

- that the financial contract may only be exercised against the actual delivery of the underlying asset in question (and thus not settled in cash or otherwise);
- that the financial contract is not assigned, i.e. the parties to the financial contract remain the same; and
- that no "reverse financial contracts" have been entered into.

The delivery requirement is only satisfied when the entire underlying asset is delivered at maturity. A net share settlement where the amount owed under the financial contract is fulfilled by delivery of the requisite number of shares does not therefore qualify as a "delivery".

A significant change to the contract made after its conclusion but prior to its maturity would be deemed an assignment. An extension at maturity or early unwinding could well be deemed a significant change.

Reverse financial contracts are defined as two (or more) contracts where a particular asset is purchased pursuant to one or more contracts and is subsequently sold by the same party pursuant to one or more contracts. The crucial point is whether the same party holds both a put and call option. In the affirmative, the put and call are deemed reversed. If one party has a put option and the other a call option, this would not qualify as a reverse situation.

If all three conditions above are fulfilled, the financial contract is not taxed separately as a financial instrument, and only the purchase and sale of the underlying asset as per the terms of the financial contract is taxed. Taxation of the investor will then depend on the type of underlying asset.

Warrants that are exercisable for shares would generally be comprised by the Danish Capital Gains on Shares Tax Act (*aktieavancebeskatningsloven*). Accordingly, gains and losses on such warrants would be considered share income subject to Danish tax at a rate of 42%/27% (depending on the income realised). Gains and losses are calculated on the basis of the realisation principle.

Finland Taxation

The following is an overview of certain Finnish tax consequences for holders of the Securities who are residents of Finland for tax purposes. The overview addresses, briefly, also the information obligations of a paying agent located in Finland (which shall be the Finnish Programme Agent acting in such capacity, and references to the "Finnish Programme Agent" should be construed to include any paying agent located in Finland in the event that an additional entity is appointed to act in such capacity in relation to a specific Series). The overview is based on tax laws and taxation practice, as in effect and applied as at the date of this Offering Circular and is intended to provide general information only. Tax laws, taxation practices and their interpretation are constantly under change, which changes may sometimes have a retroactive effect and may change the conclusions set out in the summary.

The tax treatment of certain categories of the Securities is not in all respects established and is, therefore, to some extent uncertain. In particular, there are no specific tax laws addressing the tax treatment of warrants or certificates in Finland, nor is there any court practice available in respect of the tax treatment of certificates. This overview is, however, based on the assumption that certificates would be given a similar tax treatment as currently available to warrants under prevailing court and taxation practice. In addition, this summary is based on the assumption that the warrants and certificates are listed on a regulated market or would otherwise qualify for listing.

The overview covers only the tax consequences of the subscription, purchase, ownership and disposal of Securities by individuals who are taxed in accordance with the Finnish Income Tax Act and by Finnish limited liability companies taxed in accordance with the Finnish Business Income Tax Act. The overview does not cover situations where individuals hold the Securities in the context of business activities or where the Securities are held as current assets (i.e. allocable to the inventory or otherwise held for trading purposes) or as investment or financial assets by a limited liability company or where there are unrealised changes in the values of the Securities. This overview does not address Finnish CFC-legislation.

The tax treatment of each holder of the Securities partly depends on the holder's specific situation. This means that special tax consequences, which are not described below, may arise for certain categories of holders of the Securities as a consequence of, for example, the effect and applicability of foreign income tax rules or provisions contained in an applicable double taxation treaty.

Each investor should consult a tax adviser as to the tax consequences relating to its particular circumstances resulting from subscription, purchase, ownership and disposition of the Securities.

Withholding tax

On the basis that the Issuer is not resident in Finland for tax purposes and has no permanent establishment, fixed place of business or presence in Finland, there is no Finnish withholding tax (*Fi.lähdevero*) applicable on payments made by the Issuer in respect of the Securities. However, Finland operates a system of preliminary taxation (*Fi. ennakonpidätysjärjestelmä*) to secure payment of taxes in certain circumstances. In the context of the Securities, a tax of 30 per cent. will be deducted and withheld from all payments (including redemption proceeds/premium) that are treated as interest or as compensation comparable to interest, when such payments are made by the Finnish Programme Agent to individuals. Such preliminary tax (*Fi. ennakonpidätys*) will be used for the payment of the individual's final taxes (which means that they will be credited against the individual's final tax liability).

If, however, the Securities are regarded as warrants (or certificates) for Finnish tax purposes, any profits on warrants (or certificates) would, based on current Finnish court and taxation practice, be considered a capital gain (as opposed to interest or compensation comparable to interest). Therefore, any payments made in respect of Securities that are regarded as warrants (or certificates) may be made without deduction or withholding for or on account of Finnish tax and should, accordingly, not be subject to any preliminary taxation (*Fi. ennakonpidätys*) by the Finnish Programme Agent.

For tax reporting purposes, any interest or compensation comparable to interest earned by a holder of the Securities and paid by the Finnish Programme Agent to such holder will be reported (together with the tax withheld thereon) by the Finnish Programme Agent to the Finnish Tax Administration or other applicable taxing authority as required by any applicable law or regulation.

Individuals

Income tax and capital gains – Notes

All capital income of individuals – including capital gains – is currently taxed at a rate of 30 per cent. or 34 per cent. for capital income exceeding €30,000 annually. Capital losses are primarily deductible from capital gains arising in the same year. Any capital losses that cannot be used to offset capital gains in the same year can then be applied against other capital income in the same year. Any remaining unused capital losses can finally be carried forward for five years and used in the same manner as described above.

A gain arising from the disposal of the Notes (other than the redemption thereof) constitutes capital gain for individuals. A gain arising from the redemption of the Notes constitutes capital income, but may not necessarily be treated as capital gain. Losses arising from the disposal or redemption of the Notes should qualify as a capital loss.

Any capital gain or loss is calculated by deducting the original acquisition cost (including the purchase price and costs) and sales related expenses from the sales price. Alternatively, individuals may, in lieu of applying the actual acquisition costs, choose to apply a so-called presumptive acquisition cost, which is equal to 20 per cent. of the sales price or 40 per cent. of the sales price if the Notes have been held for at least ten years. If the presumptive acquisition cost is used instead of the actual acquisition cost, any sales expenses are deemed to be included therein and may, therefore, not be deducted in addition to the presumptive acquisition cost.

Upon the disposal of interest-bearing Notes, an amount corresponding to the interest for the time preceding the last interest payment date to the time of disposal of such Notes must normally first be deducted from the sales price, which amount is deemed to constitute capital income (but is not treated as capital gain). Any interest or compensation comparable to interest paid on the Notes during their respective loan period constitutes normally also capital income of the individual.

Income tax and capital gains – Warrants and/or the Certificates

A gain arising from the disposal or the redemption (i.e. the realisation of the net value through cash settlement) of the Warrants and/or the Certificates constitutes capital gain for individuals. Similarly, a loss arising from the expiration (as worthless) of the Warrants and/or the Certificates constitutes a capital loss. Any capital gain or loss arising from the disposal or the expiration of the Warrants and/or the Certificates is, accordingly, treated and calculated in the same manner as for the Notes.

Exercise of the Warrants by physical settlement of the underlying (third party) Reference Asset is likely to be treated as a purchase by the holder of the Warrants. Accordingly, taxation is not triggered on the

exercise of a physically-settled Warrant. Instead, the subsequent sale of the underlying (third party) Reference Asset triggers capital gains taxation.

Exceptions to capital gains and losses

Capital gains arising from disposal of assets, such as the Securities, are generally exempted from tax provided that the sales prices of all assets sold by the individual during the calendar year do not, in the aggregate, exceed €1,000. Correspondingly, capital losses are generally not tax deductible if the acquisition cost and the sales prices of all assets disposed during the calendar year do not, in the aggregate, exceed €1,000.

Corporate entities

Disposal and/or redemption of the Notes

Any income received from the disposal and/or redemption of the Notes (including capital return) constitutes part of the limited liability company's taxable business income. A limited liability company is subject to a corporate income tax, currently at the rate of 20 per cent. for its worldwide taxable income.

The acquisition cost of the Notes (including the purchase price and costs) and any sales related expenses are generally deductible for tax purposes upon disposal or redemption. Accordingly, any loss due to disposal or redemption of the Notes is deductible from the taxable business income.

Interest or compensation comparable to interest paid on the Notes

Any interest or compensation comparable to interest paid on the Notes during their respective loan period constitutes part of the limited liability company's taxable business income.

Disposal and/or redemption of the Warrants and/or the Certificates

Any income received from the disposal and/or redemption of the Warrants and/or the Certificates constitutes part of the limited liability company's taxable business income and is generally taxed as set out above in respect of disposal and/or redemption of the Notes.

Exercise of the Warrants by physical settlement of the underlying (third party) Reference Asset is likely to be treated as a purchase by the holder of the Warrants. Accordingly, taxation is not triggered on the exercise of a physically-settled Warrant. Instead, the subsequent sale of the underlying (third party) Reference Asset triggers income taxation.

Gift and inheritance tax

Transfer of the Securities by way of gift, bequest or inheritance is subject to Finnish gift or inheritance tax for the beneficiary/transferee, if either the transferor or the transferee was resident of Finland for tax purposes at the time of the death or gift. Tax treaties may limit Finland's right to impose gift or inheritance tax on non-residents of Finland.

Non-resident holders

A holder of the Securities will generally not be subject to Finnish taxes on capital gains or interest payments if (i) such holder of Securities is not a resident of Finland and (ii) such holder of Securities does not carry on business in Finland or have a permanent establishment in Finland to which the Securities are attributable.

Republic of France Taxation

The following is a summary of certain material French tax considerations relating to Securities issued to Holders resident in or otherwise subject to tax in France or Securities held through a Paying Agent or custodian located in France.

This information is of a general nature and does not purport to be a comprehensive description of all French tax considerations that may be relevant to a decision to acquire, to hold and to dispose of the Notes, Certificates and Warrants. In some cases, different rules can be applicable, depending, in particular, on the characterisation of the Securities for French tax purposes or on the purchaser's

specific circumstances. The comments below only apply to Holders that are the beneficial owners of the Securities who acquire and hold the Securities as an investment and do not apply to dealers in Securities. This summary does not describe the French tax consequences, for a holder of Securities that are subject to a physical settlement, of the acquisition, holding or disposal of the assets delivered at time of settlement.

This summary is based on the French tax legislation, treaties, rules, and administrative interpretations and similar documentation, in force as at the date of this document, without prejudice to any amendments introduced at a later date, even if implemented with retroactive effect.

Each potential Holder of a Note, a Certificate or a Warrant should consult a professional adviser with respect to the tax consequences of an investment in the Notes, Certificates and Warrants, taking account in particular of the potential Holder's own individual situation and the characteristics of the relevant Securities.

French Withholding tax

All payments of interest and redemption premium made under the Securities should be free of withholding tax in France, as long as the Issuer is not incorporated or otherwise acting through a French permanent establishment.

Individuals resident in France: French Income and Capital Gains Tax

Investment in Notes and Certificates (other than Certificates which would be classified as Warrants for French tax purposes)

Taxation of interest payments and redemption premium (Prime de remboursement)

Interest and redemption premiums paid to an individual are in principle subject to a 30 per cent. flat tax composed of social contributions levied at an aggregate rate of 17.2 per cent. and individual income tax at a rate of 12.8 per cent.. This income would also be included in the "reference income" on which the *contribution exceptionnelle sur les hauts revenus* would apply (see below).

When the Paying Agent is established in France, it is responsible for withholding and reporting the flat tax prepayment no later than the 15th of the month following the payment of interest or redemption premium. When the Paying Agent is established outside France, it is in principle not involved in this withholding obligation and the taxpayer is responsible for paying the flat tax prepayment and the social contributions directly to the French tax authorities no later than the 15th of the month following the payment of interest or redemption premium. If the Paying Agent is established in an EU or EEA member state, it can however be appointed by the taxpayer to do so. However, provided the taxpayer's "reference income" of the penultimate year is less than €25,000 (or €50,000 for a couple taxed on a joint basis), it may be exempted from this flat tax prepayment.

The interest or redemption premium must be reported by the individual in his annual tax return to be filed during the following year for final computation of the income tax.

If the French taxpayer expressly and irrevocably elects to the progressive individual income tax regime on his whole revenues otherwise subject to the flat tax, the above-mentioned 30 per cent. flat tax withheld would be regarded as a prepayment and further offset against the individual income tax due by the taxpayer, in which case 6.8 per cent. of the social contributions will be deductible from the taxable income of the year of their payment.

Taxation of gains

Gains derived from the disposal of Securities classified as Notes or Certificates are subject to a 30 per cent. flat tax composed of social contributions levied at an aggregate rate of 17.2 per cent. and individual income tax at a rate of 12.8 per cent. This income would also be included in the "reference income" on which the *contribution exceptionnelle sur les hauts revenus* would apply (see below).

A French taxpayer may however expressly, annually and irrevocably in his tax return elect to the progressive individual income tax regime on his whole revenues otherwise subject to the 30 per cent. flat

tax (in which case 6.8 per cent. of the social contributions will be deductible from the taxable income of the year of their payment).

If the Holder sells Notes or Certificates at a loss, such loss must be exclusively offset against capital gains of the same nature during the year of the loss if any or of the ten following years, subject to filing obligations.

The Notes and the Certificates are not eligible for the *plan d'épargne en actions* ("**PEA**").

Investment in Warrants

Profits realised by non-professional individuals from the sale or exercise of Warrants ("***bons d'options***" or assimilated instruments) are subject to a 30 per cent. flat tax composed of social contributions of 17.2 per cent. and individual income tax at a rate of 12.8 per cent.. The *contribution exceptionnelle sur les hauts revenus* could also apply (see below).

Losses must be exclusively set off against profits of the same nature realised during the year if any, or during one of the ten following years provided the individual does not act on an habitual basis.

A French taxpayer may however expressly, annually and irrevocably in his tax return elect to the progressive individual income tax regime on his whole revenues otherwise subject to the 30 per cent. flat tax (in which case 6.8 per cent. of the social contributions will be deductible from the taxable income of the year of their payment).

The Warrants are not eligible for the *plan d'épargne en actions* (PEA).

Contribution exceptionnelle sur les hauts revenus

An exceptional contribution could be applicable to Holders. This tax takes the form of a levy equal to 3 per cent. of the fraction of the "reference" income above € 250,000 (or € 500,000 for a couple taxed on a joint basis) and 4 per cent. on "reference" income over € 500,000 (€ 1,000,000 for a couple). The contribution is levied on the "reference" income for the tax year in question, which would include income and gains realised in relation to the Notes, Certificates and Warrants.

Holders subject to French corporate income tax

Income or gains in relation to the Securities are subject to corporate income tax at the standard rate (or the reduced rates applicable to small and medium-sized companies where the relevant conditions are met), to which a 3.3 per cent. surtax is added (for companies which turnover exceeds € 7,630,000, the surtax applying to the portion of corporate income tax charge exceeding € 763,000). The standard rate applicable for financial years opened as from 1st January 2022 is equal to 25 per cent. Losses are in principle treated as ordinary losses which may be set off against operational profits and any remaining balance carried forward in accordance with standard rules (i.e. unlimited carry forward, in principle, it being noted however that carry forward losses can only be offset against profits of a given year up to an amount of € 1,000,000 plus 50 per cent. of the taxable profit of that year).

Interest payments are taxed on an accruals basis. Any redemption premium would be taxable upon receipt unless the estimated value of the redemption premium exceeds 10 per cent. of the purchase value of the instrument and the issue price is less than 90 per cent. of the estimated redemption value, in which case the taxation of this premium would be spread over the life of the instrument according to article 238 septies E of the French tax code.

The timing of recognition of income, gains or losses in relation to the holding or disposal of the Securities may vary, depending on the characteristics of the Securities.

Investors residing abroad

In principle, income or gains derived from the Securities by non-resident individuals or companies are not subject to taxation in France, provided that the Securities are not booked in a permanent establishment or a fixed base they have in France.

Transfer tax

Subscription or transfers of the Securities would not be subject to transfer tax or stamp duty in France.

Transfer tax and other taxes

The following may be relevant in connection with Securities which are settled or redeemed by way of physical delivery of shares issued by a French company (or certain assimilated securities):

(a) the disposal of shares issued by a French company for consideration is, in principle, subject to a 0.1 per cent. transfer tax (the "**French Transfer Tax**"), except in the case of shares listed on a recognised stock exchange (unless the transfer of the shares listed is evidenced by a written deed or agreement);

(b) a financial transaction tax (the "**French Financial Transaction Tax**") is imposed, subject to certain exceptions, on certain acquisition of shares issued by a French company (or certain assimilated securities) which are listed on a recognised stock exchange where the relevant issuer's stock market capitalisation exceeds EUR 1 billion on 1st December of the previous calendar year. The French Financial Transaction Tax rate is 0.3 per cent. of the acquisition price of the transaction; and

(c) if the French Financial Transaction Tax applies to a transaction, an exemption in respect of the French Transfer Tax is applicable.

Gift and Inheritance Taxes

French gift or inheritance taxes would not be levied on the transfer of a Security by way of gift by, or on the death of, a Holder, unless, subject to applicable double tax treaty provisions:

(a) the Holder is resident of France; or

(b) the beneficiary is resident of France and has been so resident for at least six years over the ten preceding years; or

(c) if both the Holder and the beneficiary are residents outside of France, the transferred assets are located in France.

Assets regarded as located in France would include receivables over a debtor which is established in France.

Applicable brackets and rates vary depending in particular on the relationships between the individuals concerned.

Real Estate Wealth Tax applicable to Individuals

The value of the Securities at 1 January of each year will, in general and subject to applicable double tax treaty provisions or specific rules in relation to new residents, not be included in the French resident Holder's taxable assets to the extent the Securities do not represent shares or other securities giving access to a portion of the share capital of a company whose assets are composed of real estate assets or property rights.

Paying Agent or Custodian located in the Republic of France

Withholding obligation

Where the Paying Agent is established in France, it is responsible for withholding and reporting the flat tax prepayment on interest and redemption premiums on the Securities no later than the 15th of the month following the payment of interest or redemption premium (see above - "*Individuals resident in France: French Income and Capital Gains Tax – Investment in Notes and Certificates*").

Germany Taxation

The following discussion is an overview of certain material German tax considerations relating to (i) Securities issued by any of the Issuers in particular where the Holder is tax resident in Germany or has a tax presence in Germany or (ii) Securities held through a disbursing agent located in Germany. It is

based on the laws in force on the date of this Offering Circular, of general nature only and neither intended as, nor to be understood as, legal or tax advice. Any information given hereafter reflects the opinion of the Issuer and must not be misunderstood as a representation or guarantee with regard to potential tax consequences. Further, each Issuer advises that the tax consequences depend on the individual facts and circumstances at the level of the investor and may be subject to future changes in law.

German tax resident private investors

General

Interest payments on Securities held by German resident private investors (i.e. private individuals whose residence or habitual abode is located in Germany) are generally subject to income tax at a flat tax rate of 25 per cent. (plus 5.5 per cent. solidarity surcharge thereon and, if applicable, church tax). Interest payments made in a currency other than euro have to be converted into euro upon receipt.

The flat tax regime also applies to capital gains from the sale or redemption of the Securities held by German resident private investors. Losses from the sale or redemption of the Securities can only be offset against other investment income within the meaning of the flat tax regime. In the event that an off-set is not possible in the assessment period in which the losses have been realised, such losses will be carried forward into future assessment periods only and can be off-set against investment income generated in future assessment periods.

Capital gains and losses are determined by the difference between the sales/redemption proceeds after the deduction of expenses directly connected to the sale/redemption and the acquisition costs of the Securities. If the Securities are denominated in a currency other than euro, the sales/redemption proceeds and the acquisition costs have to be converted into euro on the basis of the foreign exchange rates prevailing on the sale or redemption date and the acquisition date respectively.

Gains from the redemption of the Securities could even be subject to the flat tax regime where the Securities provide for a partial or exclusive physical settlement. However, if the Securities are redeemed against delivery of securities under certain circumstances, the redemption should in principle not result in a taxable capital gain or loss, as in this case the acquisition costs of the Securities should be rolled into the acquisition costs of the delivered securities.

The taxation principles outlined above should as a rule also apply to gains from the sale of Securities in the form of Warrants and - in the case of a cash settlement - to gains from the exercise of such Warrants. The exercise of physically settled Warrants, however, should not result in a taxable gain or loss. The acquisition costs of the Warrants (plus the exercise price) should rather be rolled into the acquisition costs of the delivered underlyings.

Losses (i) which stem either from forward transactions under which the taxpayer receives a marginal payment or a payment, the amount of which depends upon the value of a variable underlying reference value (ii) or which stem from the sale, assignment or redemption of a financial instrument qualifying as a forward transaction ("**Forward Transaction Losses**"), may only be offset up to an annual amount of EUR 20,000 with taxable income arising from such forward transactions and taxable option writer premiums ("**Forward Transaction Income**"). Forward Transaction Losses exceeding such annual EUR 20,000 threshold amount can be carried forward and can be offset up to an annual amount of EUR 20,000 with future Forward Transaction Income. At the date of this Offering Circular there exists only limited guidance in relation to the exact scope of the term forward transaction in this context. However, losses stemming from a cash-settled Warrants would qualify as Forward Transaction Losses.

Furthermore, losses stemming (i) either from the whole or partial irrecoverability of capital claims, (ii) or from the derecognition or writing off of worthless assets, which generally trigger taxable income under the flat tax regime, (iii) or from the transfer of such worthless assets to a third party, (iv) or from another default stemming from such assets may only be offset with other taxable income falling under the scope of the flat tax regime up to an annual amount of EUR 20,000. Losses exceeding such annual amount of EUR 20,000 can be carried forward and can be offset in succeeding calendar years up to an annual amount of EUR 20,000 with other taxable income falling under the scope of the flat tax regime.

Withholding Tax

For German resident private investors, the flat tax liability on interest payments on the Securities is generally levied by way of withholding tax, provided that the Securities are held in custody with a German custodian, who is required to deduct the withholding tax from such interest payments (the "**Disbursing Agent**"). For withholding tax purposes, interest payments made in a currency other than euro have to be converted into euro upon receipt.

Disbursing Agents are German resident credit institutions, financial services institutions (including German permanent establishments of foreign institutions), securities trading companies or securities trading banks. The applicable withholding tax rate is 25 per cent. (plus 5.5 per cent. solidarity surcharge thereon and (if applicable) church tax).

The withholding tax regime should also apply to any gains from the sale or redemption of Securities realised by private investors holding the Securities in custody with a Disbursing Agent. If the Securities are denominated in a currency other than euro, currency gains / losses are also accounted for as gains from the sale or redemption of the Securities. In principle, gains from the redemption of the Securities are even subject to the withholding tax regime where the Securities provide for a partial or exclusive physical settlement. In this case, if the cash amount paid upon redemption (if any) is not sufficient to cover the withholding tax due on redemption, the investor in the relevant Securities is obliged to provide the Disbursing Agent with sufficient funds to comply with its withholding tax obligations. However, if the Securities are redeemed against delivery of securities under certain circumstances, there should in principle be no obligation to deduct withholding tax.

The withholding tax principles outlined above should also apply to gains from the sale of Securities in the form of Warrants. In the case of an exercise, however, only cash settled Warrants should be subject to the withholding tax regime, whereas the exercise of physically settled Warrants should as a rule not result in any withholding tax consequences.

For private investors, the withholding tax is generally final (i.e. in principle, there will be no further income tax liability on investment income from which withholding tax was deducted and the investor is not required to declare such income in its tax return). In the case of investment income which is not subject to the withholding tax regime, a special flat tax assessment procedure applies, i.e. the private investor has to declare the income in its tax return and is taxed at the flat tax rate in accordance with the flat tax principles outlined above. This applies *mutatis mutandis* in the case that church tax (although due) is not levied by way of the withholding tax. Finally, the special flat tax assessment procedure applies upon request of the investor, provided that further pre-requisites are met. Private investors having a lower personal income tax rate may, upon application, also include the investment income in their general income tax return to achieve a lower tax rate.

The Issuer of the Securities – unless it qualifies as Disbursing Agent - should under German law not be required to deduct withholding tax (*Kapitalertragsteuer*) from the proceeds of the investment in the Securities.

German tax resident business investors

Interest payments under the Securities and capital gains from the sale or redemption of the Securities are subject to income tax or corporate income tax as well as solidarity surcharge (and in the case of individuals, if applicable, church tax). In addition, trade tax is levied on such income, if the Securities are held as assets of a German business. Losses should (subject to certain restrictions) be tax deductible.

The withholding tax regime outlined above should apply *mutatis mutandis* to business investors. However, German corporate investors and other investors holding the Securities as assets of a German business should in essence not be subject to the withholding tax on gains from the sale/redemption or exercise of the Securities (i.e. for these investors only interest payments, but not gains from the sale/ redemption or exercise of the Securities are subject to the withholding tax regime).

Any withholding tax imposed is credited against the investor's (corporate) income tax liability (and the solidarity surcharge as well as, if applicable, church tax) in the course of the tax assessment procedure, i.e. the withholding tax is not final. Any potential surplus of the withholding tax over the (corporate) income tax will be refunded.

Foreign tax resident investors

Foreign resident investors should not be taxable in Germany with the interest payments on and the gains from the sale or redemption (or, respectively, exercise) of the Securities and no German withholding tax should be withheld from such income. This should hold true, even if the Securities are held in custody with a German custodian. Exceptions apply, for example, where the Securities are held as business assets of a German permanent establishment or trigger for other reasons German taxable source income.

Treatment under the Investment Tax Act

The Issuer takes the view that the special provisions of the Investment Tax Act (*Investmentsteuergesetz*) are not applicable to the Securities.

Inheritance and Gift Tax

No inheritance or gift taxes with respect to the Securities will generally arise under German law, if, in the case of inheritance tax, neither the decedent nor the beneficiary, or, in the case of gift tax, neither the donor nor the donee, is a resident of the Federal Republic of Germany and such Security is not attributable to a German trade or business for which a permanent establishment is maintained, or a permanent representative has been appointed in the Federal Republic of Germany. Exceptions from this rule apply to certain German citizens who previously maintained a residence in the Federal Republic of Germany.

Other Taxes

No stamp, issue, registration or similar taxes or duties will be payable in the Federal Republic of Germany in connection with the issuance, delivery or execution of the Notes. Currently, wealth tax (*Vermögensteuer*) is not levied in the Federal Republic of Germany.

Investors are recommended to consult their own tax advisors as to the individual tax consequences arising from the investment in the Securities.

Greek Taxation

General

The following is a summary of certain material Greek tax consequences of the ownership and disposal of the Securities. The discussion is not exhaustive and does not purport to deal with all the tax consequences applicable to all possible categories of holders, some of which may be subject to special rules, and does not touch upon procedural requirements such as the filing of proof of residence, of a tax declaration or supporting documentation required. Further, it is not intended as tax advice to any particular holder and it does not purport to be a comprehensive description or analysis of all of the potential tax considerations that may be relevant to a holder in view of such holder's particular circumstances.

The summary is based on the Greek tax laws in force on the date of this Offering Circular, published case law, ministerial decisions and other regulatory acts of the respective Greek authorities as in force at the date hereof and does not take into account any developments or amendments that may occur after the date hereof, whether or not such developments or amendments have retroactive effect.

The individuals and legal persons and legal entities referred to below are assumed to be Greek tax residents or, in the case of legal persons and legal entities, permanent establishments of these legal persons or legal entities in Greece, where the Securities are held through such permanent establishments. This is because, as the Securities are not listed in Greece and the Issuers and Guarantors are not Greek undertakings or Greek tax residents, no income in Greece would be generated where the holder is also not tax resident in Greece.

Individuals are assumed not to be acting in the course of business for tax purposes.

Tax considerations are subject to the more favourable provisions of any applicable bilateral treaty for the avoidance of double taxation.

Individual holders

Payments of interest under the Securities

Payments of interest are subject to income tax at a rate of 15 per cent. If payment of interest is made through a Greek entity or a Greek permanent establishment acting as paying agent, that paying agent will withhold the entire income tax owed.

Payments of dividends under the Securities

Payments of dividends are subject to income tax at a rate of 5 per cent.

Capital gains from the Securities

Capital gains from the Securities are subject to income tax at a rate of 15 per cent. Capital gains will equal the difference between the acquisition and the transfer (or expiry) price of a Security, plus/minus expenses directly related to the acquisition/transfer (or expiry) price of the Security. Capital gains may be set off, under certain circumstances, against capital losses from securities that have been incurred in the last 5 years.

Notwithstanding the above, capital gains over bonds issued by EU, EEA and EFTA issuers are exempted from income tax over capital gains, as is the case with Greek corporate bonds. "Bonds" should be interpreted narrowly for the purposes of this exemption to include debt instruments representing a claim to receive back the entirety of an amount lent, which may be convertible to shares, may be exchangeable with other securities, may provide a right to interest and/or may provide a right to profits.

Notwithstanding the above, capital gains from listed shares are exempted from income tax, provided that the seller holds less than 0.5 per cent. of the share capital of the issuer. This is relevant to the Securities insofar as the tax authority has, as regards a specific instance, equated listed warrants giving the right to acquire listed shares with listed shares. It is unclear whether this approach may be of more general application.

Notwithstanding the above, the Greek tax authority has expressed the view that the difference between the acquisition value on the secondary market and the payment of principal received upon expiry of a corporate bond does not constitute capital gains. In this case "bonds" should again be interpreted narrowly, as above.

It would be reasonable to assume that payments under the Securities by a Guarantor will be classified for tax purposes in the same manner as if the payment were being made by the Issuer, although this point has not been addressed specifically in a general manner.

Tax credit

Tax credit is in principle available in Greece for income tax paid relating to the Securities abroad, upon filing of the appropriate documentation.

Solidarity contribution

All income, taxable or exempted, exceeding EUR 12,000 is subject to a tax called "solidarity contribution". Solidarity contribution is calculated on a graduated scale between 2.2 per cent. and 10 per cent., over the total income of an individual.

Legal Persons and Legal Entities

As a rule, all income of legal persons and legal entities is classified as income from business activities and taxed at a rate of 22 per cent. Income from business activities of credit institutions are taxed at a rate of 29 per cent. As regards payments of interest, if these are made through a Greek entity or a Greek permanent establishment acting as paying agent, that paying agent will withhold tax at a rate of 15 per cent., and the tax withheld will be considered an advance over income tax owed for the financial year of the payments.

Notwithstanding the above, taxation of capital gains over bonds issued by EU, EEA and EFTA issuers is deferred until capitalisation or distribution, as is the case with Greek corporate bonds. "Bonds" should be interpreted narrowly for the purposes of this exemption to include debt instruments representing a claim to receive back the entirety of an amount lent, which may be convertible to shares, may be exchangeable with other securities, may provide a right to interest and/or may provide a right to profits.

It would be reasonable to assume that payments under the Securities by a Guarantor will be classified for tax purposes in the same manner as if the payment were being made by the Issuer, although this point has not been addressed specifically in a general manner.

Tax credit

Tax credit is in principle available in Greece for income tax paid relating to the Securities abroad, upon filing of the appropriate documentation.

Stamp Duty

No Greek stamp duty is expected to arise in relation to the execution and performance of the Securities and the Guarantee on the basis that, according to Greek stamp duty law, agreements or documents concluded and executed abroad, the object of which is not obligations executable in Greece or property located in Greece, do not fall within the scope of Greek stamp duty laws. Additionally, exemptions may be applicable on the basis of the particular characteristics of a Security.

Hungary Taxation

The following summary does not purport to be a comprehensive description of all Hungarian tax considerations that may be relevant for the decision to acquire, to hold and to dispose of the Securities and does not constitute legal or tax advice. The summary is based on Hungarian tax law and practice and official interpretation currently in effect, all of which are subject to change. Future legislative, judicial or administrative changes could modify the tax treatment described below (even retroactively) and could affect the tax consequences for investors. Prospective investors should consult their own independent advisers as to the implications of their subscribing for, purchasing, holding, exchanging or disposing of the Securities under the laws of the jurisdictions in which they may be subject to tax. The discussion of certain Hungarian taxes set forth below is included for information purposes only.

This summary of Hungarian tax issues is based on the assumption that the Securities are at the time of their issuance legally and factually offered in the form of securities and do not qualify as equity, or units in an alternative investment fund. This summary is based on the assumption that investors know which entity directly makes payments to them in relation to the Securities.

Income tax treatment of Securities

Hungarian tax resident individual investors

In case of an individual investor holding the Securities, 15 per cent income tax is levied at the time the interest is received. Upon the sale or redemption of the Securities, the difference between the sale/redemption price and the acquisition value (less related costs) constitutes a capital gain upon which 15 per cent personal income tax is due.

Such income tax is to be withheld and paid to the Hungarian tax authority by a Hungarian paying agent (meaning, for example, a Hungarian credit institution (a "**Hungarian Paying Agent**")). The investor does not have to include such income in the annual income tax return as it would be presented in the draft income tax return annually prepared and offered for acceptance by the tax authority.

In the absence of a Hungarian Paying Agent (i.e. if no Hungarian withholding tax is deducted), the investor must include interest, capital gains or other income from the Securities in the income tax return and such income is taxed at a rate of 15 per cent.

For capital gains an additional 13 per cent social contribution tax may apply if, in the given year, the investor does not pay the social contribution tax at least on the basis of 24-times the minimum wage effective on the first day of the calendar year. The tax shall be withheld and paid to the Hungarian tax authority by the Hungarian Paying Agent or, in the lack of a Hungarian Paying Agent, by the private investor.

Hungarian tax resident corporate investors

Corporations having their place of management and/or their legal seat in Hungary are subject to corporate income tax in Hungary on their worldwide income (unlimited corporate income tax liability). A

Hungarian tax resident corporation, having unlimited corporate income tax liability, will be subject to Hungarian corporate income tax at a rate of 9 per cent. Income from Securities (either in the form of interest, capital gain or other) is to be included in the general corporate tax base and will be subject to the general corporate income tax rate.

Financial institutions, financial enterprises, insurance companies and investment enterprises may be subject to local business tax at 2 per cent on the basis of the proceeds realised on the Securities.

There is no withholding tax obligation for the paying agent if the proceeds are paid to Hungarian tax resident corporate investors.

Non-Hungarian tax resident investors

Taxation of non-Hungarian tax resident investors in Hungary is restricted by the effective bilateral treaties on the avoidance of double taxation.

Generally interest and capital gains income of non-Hungarian tax resident individual investors is subject to 15 per cent withholding tax rate deductible by the Hungarian Paying Agent if there is such a paying agent. This general rate may be decreased or eliminated by the applicable treaty on the avoidance of double taxation. A residency certificate needs to be submitted to the Hungarian Paying Agent before the payment of the income in order to use the treaty benefits. If income tax has to be deducted to a certain extent, that would be withheld and paid to the Hungarian tax authority by the Hungarian Paying Agent who will issue a certificate on the amount of the income and of the Hungarian income tax deducted.

Corporations having neither their place of management nor their legal seat in Hungary are subject to corporate income tax only on income from certain Hungarian sources (limited corporate income tax liability).

Interest on Securities paid to a foreign tax resident corporate investor, who does not have a permanent establishment in Hungary, and any capital gains realised by such foreign resident investor on the sale of the Securities is not subject to tax in Hungary.

The tax liability of a foreign tax resident corporate investor, which has a permanent establishment in Hungary is limited, in general, to the income from business activities realised through its Hungarian permanent establishment. Therefore, for a non-Hungarian tax resident investor who holds the Securities through a Hungarian permanent establishment, the interest and/or capital gains income will not be subject to a withholding tax but it will be included in the general corporate income tax base (on an accrual basis) of the Hungarian permanent establishment, which in turn will be subject to a tax rate of 9 per cent.

Other Taxes or Duties in connection with the Securities in Hungary

No registration tax, capital tax, customs duty, transfer tax, stamp duty or other similar tax or duty is payable in Hungary for or in connection with the purchase, holding or disposal of the Securities, save for disposals by donation or inheritance in certain cases.

Italy Taxation

The statements herein regarding taxation are based on the laws in force in Italy as at the date of this Offering Circular and are subject to any changes in law occurring after such date, which could be made on a retroactive basis. The following overview does not purport to be a comprehensive description of all the tax considerations which may be relevant to a decision to subscribe for, purchase, own or dispose of the Securities and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities or commodities) may be subject to special rules. Investors in the Securities are advised to consult their own tax advisers concerning the overall tax consequences of their ownership of the Securities. The following analysis is an overview of certain material Italian tax considerations relating to (i) Securities issued by any of the Issuers where the investor is tax resident in Italy or the investment is related to an Italian permanent establishment or (ii) Securities are deposited with or any payment of interest and proceeds is made through a Paying Agent, custodian or intermediary located in Italy.

This summary does not describe the tax consequences for an investor with respect to Securities that will be redeemed by physical delivery.

As clarified by the Italian tax authorities in resolution No. 72/E of 12 July 2010, the Italian tax consequences of the purchase, ownership and disposal of the Securities may be different depending on whether:

(a) *they represent a securitised debt claim, implying a static "use of capital" (impiego di capitale), through which the subscriber of the Securities transfers to the Issuer a certain amount of capital for the purpose of obtaining a remuneration on the same capital and subject to the right to obtain its (partial or entire) reimbursement at maturity; or*

(b) *they represent a securitised derivative financial instrument or bundle of derivative financial instruments not entailing a "use of capital", through which the subscriber of the Securities invests indirectly in underlying financial instruments for the purpose of obtaining a profit deriving from the negotiation of such underlying financial instruments.*

Italy Taxation of Notes

Legislative Decree No. 239 of 1 April 1996 ("**Decree 239**"), as subsequently amended, provides for the applicable regime with respect to the tax treatment of interest, premium and other income (including the difference between the redemption amount and the issue price) from Notes falling in the category of bonds (*obbligazioni*) or debentures similar to bonds (*titoli similari alle obbligazioni*) issued, inter alia, by a non-Italian resident issuer. For this purpose, bonds and debentures similar to bonds are securities that incorporate an unconditional obligation to pay, at redemption, an amount not lower than their nominal value and which do not grant the holder any direct or indirect right of participation in (or of control of) management of the Issuer.

Otherwise, Notes that do not qualify as debentures similar to bonds are characterised for Italian tax purposes as "atypical securities" and as such regulated by Law Decree No. 512 of September 30, 1983.

Italian resident Holders

Where the Italian resident Holder of the Notes is (i) an individual not engaged in an entrepreneurial activity to which the Notes are connected, (ii) a non-commercial partnership, (iii) a non-commercial private or public institution, trusts not carrying out mainly or exclusively commercial activities, the Italian State and public and territorial entities or (iv) an investor exempt from Italian corporate income taxation.

Interest, premium and other income relating to the Notes, accrued during the relevant holding period, are subject to a withholding tax, referred to as *imposta sostitutiva*, levied at the rate of 26 per cent. (either when interest is paid or when payment thereof is obtained by the holder on a sale of the Notes). All the above categories are qualified as "net recipients", (unless they have entrusted the management of their financial assets, including the Notes, to an authorised intermediary and have opted for the so called "*regime del risparmio gestito*" (the Asset Management Regime) according to Article 7 of Italian Legislative Decree No. 461 of November 21, 1997, as amended and supplemented from time to time ("**Decree No. 461**") – see "Capital Gains Tax" below.

In the event that the Holders described under (i) and (iii) above are engaged in an entrepreneurial activity to which the Notes are connected, the *imposta sostitutiva* applies as a provisional tax. Interest must be included in the relevant beneficial owner's Italian income tax return and should therefore be subject to Italian ordinary income taxation and the *imposta sostitutiva* may be recovered as a deduction from Italian income tax due.

Subject to certain limitations and requirements (including a minimum holding period), Italian resident individuals not acting in connection with an entrepreneurial activity or social security entities pursuant to Legislative Decree No. 509 of 30 June 1994 and Legislative Decree No. 103 of 10 February 1996 may be exempt from any income taxation, including the *imposta sostitutiva*, on interest, premium and other income relating to the Notes if the Notes are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Law No. 232 of 11 December 2016 (the "**Finance Act 2017**") and in Article 1, paragraphs 210-215 of Law No. 145 of 30 December 2018 (the "**Finance Act 2019**"), and in Article 13-bis of Law Decree No. 124 of 26 October 2019 ("**Law Decree No. 124**"), as amended and applicable from time to time. Pursuant to Article 1, paragraphs 219-225 of Law no. 178 of 30 December 2020 ("Law No. 178"), it is further

provided that Italian resident individuals investing, by 31 December 2021, in long-term individual savings account compliant with Article 13-bis, paragraph 2-bis of Law Decree No. 124 may benefit from a tax credit corresponding to possible capital losses, losses and negative differences realised in respect of certain qualifying financial instruments comprised in the long-term individual savings account, provided that certain conditions and requirements are met (e.g. including the loss of the possibility to subsequently set off the relevant capital losses, losses and negative differences against future capital gains).

Where an Italian resident Holder of a Note is a company or similar commercial entity or a permanent establishment in Italy of a foreign company to which the Notes are effectively connected and the Notes are deposited with an authorised intermediary, interest, premium and other income from the Notes will not be subject to *imposta sostitutiva*, but must be included in the relevant Holder's income tax return and are therefore subject to general Italian corporate income taxation (IRES) (and, in certain circumstances, depending on the "status" of the Holder, also to the regional tax on productive activities ("**IRAP**")).

Under the current regime provided by Law Decree No. 351 of 25 September 2001, converted into law with amendments by Law No. 410 of 23 November 2001 ("**Decree 351**"), Law Decree No.78 of 31 May 2010 converted into Law No. 122 of 30 July 2010 and Article 9, paragraph 1 of Legislative Decree No. 44 of 4 March 2014, all as amended, payments of interest in respect of the Notes made to Italian resident real estate investment funds established pursuant to Article 37 of Legislative Decree No. 58 of 24 February 1998, as amended and supplemented, and Article 14-bis of Law No. 86 of 25 January 1994 and Italian real estate investment companies with fixed capital ("**Real Estate SICAFs**", and, together with the Italian resident real estate investment funds, the "**Real Estate Funds**") are subject neither to *imposta sostitutiva* nor to any other income tax in the hands of a Real Estate Fund, but subsequent distributions made in favour of unitholders or shareholders will be subject, in certain circumstances, to a withholding tax of 26 per cent.; subject to certain conditions, depending on the status of the investor and percentage of participation, income of the Real Estate Fund is subject to taxation in the hands of the unitholder or shareholder regardless of distribution.

If the investor is resident in Italy and is an open-ended or closed-ended investment fund, an Italian non-real estate investment company with fixed capital ("**SICAF**") or an Italian non-real estate investment company with variable capital ("**SICAV**") established in Italy (together the "**Fund**") and either (i) the Fund or (ii) its manager is subject to the supervision of a regulatory authority, and the relevant Notes are held by an authorised intermediary, interest, premium and other income accrued during the holding period on the Notes will not be subject to *imposta sostitutiva*, but must be included in the management results of the Fund. The Fund will not be subject to taxation on such results but a substitute tax of 26 per cent. (the "**Collective Investment Fund Tax**") will apply, in certain circumstances, to distributions made in favour of unitholders or shareholders.

Where an Italian resident Holder of a Note is a pension fund (subject to the regime provided for by Article 17 of the Legislative Decree No. 252 of 5 December 2005) and the Notes are deposited with an authorised intermediary, interest, premium and other income relating to the Notes and accrued during the holding period will not be subject to *imposta sostitutiva*, but must be included in the result of the relevant portfolio accrued at the end of the tax period, to be subject to a 20 per cent. substitute tax. Subject to certain conditions (including minimum holding period requirement) and limitations, interest, premium and other income relating to the Notes may be excluded from the taxable base of the 20 per cent. substitute tax if the Notes are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time.

Pursuant to Decree 239, *imposta sostitutiva* is applied by banks, Italian investment companies (*società di intermediazione mobiliare*) (SIMs), fiduciary companies, Italian asset management companies (*società di gestione del risparmio*) (SGRs), stockbrokers and other entities identified by a decree of the Ministry of Economics and Finance (each an "**Intermediary**").

An Intermediary must (i) be resident in Italy or be a permanent establishment in Italy of a non-Italian resident financial intermediary and (ii) intervene, in any way, in the collection of interest or in the transfer of the Notes. For the purpose of the application of the *imposta sostitutiva*, a transfer of Notes includes any assignment or other act, either with or without consideration, which results in a change of the ownership of the relevant Notes or in a change of the Intermediary with which the Notes are deposited.

Where the Notes are not deposited with an Intermediary, the *imposta sostitutiva* is applied and withheld by any Italian financial intermediary paying interest to a Holder of a Note.

Non-Italian Resident Holders

No Italian *imposta sostitutiva* is applied on payments to a non-Italian resident Holder of Notes of interest or premium relating to the Notes provided that, if the Notes are deposited with an Intermediary in Italy, the non-Italian resident Holder of Notes declares itself to be a non-Italian resident according to Italian tax regulations.

Atypical securities

Interest payments relating to Notes that are neither deemed to fall within the category of bonds (*obbligazioni*) or debentures similar to bonds (*titoli similari alle obbligazioni*) may be subject to a withholding tax, levied at the rate of 26 per cent. For this purpose, debentures similar to bonds are securities that incorporate an unconditional obligation to pay an amount not lower than their nominal value.

Subject to certain limitations and requirements (including a minimum holding period), Italian resident individuals not acting in connection with an entrepreneurial activity or social security entities pursuant to Legislative Decree No. 509 of 30 June 1994 and Legislative Decree No. 103 of 10 February 1996 may be exempt from any income taxation, including the withholding tax on interest, premium and other income relating to the Notes that are classified as atypical securities, if the Notes are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time. Pursuant to Article 1, paragraphs 219-225 of Law No. 178, it is further provided that Italian resident individuals investing, by 31 December 2021, in long-term individual savings account compliant with Article 13-bis, paragraph 2-bis of Law Decree No. 124 may benefit from a tax credit corresponding to possible capital losses, losses and negative differences realised in respect of certain qualifying financial instruments comprised in the long-term individual savings account, provided that certain conditions and requirements are met (e.g. including the loss of the possibility to subsequently set off the relevant capital losses, losses and negative differences against future capital gains).

The 26 per cent. withholding tax mentioned above does not apply to interest payments made to a non-Italian resident Holder of Notes and to an Italian resident Holder of Notes which is (i) a company or similar commercial entity (including the Italian permanent establishment of foreign entities), (ii) a commercial partnership, or (iii) a commercial private or public institution.

Payments made by a non-resident Guarantor

With respect to payments made to Italian resident Holder of Notes by a non-Italian resident guarantor, in accordance with one interpretation of Italian tax law, any such payment made by the non-Italian resident guarantor could be treated, in certain circumstances, as a payment made by the relevant Issuer and would thus be subject to the tax regime described in the previous paragraphs of this section.

Capital Gains Tax

Any gain obtained from the sale or redemption of the Notes would be treated as part of the taxable income (and, in certain circumstances, depending on the "status" of the Holder, also as part of the net value of production for IRAP purposes) if realised by an Italian company or a similar commercial entity (including the Italian permanent establishment of foreign entities to which the Notes are connected) or Italian resident individuals engaged in an entrepreneurial activity to which the Notes are connected.

Where an Italian resident Holder is (i) an individual not holding the Notes in connection with an entrepreneurial activity, (ii) a non-commercial partnership, (iii) a non-commercial private or public institution, any capital gain realised by such Holder from the sale or redemption of the Notes would be subject to an *imposta sostitutiva*, levied at the current rate of 26 per cent. Holders of Notes may set off losses against gains.

Subject to certain limitations and requirements (including a minimum holding period), Italian resident individuals not engaged in an entrepreneurial activity or social security entities pursuant to Legislative

Decree No. 509 of 30 June 1994 and Legislative Decree No. 103 of 10 February 1996 may be exempt from Italian capital gain taxes, including the *imposta sostitutiva*, on capital gains realised upon sale or redemption of the Notes if the Notes are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time. Pursuant to Article 1, paragraphs 219-225 of Law No. 178, it is further provided that Italian resident individuals investing, by 31 December 2021, in long-term individual savings account compliant with Article 13-bis, paragraph 2-bis of Law Decree No. 124 may benefit from a tax credit corresponding to possible capital losses, losses and negative differences realised in respect of certain qualifying financial instruments comprised in the long-term individual savings account, provided that certain conditions and requirements are met (e.g. including the loss of the possibility to subsequently set off the relevant capital losses, losses and negative differences against future capital gains).

In respect of the application of the *imposta sostitutiva*, taxpayers may opt for one of the three regimes described below.

Under the "tax declaration" regime (*regime della dichiarazione*), which is the default regime for Holders of a Note under (i) to (iii) above, the *imposta sostitutiva* on capital gains will be chargeable, on a cumulative basis, on all capital gains, net of any incurred capital loss, realised by the Italian resident individuals holding Notes not in connection with an entrepreneurial activity pursuant to all sales or redemptions of the Notes carried out during any given tax year. The relevant Holder of a Note must indicate the overall capital gains realised in any tax year, net of any relevant incurred capital loss, in their annual tax return and pay *imposta sostitutiva* on such gains together with any balance of income tax due for such year. Capital losses in excess of capital gains may be carried forward against capital gains realised in any of the four succeeding tax years.

As an alternative to the tax declaration regime, Italian resident individuals holding the Notes under (i) to (iii) above may elect to pay the *imposta sostitutiva* separately on capital gains realised on each sale or redemption of the Notes (the "*risparmio amministrato*" regime). Such separate taxation of capital gains is allowed subject to (i) the Notes being deposited with Italian banks, SIMs or certain authorised financial intermediaries (including permanent establishments in Italy of foreign intermediaries); and (ii) an express election for the *risparmio amministrato* regime being punctually made in writing by the relevant Holder of Notes. The depository is responsible for accounting for *imposta sostitutiva* in respect of capital gains realised on each sale or redemption of the Notes (as well as in respect of capital gains realised upon the revocation of its mandate), net of any incurred capital loss, and is required to pay the relevant amount to the Italian tax authorities on behalf of the taxpayer, deducting a corresponding amount from the proceeds to be credited to the Holder of Notes or using funds provided by the Holder of Notes for this purpose. Under the *risparmio amministrato* regime, where a sale or redemption of the Notes results in a capital loss, such loss may be deducted from capital gains subsequently realised, within the same securities management, in the same tax year or in the following tax years up to the fourth. Under the *risparmio amministrato* regime, the Holder of Notes is not required to declare the capital gains in its annual tax return.

Any capital gains realised by Italian Holders of a Note under (i) to (iii) above who have entrusted the management of their financial assets, including the Notes, to an authorised intermediary and have opted for the so-called "*risparmio gestito*" regime will be included in the computation of the annual increase in value of the managed assets accrued, even if not realised, at year end, subject to a 26 per cent. substitute tax, to be paid by the managing authorised intermediary. Under the *risparmio gestito* regime, any depreciation of the managed assets accrued at year end may be carried forward against any increase in value of the managed assets accrued in any of the four succeeding tax years. Under the *risparmio gestito* regime, the Holder of Notes is not required to declare the capital gains realised in its annual tax return.

Any capital gains realised by a Holder of Notes which is an Italian Fund will not be subject to *imposta sostitutiva*, but will be included in the result of the relevant portfolio. Such result will not be taxed with the Fund, but subsequent distributions in favour of unitholders or shareholders may be subject to the Collective Investment Fund Tax.

Any capital gains realised by a Holder of Notes which is an Italian pension fund (subject to the regime provided for by article 17 of the Legislative Decree No. 252 of 5 December 2005) will be included in the result of the relevant portfolio accrued at the end of the tax period, to be subject to the 20 per cent.

substitute tax. Subject to certain conditions (including minimum holding period requirement) and limitations, interest, premium and other income relating to the Notes may be excluded from the taxable base of the 20 per cent. substitute tax if the Notes are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time.

Any capital gains realised by a Holder of Notes which is an Italian Real Estate Fund will be subject neither to substitute tax nor to any other income tax at the level of the Real Estate Fund.

Capital gains realised by non-Italian resident Holders of Notes from the sale or redemption of the Notes are not subject to Italian taxation, provided that the Notes (i) are traded on regulated markets, or (ii) if not traded on regulated markets, are held outside Italy.

Capital gains realised by non-Italian resident Holders from the sale or redemption of Notes not traded on regulated markets and deposited with a bank, a SIM or certain authorised financial intermediary in Italy are not subject to the *imposta sostitutiva*, provided that the effective beneficiary: (a) is resident in a country which allows for a satisfactory exchange of information with Italy as listed in the Italian Ministerial Decree of 4 September 1996, as amended by Ministerial Decree of 23 April 2017 and possibly further amended by future decrees issued pursuant to Article 11, paragraph 4, letter (c) of Decree 239 (the "**White List**"); (b) is an international entity or body set up in accordance with international agreements which have entered into force in Italy; (c) is a Central Bank or an entity which manages, *inter alia*, the official reserves of a foreign State; or (d) is an institutional investor which is resident in a country which is included in the White List, even if it does not possess the status of a taxpayer in its own country of residence.

In order to benefit from the tax exemption, non-resident investors who deposited the Notes with a bank, a SIM or certain authorised financial intermediaries in Italy must withdraw from the so-called *risparmio amministrato* regime - which provides for the application of an *imposta sostitutiva* separately on capital gains realised on each sale or redemption of the relevant Notes - and file with the relevant depositary a statement in which the Holder declares to be eligible to benefit from the applicable exemption from *imposta sostitutiva*. Such statement, which is not requested for international bodies or entities set up in accordance with international agreements which have entered into force in Italy or in the case of foreign Central Banks or entities which manage the official reserves of a foreign State, must comply with the requirements set forth by Ministerial Decree of 12 December 2001.

If none of the conditions above are met and the Notes are deposited with a bank, a SIM or certain authorised financial intermediaries in Italy, capital gains realised by non-Italian resident Holders are subject to the *imposta sostitutiva* at the current rate of 26 per cent. In any event, non-Italian resident individuals or entities without a permanent establishment in Italy to which the Notes are connected, that may benefit from a double taxation treaty with Italy providing that capital gains realised upon the sale or redemption of Notes are to be taxed only in the country of tax residence of the recipient and comply with the relevant formalities, will not be subject to *imposta sostitutiva* in Italy.

Italian Taxation of Warrants and Certificates

Pursuant to Article 67 of the Presidential Decree No. 917 of 22 December 1986 (the "**IITCC**") and Legislative Decree No. 461, where the Italian resident investor is (i) an individual not engaged in an entrepreneurial activity to which the Warrants and Certificates are connected, (ii) a non-commercial partnership, (iii) a non-commercial private or public institution, or (iv) an investor exempt from Italian corporate income taxation, capital gains accrued under the sale or the exercise of the Warrants and Certificates are subject to a 26 per cent. substitute tax (*imposta sostitutiva*). The recipient may opt for the three different taxation criteria, *regime della dichiarazione, risparmio amministrato and risparmio gestito*, described in the "Capital Gains Tax" paragraph above.

Subject to certain limitations and requirements (including a minimum holding period), Italian resident individuals not engaged in an entrepreneurial activity or social security entities pursuant to Legislative Decree No. 509 of 30 June 1994 and Legislative Decree No. 103 of 10 February 1996 may be exempt from Italian capital gain taxes, including the *imposta sostitutiva*, on capital gains realised under the Warrants and Certificates if the Warrants and Certificates are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1,

paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time. Pursuant to Article 1, paragraphs 219-225 of Law No. 178, it is further provided that Italian resident individuals investing, by 31 December 2021, in long-term individual savings account compliant with Article 13-bis, paragraph 2-bis of Law Decree No. 124 may benefit from a tax credit corresponding to possible capital losses, losses and negative differences realised in respect of certain qualifying financial instruments comprised in the long-term individual savings account, provided that certain conditions and requirements are met (e.g. including the loss of the possibility to subsequently set off the relevant capital losses, losses and negative differences against future capital gains).

Where an Italian resident investor is a company or similar commercial entity, or the Italian permanent establishment of a foreign commercial entity to which the Warrants and Certificates are effectively connected, capital gains arising from the Warrants and Certificates will not be subject to *imposta sostitutiva*, but must be included in the relevant investor's income tax return and are therefore subject to Italian corporate tax and, in certain circumstances, depending on the "status" of the investors also as a part of the net value of production for IRAP purposes.

Where (i) an Italian resident investor is a Fund, (ii) the relevant Warrants and Certificates are deposited with an authorised intermediary, and (iii) the Fund realises a capital gain, such gain will be included in the result of the relevant portfolio accrued at the end of the tax period. The Fund will not be subject to taxation on such results but subsequent distributions in favour of unitholders or shareholders may be subject to the Collective Investment Fund Tax.

Capital gains realised by an Italian resident Holder which is an Italian pension fund (subject to the regime provided by Article 17 of the Legislative Decree No. 252 of 5 December 2005) will be included in the result of the relevant portfolio accrued at the end of the tax period, to be subject to the 20 per cent. *ad hoc* substitute tax. Subject to certain conditions (including minimum holding period requirement) and limitations, capital gains may be excluded from the taxable base of the 20 per cent. substitute tax if the Warrants and Certificates are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time.

Any capital gains realised by an Italian Real Estate Fund will be subject neither to *imposta sostitutiva* nor to any other income tax at the level of the Real Estate Fund.

Capital gains realised from the sale or redemption of the Warrants and Certificates by non-Italian resident Holders without a permanent establishment in the Republic of Italy to which the Warrants and Certificates are effectively connected are not subject to Italian taxation, provided that the Warrants and Certificates are held outside Italy or the capital gains derive from transactions executed in regulated markets.

Capital gains realised by non-Italian resident Holders from the sale or redemption of Warrants and Certificates not traded on regulated markets and deposited with a bank, a SIM or certain authorised financial intermediary in Italy are not subject to the *imposta sostitutiva*, provided that the effective beneficiary: (a) is resident in a country which allows for a satisfactory exchange of information with Italy as listed in the White List; (b) is an international entity or body set up in accordance with international agreements which have entered into force in Italy; (c) is a Central Bank or an entity which manages, *inter alia*, the official reserves of a foreign State; or (d) is an institutional investor which is resident in a country which is included in the White List, even if it does not possess the status of a taxpayer in its own country of residence.

In order to benefit from the tax exemption, non-resident investors who deposited the Warrants and Certificates with a bank, a SIM or certain authorised financial intermediaries in Italy must withdraw from the so-called *risparmio amministrato* regime - which provides for the application of an *imposta sostitutiva* separately on capital gains realised on each sale or redemption of the relevant Warrants and Certificates - and file with the relevant depositary a statement in which the Holder declares to be eligible to benefit from the applicable exemption from *imposta sostitutiva*. Such statement, which is not requested for international bodies or entities set up in accordance with international agreements which have entered into force in Italy or in the case of foreign Central Banks or entities which manage the official reserves

of a foreign State, must comply with the requirements set forth by Ministerial Decree of 12 December 2001.

If none of the conditions above are met and the Warrants and Certificates are deposited with a bank, a SIM or certain authorised financial intermediaries in Italy, capital gains realised by non-Italian resident Holders from the sale or redemption of Warrants and Certificates are subject to the *imposta sostitutiva* at the current rate of 26 per cent. In any event, non-Italian resident individuals or entities without a permanent establishment in Italy to which the Warrants and Certificates are connected, that may benefit from a double taxation treaty with Italy providing that capital gains realised upon the sale or redemption of Warrants and Certificates are to be taxed only in the country of tax residence of the recipient and comply with the relevant formalities, will not be subject to *imposta sostitutiva* in Italy on any capital gains realised upon the sale or redemption of Warrants and Certificates.

Atypical securities

Please note that in accordance with a different interpretation of current tax law, there is a remote possibility that the Warrants and Certificates would be considered as 'atypical' securities pursuant to Article 8 of Law Decree No. 512 of 30 September 1983 as implemented by Law No. 649 of 25 November 1983. In this event, payments relating to Warrants and Certificates may be subject to an Italian withholding tax, levied at the rate of 26 per cent.

Subject to certain limitations and requirements (including a minimum holding period), Italian resident individuals not acting in connection with an entrepreneurial activity or social security entities pursuant to Legislative Decree No. 509 of 30 June 1994 and Legislative Decree No. 103 of 10 February 1996 may be exempt from any income taxation, including the withholding tax on interest, premium and other income relating to Warrants and Certificates that are classified as atypical securities, if the Warrants and Certificates are included in a long-term savings account (*piano individuale di risparmio a lungo termine*) that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017 and in Article 1, paragraphs 210-215 of Finance Act 2019 and in Article 13-bis of Law Decree No. 124, as amended and applicable from time to time. Pursuant to Article 1, paragraphs 219-225 of Law No. 178, it is further provided that Italian resident individuals investing, by 31 December 2021, in long-term individual savings account compliant with Article 13-bis, paragraph 2-bis of Law Decree No. 124 may benefit from a tax credit corresponding to possible capital losses, losses and negative differences realised in respect of certain qualifying financial instruments comprised in the long-term individual savings account, provided that certain conditions and requirements are met (e.g. including the loss of the possibility to subsequently set off the relevant capital losses, losses and negative differences against future capital gains).

The 26 per cent. withholding tax mentioned above does not apply to payments made to a non-Italian resident Holder of Warrants and Certificates and to an Italian resident Holder of Warrants and Certificates which is (i) a company or similar commercial entity (including the Italian permanent establishment of foreign entities), (ii) a commercial partnership, or (iii) a commercial private or public institution. This withholding is levied by any entities, resident in Italy, which intervene, in any way, in the collection of payment or transfer of the Warrants and Certificates.

Inheritance and gift taxes

Pursuant to Law Decree No. 262 of 3 October 2006 converted into Law No. 286 of 24 November 2006, as subsequently amended, the transfers of any valuable asset (including shares, bonds or other securities) as a result of death or donation are taxed as follows:

(a) transfers in favour of spouses and direct descendants or direct ancestors are subject to an inheritance and gift tax applied at a rate of four per cent. on the value of the inheritance or the gift exceeding, for each beneficiary, €1,000,000;

(b) transfers in favour of relatives to the fourth degree or relatives-in-law to the third degree are subject to an inheritance and gift tax at a rate of six per cent. on the entire value of the inheritance or the gift. Transfers in favour of brothers/sisters are subject to the six per cent. inheritance and gift tax on the value of the inheritance or the gift exceeding, for each beneficiary, €100,000; and

(c) any other transfer is, in principle, subject to an inheritance and gift tax applied at a rate of eight per cent. on the entire value of the inheritance or the gift.

If the transfer is made in the favour of persons with severe disabilities, the tax is levied at the rate mentioned above on the value exceeding, for each beneficiary, €1,500,000.

The mortis causa transfer of financial instruments included in a long-term savings account *(piano di risparmio a lungo termine*) – that meets the requirements set forth in Article 1, paragraphs 100-114 of Finance Act 2017, as amended from time to time – is exempt from inheritance tax.

Transfer tax

Following the repeal of the Italian transfer tax contracts relating to the transfer of Securities are subject to the registration tax as follows: (i) public deeds and notarised deeds are subject to fixed registration tax at the rate of €200.00; (ii) private deeds are subject to registration tax only in "case of use" (*caso d'uso*) or in case of "explicit reference" (*enunciazione*) or voluntary registration.

Stamp duty

Pursuant to Article 19, paragraph 1 of Decree No. 201 of 6 December 2011 ("**Decree 201**"), a proportional stamp duty applies on an annual basis to any periodic reporting communications which may be sent by a financial intermediary to an Investor in respect of any Security which may be deposited with such financial intermediary. The stamp duty applies at a rate of 0.2 per cent. and it cannot exceed €14,000, for taxpayers who are not individuals. This stamp duty is determined on the basis of the market value or – if no market value figure is available – the nominal value or redemption amount of the Securities held.

Based on the wording of the law and the implementing decree issued by the Italian Ministry of Economy on 24 May 2012, the stamp duty applies to any investor who is a client (as defined in the regulations issued by the Bank of Italy on 20 June 2012) of an entity that exercises in any form a banking, financial or insurance activity within the Italian territory.

Wealth Tax on Securities deposited abroad

Pursuant to Article 19, paragraph 18 of Decree 201, Italian resident individuals, non-commercial entities, non-commercial partnerships and similar institutions holding the Securities outside the Italian territory are required to pay an additional tax at a rate of 0.2 per cent. (IVAFE). Starting from fiscal year 2020, the wealth tax cannot exceed €14,000 for taxpayers which are not individuals.

This tax is calculated on the market value of the Securities at the end of the relevant year or – if no market value figure is available – the nominal value or the redemption value of such financial assets held outside the Italian territory. Taxpayers are entitled to an Italian tax credit equivalent to the amount of wealth taxes paid in the State where the financial assets are held (up to an amount equal to the Italian wealth tax due).

Italian Financial Transaction Tax ("**IFTT**")

Italian shares and other participating instruments, as well as depositary receipts representing those shares and participating instruments irrespective of the relevant issuer (cumulatively referred to as "**In-Scope Shares**"), received by a Holder upon physical settlement of the Securities may be subject to 0.2 per cent. IFTT calculated on the higher of the exercise value of the Securities as determined according to Article 4 of the Ministerial Decree of 21 February 2013, as amended (the "**IFTT Decree**").

Holders in derivative transactions or transferable securities, including certificates, and certain equity-linked notes, mainly having as underlying or mainly linked to In-Scope Shares are subject to IFTT at a rate ranging between €0.01875 and €200 per counterparty, depending on the notional value of the relevant derivative transaction or transferable securities calculated pursuant to Article 9 of the IFTT Decree. IFTT applies upon subscription, negotiation or modification of the derivative transactions or transferable securities or the equity linked notes, as described above. The tax rate may be reduced to a fifth if the transaction is executed on certain qualifying regulated markets or multilateral trading facilities.

Jersey Taxation

Any individual holder of Securities resident in Jersey for the purposes of the Income Tax (Jersey) Law 1961 will be obliged under that law to include in any statement delivered under that law of the profits and gains arising to that individual a true, complete and correct statement of the amount of the profits and gains arising to that individual from that individual's holding of Securities.

A company which holds Securities and which is resident for tax purposes in Jersey will be subject to income tax in Jersey in respect of the Securities at a rate of zero per cent. unless it (i) owns land in Jersey, (ii) is a financial services company, a specified utility company or an importer or supplier of hydrocarbon oil for the purposes of Income Tax (Jersey) Law 1961, or (iii) is a registered person under Article 118C of the Income Tax (Jersey) Law 1961.

No capital gains tax, capital transfer tax, wealth or inheritance tax is levied in Jersey.

No stamp duties are payable in Jersey on the acquisition, ownership, exchange, sale or other disposition *inter vivos* of Securities. Stamp duty of up to £100,000 is payable on the grant of probate or letters of administration in Jersey in respect of a deceased natural person (i) who died domiciled in Jersey, on the value of the entire estate (including any Securities or interests therein) and (ii) otherwise, on the value of so much of the estate (including any Securities or interests therein), if any, as is situated in Jersey.

Liechtenstein Taxation

The following is a summary of certain material Liechtenstein tax consequences applicable to individual and corporate investors without any considerations in relation to double taxation agreements and tax information exchange agreements. The summary is based on the legislation at the date of this Offering Circular and is intended to provide general information only, whereas it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to acquire, hold or sell the Securities. It is recommended and advisable that potential investors consult their own tax advisors for information with respect to his or her special tax consequences that may arise as a result of holding such Securities, including the provisions contained in double taxation agreements. The Issuers make no representations regarding the tax consequences discussed hereinafter.

Payments made via a Liechtenstein paying agent to investors having their residence or habitual abode in Austria are dealt with below under the heading "Tax Treaty between Austria and Liechtenstein".

Withholding tax

There is no Liechtenstein withholding tax applicable on payments made by the Issuers in respect of the Securities to investors having their residence or habitual abode in Liechtenstein (each such investor a "**Resident Individual**").

Income tax and wealth tax

Capital gains and profits from the sale of the Securities earned by Resident Individuals subject to unrestricted taxation in Liechtenstein on their wealth and income are exempt from income tax if the Securities themselves are subject to wealth tax. A Resident Individual's taxable net wealth is multiplied by an interest rate annually determined anew by the Finance Act. The resulting amount is incorporated into the basis for the calculation of the income tax.

Individuals other than Resident Individuals are not subject to wealth tax in respect of the Securities nor income tax on the capital gains or profits earned from sales of the Securities.

Corporate tax

Legal entities including corporations of any kind, foundations, establishments, trust enterprises, UCITS, investment enterprises for other assets or real estate according to the Investment Undertaking Act, alternative investment funds according to the Law on Alternative Investment Funds and comparable undertakings constituted according to the laws of other jurisdictions are subject to ordinary corporate tax if they have their domicile or effective place of management in Liechtenstein (each a "**Resident Corporate Taxpayer**"). Resident Corporate Taxpayers are subject to corporate tax at the rate of 12.5 per cent. on their profits calculated from their corporate income reduced by allowable expenses.

However, certain important exemptions exist, whereas:

(a) capital gains as well as profits from the sale of securities and liquidation proceeds stemming from participation in domestic and foreign legal entities;

(b) income derived from managed assets in accordance with the Act on UCITS, of investment enterprises for other assets or real estate according to the Investment Undertaking Act, of alternative investment funds according to the Act on Alternative Investment Funds or comparable undertakings according the laws of other jurisdictions; and

(c) qualifying assets of legal entities subject to the Pension Funds Act

qualify as non-taxable income.

With Amendment of Tax Act LGBl. 2018 No. 147, the exemptions of (a) have experienced a restriction, which applies for the first time to the assessment of the tax year 2019.

Legal entities other than Resident Corporate Taxpayers are not subject to ordinary corporate income tax, unless their profits form part of the net corporate income of a Liechtenstein permanent establishment of that legal entity. However, the same favourable exemptions in relation to capital gains as well as profits from the sale of securities and liquidation proceeds stemming from participations in domestic and foreign legal entities apply as stated above for the Resident Corporate Taxpayer.

Private assets structures

Legal entities subject to ordinary corporate tax in Liechtenstein that qualify as Private Assets Structures as defined in Article 64 of the Tax Act (formerly Offshore Companies not pursuing a commercial purpose) are subject to an annual tax of CHF 1,800 if they are acting in the interest of the private wealth of one or more natural persons. Capital gains or profits earned from the sale of the Securities are then not subject to any additional tax apart from the one stated above.

Trusts

Trusts (special endowments not qualifying as legal entity) which are either domiciled in Liechtenstein or managed there are not subject to the corporate tax whereas they are subject to an annual tax of CHF 1,800 only.

Stamp taxes

Based on the Customs Treaty between Liechtenstein and Switzerland and the respective Liechtenstein enactments thereto Swiss federal stamp tax is applicable in Liechtenstein. See "*Swiss Federal Stamp Taxes*" at page 713 of the Offering Circular.

Gift and inheritance tax

Effective 1 January 2011 Liechtenstein gift and inheritance tax has been abolished.

Tax Treaty between Austria and Liechtenstein

If the recipient of income from the Securities is a wealth structuring vehicle, established before 31 December 2016 and deemed transparent for tax purposes with a beneficial owner resident in Austria within the meaning of the Tax Treaty between Austria and Liechtenstein dated 29 January 2013 ("**Tax-Treaty**"), a withholding tax of 27.50 per cent. is levied at source by the Liechtenstein paying agent. The withholding tax is final. According to the Liechtenstein Automatic Exchange of Information Ordinance respective accounts will be considered as so called "exempt accounts" and will not be reported. No tax is withheld if the recipient of the income has explicitly authorised the Liechtenstein paying agent to report the amount of interest paid annually to the Liechtenstein Tax Authority who will forward the information to the competent Austrian authority. Such reporting will follow the rules of the Tax Treaty, however, according to the Protocol, are considered as exchange of information according to Art. 2 of the Automatic Exchange of Information on tax matters between Liechtenstein and the member states of the European Union.

The following are deemed as Liechtenstein paying agents pursuant to section 2 Abs. 1 lit. e) of the Tax Treaty i) banks under Liechtenstein banking law and securities dealers, ii) natural and legal persons

resident or established in Liechtenstein including partnerships and permanent establishments of foreign companies which even accept, hold, invest or transfer assets of third parties or merely pay interest or secure the payment of interest in the course of their business. Also included are natural and legal persons holding a license pursuant to the Trustee Act and pursuant to section 180a Liechtenstein Persons- and Companies Act (PGR), provided they are members of a governing body of a wealth structuring vehicle.

Grand Duchy of Luxembourg Taxation

The following discussion is a summary of certain material Luxembourg tax considerations relating to (i) Securities issued by any of the Issuers where the Holder is tax resident in Luxembourg or has a tax presence in Luxembourg, or (ii) Securities where the Paying Agent is located in Luxembourg.

Notes and Certificates

Resident individuals

Under the Luxembourg law of 23 December 2005 introducing withholding tax on certain interest payments derived from savings income, interest on Notes and Certificates paid by a Luxembourg paying agent to an individual Holder who is a resident of Luxembourg not holding the Notes or Certificates as business assets will be subject to a withholding tax of twenty per cent. which will operate a full discharge of income tax due on such payments (see below under "*Securities where the Paying Agent is located in Luxembourg*").

An individual Holder who is a resident of Luxembourg not holding the Notes or Certificates as business assets will not be subject to taxation on capital gains (including foreign exchange gains) upon the disposal of the Notes or Certificates, unless the disposal of the Notes or Certificates precedes their acquisition or the Notes and Certificates are disposed of within six months of the date of acquisition. Upon redemption or exchange of the Notes or Certificates, the portion of the redemption or exchange price corresponding to accrued but unpaid interest (if any) is subject to the aforementioned twenty per cent. withholding tax.

An individual holder of a Note or Certificate who is a resident of Luxembourg holding the Notes or Certificates as business assets will be subject to taxation as set forth in the paragraph "*Undertaking with a collective character established in Luxembourg*" set out below, except that the aforementioned twenty per cent. withholding tax can be credited against the overall tax liability.

Undertaking with a collective character established in Luxembourg

Interest on Notes or Certificates paid by a Luxembourg paying agent to holders of a Note or Certificate who are not individuals will not be subject to any withholding tax.

Save where the holder of a Note or Certificate is exempt from taxation under Luxembourg law, a Holder who is an undertaking with a collective character resident in Luxembourg, or a non-resident Holder of the same type who has a permanent establishment in Luxembourg with which the holding of the Note or Certificates is connected, must, for corporate tax purposes, include in his taxable income (i) any interest received or accrued on the Notes or Certificates and (ii) the difference between the sale or redemption price (including accrued but unpaid interest, if any) and the lower of the cost or book value of the Notes or Certificates sold or redeemed (including foreign exchange gains).

Non-Residents

A holder of Notes or Certificates will not become resident, or deemed to be resident, in Luxembourg by reason only of the holding of the Notes or Certificates or the execution, performance and/or delivery of the Notes or Certificates.

Warrants

Resident Warrant Holders

Individuals

The profit made by a resident individual holder of a Warrant not holding the Warrants as business assets, on the sale of Warrants or upon the exercise thereof against payment of a cash amount is taxable in

Luxembourg if such Warrant is sold or exercised within a period of six months following the acquisition by such person. The exercise by such a holder of Warrants against physical settlement does not give rise to taxation in Luxembourg, provided that the disposal of the assets acquired upon such exercise will be taxable in Luxembourg in the same circumstances as would be a sale of a Warrant or the exercise thereof against payment of a cash amount and that the holding period of six months referred to above will start on the date of acquisition of such assets following the exercise of such Warrant.

If Warrants are held by a resident individual as a business asset, they are subject to Luxembourg tax as described in the paragraph "Undertakings with a collective character established in Luxembourg" set out below.

Undertakings with a collective character established in Luxembourg

Save where the holder of a Warrant is exempt from taxation under Luxembourg law, a holder who is an undertakings with a collective character resident of Luxembourg, or a non-resident Holder of the same type who has a permanent establishment in Luxembourg with which the holding of the Warrants is connected must include in his taxable income the profit made on the sale of Warrants or upon the exercise thereof against payment of a cash amount. The exercise by a holder of Warrants against physical settlement does not give raise to taxation in Luxembourg, provided that the disposal of the assets acquired upon such exercise will be taxable in Luxembourg in the same circumstances as would be a sale of a Warrant or the exercise thereof against payment of a cash amount.

Non-resident Warrant Holders

Under the existing laws of Luxembourg, the exercise or sale of Warrants by a non-resident Holder does not give rise to taxable income in Luxembourg, unless such Warrants were held as business assets by such non-resident within a permanent establishment in Luxembourg.

Other Taxes

Luxembourg net wealth tax will not be levied on a holder of Securities, unless the Holder is an undertaking with a collective character resident in Luxembourg; or the Securities are attributable to a permanent establishment in Luxembourg of a foreign entity of the same type as a Luxembourg undertaking with a collective character.

There is no Luxembourg registration tax, capital tax, stamp duty or any other similar tax or duty payable in Luxembourg in respect of or in connection with the execution and delivery of the Securities or the performance of the Issuer's obligations under the Securities, except that court proceedings in a Luxembourg court or the representation of the Securities to an "*autorité constituée*" could imply registration of the Securities at a fixed registration duty.

Securities where the Paying Agent is located in Luxembourg

Resident Holders

If interest on Securities is paid to Luxembourg resident individuals by a Paying Agent established in Luxembourg, such individual Holder will be subject to a withholding tax of twenty per cent. which will operate as a full discharge of income tax due on such payments.

In case interest on Securities is paid to Luxembourg resident individuals by a Paying Agent established in a Member State of the EU or the EEA other than Luxembourg, the beneficiary may opt for the application of such withholding tax in accordance with the provisions of the law of 23 December 2005. In such case the beneficiary is responsible for the related payment and declaration obligations. This withholding tax represents the final tax liability for Luxembourg individual resident taxpayers acting in the course of the management of their private wealth.

Non-resident Holders

Under the existing laws of Luxembourg there is no withholding tax on the payment of interest on, or reimbursement of principal of, the Securities made to non-residents of Luxembourg through a paying agent established in Luxembourg.

Norway Taxation

The following discussion is an overview of certain material Norwegian tax considerations relating to Securities issued by any of the Issuers where the holder is tax resident in Norway. The overview is based on legislation as at the date of this document and is intended to provide general information only. The tax treatment of each holder can depend on the holder's specific situation. This description does not deal comprehensively with all tax consequences that may occur for holders of Securities, and does not purport to deal with the tax consequences applicable to all categories of investors. It is strongly recommended that potential investors consult their own tax advisers for information with respect to the special tax consequences that may arise as a result of holding Securities, including the applicability and effect of foreign tax rules, provisions contained in double taxation treaties and other rules which may be applicable. Any changes to applicable tax laws may have a retrospective effect.

Individuals resident in Norway

Withholding tax

There is no Norwegian withholding tax applicable on payments made by the Issuer in respect of the Securities.

Tax liability

Individuals having their place of residence in Norway for tax purposes ("**Norwegian Resident Individuals**") under Norwegian Domestic laws and the relevant tax treaty (if any), are generally subject to Norwegian Income Tax on their worldwide income, irrespective of the country from which the income is derived.

Any return received on the Securities and capital gains received on realisation (including a sale or redemption) of the Securities are taxable as ordinary income. Ordinary income is currently taxed at a flat rate of 22 per cent. Losses on realisation of Securities are deductible in the ordinary income of the individual.

Return received on and capital gains derived from shares in joint stock corporations and on mutual funds where more than 80 per cent. of the funds' assets are stock, and on certain other holdings, are taxed at a higher tax rate, currently 35.2 per cent. Where 20 to 80 per cent. of a mutual fund's underlying assets are stock, the taxation of dividends and interests are taxed on a pro rata basis. If less than 20 per cent. of the funds' underlying assets are stock, all dividends are taxed as interests at 22 per cent.

Separate or integrated taxation – Warrants and/or Certificates

Whether the Warrants and/or Certificates will be subject to separate taxation on settlement or integrated taxation with the underlying assets depends on the nature of the underlying object of the Warrants and/or Certificates. Financial options, i.e. options and warranties on shares, debentures, foreign currency, quoted financial instruments and index options are generally taxed separately from the underlying asset. Whether financial instruments other than financial options will be taxed separately or integrated must be evaluated in each case. However, financial instruments will, as a starting point, be subject to separate taxation if the purpose of the instrument is not mainly to arrange for the transfer of the underlying object of the Securities.

On this basis the Warrants and/or Certificates will most likely be subject to separate taxation in Norway. This is assumed in the following where the question is of importance.

Calculation of capital gains and losses

Capital gain or loss is computed as the difference between the consideration received on realisation and the cost price of the Securities. The cost price of the Securities is equal to the price for which the Holder acquired the Securities. Costs incurred in connection with the acquisition and realisation of the Securities may be deducted from the Holder's ordinary income in the year of realisation. In case of physical settlement of the Securities, the capital gain will be computed as the difference between the market value of the underlying asset and the cost price of the Securities (premium) including the exercise price.

Settlement, sale and lapse of Securities

Both settlement at the end of the term and sale is treated as realisation of the Securities, and will trigger a taxable capital gain or loss. The calculation of capital gains and losses is accounted for above.

If the Securities lapse (without any return), they are deemed to be realised, incurring a loss equal to the acquisition cost. A loss is deductible as set out above.

Net wealth taxation

The value of the Securities at the end of each income year will be included in the computation of the Holder's taxable net wealth for municipal and state net wealth tax purposes. The top marginal tax rate on net wealth is currently 1.1 per cent.

Transfer taxes etc. – VAT

There are no Norwegian transfer taxes, stamp duty or similar taxes connected to the purchase, disposal or settlement of the Securities. Further, there is no VAT on transfer of Securities.

Inheritance Tax

Norway has abolished inheritance tax and gift tax.

Legal entities resident in Norway

Withholding tax

There is no Norwegian withholding tax applicable on payments made by the Issuer in respect of the Securities.

Tax liability

Legal entities being formed and registered in Norway or having their effective place of management in Norway for tax purposes ("**Norwegian Resident Corporations**") under Norwegian Domestic laws and any relevant tax treaty (if any), are generally subject to Norwegian Income Tax on their worldwide income, irrespective of the country from which the income is derived.

Any return received on the Securities and capital gains received on realisation (including a sale or redemption) of the Securities are as a main rule taxable as ordinary income, which is currently taxed at a flat rate of 22 per cent. Losses on realisation of the Securities are deductible in the ordinary income of the entity.

The taxation is as a starting point triggered and calculated as described in the section concerning individuals, see heading "*Individuals resident in Norway*" above.

Exemption from tax – The Norwegian tax exemption method

Dividends and gains on certain equities such as shares in joint stock corporations and on options and warrants with qualifying equities as the underlying object and on mutual funds where more than 80 per cent. of the funds' assets are shares, and on certain other holdings, are taxed according to the so-called tax exemption method, provided that the entities that the equities are related to are resident within the European Economic Area. If the entity is resident within the European Economic Area in a low tax country for Norwegian tax purposes (the taxation is considered low if it is less than 2/3 of the Norwegian tax level), the tax exemption method only applies if the entity is properly established and performs real economic activity in its home country.

Pursuant to the tax exemption method, dividends received are only subject to a 0.66 per cent. tax and capital gains realised are not subject to tax. According to the preparatory works, stock index options will also be comprised by the exemption method, but only as long as the index mainly is related to companies resident within the European Economic Area. In practice, this has been interpreted so that at least 90 per cent. of the index must consist of shares in companies resident within the European Economic Area. The exemption method will only apply as long as the financial instrument in question is not regarded as a debt instrument.

Where 20 to 80 per cent. of a mutual fund's underlying assets are stock, the taxation of dividends and interests are taxed on a pro rata basis, whereas the interests are taxed at 22 per cent. and dividends are taxed at 0.66 per cent. If less than 20 per cent. of the funds' underlying assets are stock, all dividends are taxed as interests.

As a result of the tax exemption for yields and gains, capital losses on such equities and equity linked instruments are not deductible.

Other taxes

There are no transfer taxes, stamp duty or similar taxes connected to purchase, disposal or settlement of the Securities. Further, there is no VAT on transfer of the Securities. Limited companies and similar entities are not subject to net wealth taxation.

Non-resident holders

A holder of the Securities will generally not be subject to Norwegian tax on yields, capital gains or interest payments if (i) such holder of Securities is not a resident of Norway for tax purposes under Norwegian Domestic laws and any relevant tax treaty (if any) and (ii) such holder of Securities does not participate in or carry on business in Norway or have a permanent establishment in Norway to which the Securities are attributable. The above is provided that the payment is not deemed as a dividend from a Norwegian entity (i.e. tax resident in Norway).

Portugal Taxation

The following discussion is a summary of certain material Portuguese tax considerations relating to Securities issued by any of the Issuers in particular if the Holder is tax resident in Portugal or otherwise subject to tax in Portugal and the relevant Issuer is not tax resident in Portugal and does not have a permanent establishment in Portugal.

This information is of a general nature and does not purport to be a comprehensive description of all Portuguese tax consequences that may be relevant to any particular Holder and to a decision to acquire, to hold and to dispose of the Securities.

The summary is based on tax laws and taxation practice, as in effect and applied as at the date of this Offering Circular and is intended to provide general information only. The information herein included was not subject to confirmation by the Portuguese tax authorities through a specific tax ruling or otherwise. Tax laws, taxation practices and their interpretation are constantly under change, which changes may sometimes have a retroactive effect and may change the conclusions set out in this summary.

The references to "interest", "investment income" and "capital gains" in the paragraphs below mean "interest", "investment income" and "capital gains" as understood in Portuguese tax law. The statements below do not take any account of any different definitions of "interest", "investment income" and "capital gains" which may prevail under any other law or which may be created by this Offering Circular or any related documentation.

Each potential Holder should consult a professional tax adviser as to the tax consequences relating to its particular circumstances and the characteristics of the relevant Securities resulting from subscription, purchase, ownership and disposition of the Notes, Certificates and Warrants.

The information herein does not incorporate comments related to the Portuguese 2022 State Budget Law as it has not yet been approved and therefore it has not yet entered into force as at the date of this Offering Circular.

Withholding tax

See below under (A) "*Individual investors resident in Portugal*": where there is a Paying Agent established in Portugal, withholding tax will apply to certain income.

Income/Capital Gains/Corporate Tax

Investors resident in Portugal

Payments of principal in respect of the Securities to corporate entities or to individuals are not subject to tax in Portugal. For these purposes, principal shall mean all payments received by the investor without any remuneration component.

(A) *Individual investors resident in Portugal*

(i) *Notes and Certificates that guarantee the repayment of the invested amount*

(a) *Investment income*

Income generated by the holding of Notes or Certificates that provide for the repayment of the invested amount, qualifies as investment income (e.g., interest) and is subject to Portuguese individual income tax. Investment income includes also accrued interest (if the Security is transferred while interest is accruing) and the positive difference, if any, between the repayment amount and the issue price of the Security.

This investment income is subject to taxation at a flat rate of 28 per cent., unless the individual elects to include the income (along with other income subject to taxation) in his taxable income, in which case it will be subject to tax at progressive rates of up to 48 per cent. Additionally, taxable income in excess of € 80,000 is subject to an additional rate of 2.5 per cent., while taxable income in excess of € 250,000 is subject to a tax rate of 5 per cent.

Withholding tax will apply at a rate of 28 per cent. if the Paying Agent is established in Portugal. The tax withheld represents the final tax due, unless the individual elects to include the income in his taxable income, in which case it will be subject to tax at progressive rates of up to 48 per cent. and the tax withheld will be deemed a payment on account of the final tax due. Additionally, taxable income in excess of € 80,000 is subject to an additional rate of 2.5 per cent., while taxable income in excess of € 250,000 is subject to a tax rate of 5 per cent.

A final withholding tax at a rate of 35 per cent. will apply if the investment income is paid or made available via a bank account for the benefit of undisclosed third parties to the account, by a Paying Agent established in Portugal, unless the identity of the beneficial owner of the income is disclosed, in which case the general rules apply.

A final withholding tax at a rate of 35 per cent. will apply (or a final taxation at a rate of 35 per cent. when such withholding tax at source does not apply) to investment income paid or made available to individuals tax resident in Portugal by non-resident entities with no permanent establishment in Portugal, which are domiciled in a country or territory considered as a tax haven by Portuguese legislation (as listed in Finance Minister Order no. 150/2004 of 13 February 2004, as amended).

Foreign sourced investment income derived by individual tax residents in Portugal benefiting from the non-habitual resident special tax regime may be exempt from Portuguese individual income tax provided: (i) the income may be liable to tax in the source country according to the applicable tax treaty concluded between Portugal and the source state; or (ii) in cases where there is no tax treaty in place, the income may be liable to tax in the source country according to the OECD Model Tax Convention on Income and on Capital, provided that the source country is not a "blacklisted" jurisdiction and the income is not deemed to have been obtained in Portuguese territory.

(b) *Capital gains*

Other income/earnings arising from the Notes or the Certificates (e.g., income other than accrued interest, earned by selling the Notes or the Certificates) will

qualify as capital gains and is/are subject to taxation at a flat rate of 28 per cent., unless the individual elects to include the income (along with other income subject to taxation) in his taxable income, in which case it will be subject to tax at progressive rates of up to 48 per cent. Additionally, the taxable income in excess of € 80,000 is subject to an additional rate of 2.5 per cent., while taxable income in excess of € 250,000 is subject to a tax rate of 5 per cent.

Broadly, the taxable base is comprised of the positive difference between capital gains and capital losses in a given year.

Capital losses will not be allowed for tax purposes if the counterparty to the transaction is domiciled in a low tax jurisdiction.

Foreign sourced capital gains income derived by individual tax residents in Portugal benefiting from the non-habitual resident special tax regime may be exempt from Portuguese individual income tax provided: (i) the income may be liable to tax in the source country according to the applicable tax treaty concluded between Portugal and the source state; or (ii) in cases where there is no tax treaty in place, the income may be liable to tax in the source country according to the OECD Model Tax Convention on Income and on Capital, provided that the source country is not a "blacklisted" jurisdiction and the income is not deemed to have been obtained in Portuguese territory.

(ii) *(a) Notes and Certificates that do not guarantee the repayment of the invested amount and (b) Warrants*

Interest and other remuneration, if any, arising from the Securities will qualify as investment income. The tax regime described above concerning investment income will generally apply.

Other income arising from the Securities (e.g., earnings arising from an increase in the market value of the underlying assets) will qualify as capital gains. The tax regime described above concerning capital gains will generally apply.

(B) *Corporate entities (as investors) resident in Portugal*

Income, including capital gains, arising from the Securities will be subject to tax in Portugal at a maximum rate of 22.5 per cent. (taxable income within the first bracket of € 25,000 will be subject to a special reduced income tax rate of 17 per cent., applicable only to small and medium sized corporate entities). Additionally, taxable income in excess of € 1,500,000 is subject to a state surtax rate of 3 per cent., while taxable income in excess of € 7,500,000 is subject to a state surtax rate of 5 per cent.; and finally, taxable income in excess of € 35,000,000 is subject to a state surtax rate of 9 per cent.

As referred to above, a final withholding tax at a rate of 35 per cent. will apply if the investment income (as defined above while describing the tax regime for individuals tax resident in Portugal) is paid or made available via a bank account for the benefit of undisclosed third parties to the account, by a Paying Agent established in Portugal, unless the identity of the beneficial owner of the income is disclosed, in which case the general (individual income tax or corporate income tax, as the case may be) rules apply.

Investors not resident in Portugal

Investors not resident in Portugal and without a permanent establishment in Portugal to which the income/capital gain is attributable, will not be subject to tax in Portugal by means of withholding tax or otherwise.

As referred to above, a final withholding tax at a rate of 35 per cent. will apply if the investment income (as defined above while describing the tax regime for individuals tax resident in Portugal) is paid or made available via a bank account for the benefit of undisclosed third parties to the account, by a Paying Agent established in Portugal, unless the identity of the beneficial owner of the income is disclosed, in which case the general rules apply.

Stamp Tax

Lending/Borrowing

The subscription of the Securities (including the repayment of the invested amount to investors) is not subject to stamp tax in Portugal.

Gift/Inheritance Tax

Gift/inheritance tax is part of the stamp tax. The individual investor, whether resident or not resident in Portugal, will not be subject to gift or inheritance tax in Portugal. The same applies to the corporate investor not resident and without a permanent establishment in Portugal.

Any gift or inheritance comprising Securities benefiting a corporate investor resident in Portugal will not be subject to stamp tax but will be subject to corporate income tax in Portugal.

Transfer Tax

Transfer of the Securities is not subject to transfer tax in Portugal.

Value Added Tax

Acquisition and transfer of Securities will not be taxable under Value Added Tax.

Paying Agent or Custodian Located in Portugal

See (A) "*Individual investors resident in Portugal*", (B) "*Corporate entities (as investors) resident in Portugal*" and "*Investors not resident in Portugal*" above.

Spain Taxation

The following is a general description of the Spanish withholding tax treatment, direct and indirect taxation of payments under the Securities. The statements herein regarding Spanish taxes and withholding taxes in Spain are made assuming that the Issuers are not Spanish resident entities nor do they act through a permanent establishment in Spain, and are based on the laws in force as well as the administrative interpretations thereof in Spain as of the date of this Offering Circular and are subject to any changes in law occurring after such date, which could be made on a retroactive basis. It does not purport to be a complete analysis of all tax considerations relating to the Securities, whether in Spain or elsewhere, which may be relevant to a decision to subscribe for, purchase, own or dispose of the Securities and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities or commodities) may be subject to special rules. Prospective purchasers of the Securities should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of the Securities and receiving payments of interest, principal and/or other amounts under the Securities and the consequences of such actions under the tax laws of Spain.

Personal Income Tax ("**PIT**") **/ Corporate Income Tax** ("**CIT**") **/ Non Resident Income Tax** ("**NRIT**")

(A) *Spanish resident individuals*

(i) *Warrants*

Following the criterion of the Spanish Directorate-General for Taxation in several rulings (amongst others, rulings dated 27 August 2007, 23 May 2007 and 29 May 2013), income earned by Spanish resident individuals under Warrants should be considered as capital gains, in which case no withholdings on account of PIT will have to be deducted.

Notwithstanding that, Spanish resident individuals recognising capital gains will still be subject to PIT, to be declared in their annual tax returns, according to the following rates:

- Amounts up to EUR 6,000.00: 19 per cent.

- Amounts between EUR 6,000.01 and EUR 50,000: 21 per cent.
- Amounts between EUR 50,000.01 and EUR 200,000: 23 per cent.
- Amounts exceeding EUR 200,000.01: 26 per cent.

(ii) *Certificates and Notes*

(a) *Interest payments under the Certificates and Notes*

Income earned by Spanish resident individuals under Certificates and Notes should qualify as interest payments. In general, interest payments obtained by Spanish resident individuals should be subject to withholding tax at 19 per cent. rate on account of PIT (creditable against final tax liability). Expenses relating to the management and deposit of the Certificates and Notes, if any, will be tax-deductible, excluding those pertaining to discretionary or individual portfolio management. Notwithstanding the above, non-resident in Spain entities not acting through a permanent establishment in Spain are not bound to withhold on account of PIT on payments made to Spanish resident individuals. Interest payments under Certificates and Notes should be only subject to withholding tax in Spain if they are deposited in a depository entity or paid to individuals resident in Spain (or acting through a permanent establishment in Spain) or if an entity or individual resident in Spain (or acting through a permanent establishment in Spain) is in charge of the collection of the income derived from the Certificates and Notes, provided that such income had not been previously subject to withholding tax in Spain.

Notwithstanding the above, Spanish resident individuals earning such income will still be subject to PIT – to be declared in their annual tax returns – according to the following rates:

- Amounts up to EUR 6,000.00: 19 per cent.
- Amounts between EUR 6,000.01 and EUR 50,000: 21 per cent.
- Amounts between EUR 50,000.01 and EUR 200,000: 23 per cent.
- Amounts exceeding EUR 200,000.01: 26 per cent.

However, when certain income included in the taxpayer's taxable base has already been taxed abroad, the taxpayer shall be entitled to a tax credit against the PIT taxable base for the lowest amount of the following: (i) the amount effectively paid abroad; and (ii) the amount resulting from applying the average tax rate to the taxable base effectively taxed abroad.

(b) *Income upon transfer or redemption of the Certificates and Notes*

Income earned upon transfer or redemption of the Certificates and Notes should be subject to Spanish withholding tax at 19 per cent. rate on account of PIT (creditable against final tax liability). Notwithstanding this, as entities which are not resident in Spain and which are not acting through a permanent establishment in Spain are not bound to withhold on account of PIT on payments made to Spanish resident individuals, income earned upon transfer or redemption of the Certificates and Notes should be subject to withholding tax in Spain only if there is a financial entity acting on behalf of the seller, provided such entity is resident for tax purposes in Spain or has a permanent establishment in Spain.

However, when the Certificates and Notes (i) are represented in book-entry form; (ii) are admitted to trading on a Spanish secondary stock exchange; and (iii) generate explicit remuneration, holders can benefit from a withholding tax exemption in respect of the income arising from the transfer or reimbursement of the Certificates and Notes, exception made of income derived from accounts entered into with financial institutions, provided that such accounts are based on financial instruments, such as Notes and Certificates. However, under certain circumstances, when a transfer of the Certificates and Notes has occurred within the 30-day period immediately preceding any relevant coupon payment date such holders may not be eligible for such withholding tax exemption.

Notwithstanding the above, Spanish resident individuals earning such income will still be subject to PIT, to be declared in their annual tax returns, according to the following rates:

- Amounts up to EUR 6,000.00: 19 per cent.
- Amounts between EUR 6,000.01 and EUR 50,000: 21 per cent.
- Amounts between EUR 50,000.01 and EUR 200,000: 23 per cent.
- Amounts exceeding EUR 200.000,01: 26 per cent.

However, when certain income included in the taxpayer's taxable base has already been taxed abroad, the taxpayer shall be entitled to a tax credit against the PIT taxable base for the lowest amount of the following: (i) the amount effectively paid abroad; and (ii) the amount resulting from applying the average tax rate to the taxable base effectively taxed abroad.

(B) *Spanish resident companies*

(i) *Warrants*

Income earned under Warrants shall be considered as capital gains, in which case no withholdings on account of CIT will have to be deducted.

(ii) *Certificates and Notes*

Interest payments under the Certificates and Notes shall be subject to withholding tax at 19 per cent. rate on account of CIT (creditable against final tax liability). Notwithstanding this, entities which are not resident in Spain and which are not acting through a permanent establishment in Spain are not bound to withhold on account of CIT on payments made to Spanish resident entities. Interest payments under Certificates and Notes should only be subject to withholding tax in Spain in case they are deposited in a depository entity resident in Spain (or acting through a permanent establishment in Spain) or if an entity or individual resident in Spain (or acting through a permanent establishment in Spain) is in charge of the collection of the income derived from the Certificates and Notes, provided that such income has not been previously subject to withholding tax in Spain.

Income upon transfer or redemption of the Certificates and Notes should be subject to Spanish withholding tax at 19 per cent. rate on account of CIT (creditable against final tax liability). Notwithstanding this, as non-resident in Spain entities not acting through a permanent establishment in Spain are not bound to withhold on account of CIT on payments made to Spanish resident entities, income upon transfer or redemption of the Certificates and Notes should be subject to withholding tax in Spain only if there is a financial entity acting on behalf of the seller, provided such entity is resident for tax purposes in Spain or has a permanent establishment in Spain.

However, when (i) the Certificates and Notes are represented in book-entry form and are admitted to trading on a Spanish secondary stock exchange or on the Spanish Alternative Fixed Income Market (MARF); or (ii) the Certificates and Notes are listed on a market in an OECD member state; holders who are Corporate Income Taxpayers can benefit from a withholding tax exemption in respect of interest payments and income arising from the transfer or redemption of the Certificates and Notes, exception made of income derived from accounts entered into with financial entities, provided that such accounts are based on financial instruments, such as Certificates and Notes.

Spanish resident companies earning income under the Warrants, Certificates or Notes will be subject to CIT, to be declared in their annual tax returns, at a general 25 per cent. rate. However, when certain income included in the taxpayer's taxable base has already been taxed abroad, the taxpayer shall be entitled to a tax credit against the CIT taxable base for the lowest amount of the following: (i) the amount effectively paid abroad; and (ii) the amount that should have been paid in Spain in the case that such income had been obtained in Spain. Taxpayers with an annual net turnover higher than EUR 20 million or that are taxed jointly under a CIT group will be subject to a minimum 15% effective CIT rate of the adjusted taxable base (additional

requirements or limitations may apply depending on the nature and circumstances of a given taxpayer).

(C) *Individuals and companies with no tax residency in Spain*

(i) *Income obtained through a permanent establishment in Spain*

Ownership of the Securities by investors who are not resident for tax purposes in Spain will not in itself create the existence of a permanent establishment in Spain.

The tax rules applicable to income deriving from the Securities under NRIT in this scenario are, generally, the same as those previously set out for Spanish resident companies, subject to the provisions of any relevant double tax treaty.

(ii) *Income obtained without a permanent establishment in Spain*

Income obtained by investors residing outside Spain and without a permanent establishment in Spain would not be considered, in general terms, as Spanish-source income and, therefore, would not be subject to taxation and withholding tax in Spain.

According to binding ruling V0185-20 issued by the Spanish General Directorate of Taxes on 27 January 2020, certain securities (such as financial derivatives) may be classified, for the purposes of the relevant double tax treaty, as business profits or other income and, as mentioned above, should not be considered, in general terms, as Spanish-source income, subject to the provisions of any relevant double tax treaty.

Net Wealth Tax ("NWT")

Only individual holders of Securities would be subject to the NWT as legal entities are not taxable persons under NWT.

Relevant taxpayers will be (i) individuals who have their habitual residence in Spain regardless of the place where their assets or rights are located or could be exercised; and (ii) non-Spanish resident individuals owning assets or rights which are located or could be exercised in Spain, in each case, whose net wealth is higher than EUR 700,000, as this amount is considered as exempt from NWT.

Taxpayers should include in their NWT self-assessment the Securities (assuming they qualify as debt instruments) for the following amounts:

(i) if they are listed in an official market, the average negotiation value of the fourth quarter; and

(ii) in other case, its nominal value (including redemption premiums).

The value of the Securities together with the rest of the taxpayer's wealth, once reduced by the deductible in rem liens and encumbrances which reduce the rights and assets values and the personal debts of the taxpayer, shall be taxed at a tax rate between 0.2 to 3.5 per cent.

Finally, please note that the Spanish regions are entitled to modify (i) the threshold of net wealth exempt from taxation; (ii) the tax rates; and (iii) the tax benefits and exemptions to be applied in their territory.

Taxpayers who are non-Spanish resident individuals but who are resident in a Member State of the European Union or the European Economic Area may apply the rules approved by the autonomous region where the assets and rights with more value (i) are located, (ii) can be exercised or (iii) must be fulfilled.

Inheritance and Gift Tax ("IGT")

(A) *Individuals with tax residency in Spain*

Individuals resident in Spain who acquire ownership or other rights over any Securities by inheritance, gift or legacy will be subject to IGT. The applicable effective tax rates range between 7.65 per cent. and 81.6 per cent., depending on several factors such as family relationship and pre-existing heritage. However, it is necessary to take into account that the IGT (including certain tax benefits) has been transferred to the Spanish regions. Therefore, an

analysis must be made in each specific case to determine to what extent any regional legislation might be applicable, since there might be differences in respect of the final taxation under IGT depending on the region in which an investor resides.

(B) *Companies with tax residency in Spain*

Companies resident in Spain which acquire ownership or other rights over the Securities by inheritance, gift or legacy are not subject to IGT, as income obtained will be subject to CIT.

(C) *Individuals and companies with no tax residency in Spain*

Non-Spanish resident individuals and companies which are not resident in Spain and do not have a permanent establishment in Spain that acquire ownership or other rights over the Securities by inheritance, gift or legacy, will not be subject to IGT provided that the Securities were not located in Spain and the rights deriving from them could not be exercised within Spanish territory.

The acquisition of Securities by inheritance, gift or legacy by non-resident companies with a permanent establishment in Spain is not subject to the IGT, as income obtained will be subject to the NRIT.

Value Added Tax, Transfer Tax and Stamp Duty

Acquisition and transfer of Securities, in principle, shall not trigger Transfer Tax and Stamp Duty, nor will they be taxable under Value Added Tax.

Spanish Financial Transactions Tax ("FTT")

The acquisition of shares of a Spanish listed company trading on a regulated market in Spain, any other Member State of the European Union, or on a market in a third country if the market is considered to be equivalent, with a market capitalisation greater than 1,000 million euros ("**Qualifying Shares**") and the acquisition of certificates of deposit representing Qualifying Shares ("**Qualifying Certificates**"), such as American depositary receipts, regardless of the type of market or trading centre where the trades are executed (regulated market, multilateral trading facility, systematic internaliser; or OTC transactions), are subject, save for certain exceptions, to Spanish FTT at a 0.2 per cent of the corresponding acquisition price (excluding the costs and expenses associated to such transaction).

In addition to the above, the acquisition of Qualifying Shares and Qualifying Certificates under the execution or settlement of convertible or exchangeable bonds or debentures, of derivatives, as well as of any financial instrument, or of certain financial contracts, are also subject to the Spanish FTT.

Sweden Taxation

The following discussion is a summary of certain material Swedish tax considerations relating to (i) Securities issued by any of the Issuers where the Holder is tax resident in Sweden or has a tax presence in Sweden and (ii) Securities where the Paying Agent or custodian is located in Sweden. This summary of certain tax issues that may arise as a result of holding Securities is based on current Swedish tax legislation and is intended only as general information for Holders of Securities who are resident or domiciled in Sweden for tax purposes, unless otherwise stated. This description does not deal comprehensively with all tax consequences that may occur for Holders of Securities, nor does it cover the specific rules where Securities are held by a partnership or are held as current assets in a business operation. The summary does, moreover, not cover Securities held on a so-called investment savings account (Sw: investeringssparkonto). Special tax consequences that are not described below may also apply for certain categories of taxpayers, including investment companies and life insurance companies. It is recommended that potential investors in Securities consult their own tax advisers for information with respect to the special tax consequences that may arise as a result of holding Securities, including the applicability and effect of foreign income tax rules, provisions contained in double taxation treaties and other rules which may be applicable.

Withholding of tax

There is no Swedish withholding tax (*källskatt*) applicable on payments made by the Issuer in respect of the Securities. Sweden operates a system of preliminary tax (*preliminärskatt*) to secure payment of taxes.

In the context of the Securities a preliminary tax of 30 per cent. will be deducted from all payments treated as interest in respect of the Securities made to any individuals or estates that are resident in Sweden for tax purposes provided the paying entity is tax resident in Sweden and subject to reporting obligations. A preliminary tax of 30 per cent. will also be deducted from any other payments in respect of the Securities not treated as capital gains, if such payments are paid out together with payments treated as interest. To the extent the Securities are cleared through Euroclear Sweden, Euroclear Sweden would normally be obligated to make preliminary tax deductions. Depending on the relevant Holder's overall tax liability for the relevant fiscal year the preliminary tax may fall short of, equal or exceed the Holder's overall tax liability, with any balance subsequently to be paid by or to the relevant Holder, as applicable.

Taxation of individuals resident in Sweden

Income from capital

For individuals and estates of deceased Swedish individuals, capital gains, interest payments, dividends and other income derived from the holding of an asset should be reported as income from capital.

Capital gains and losses

Individuals and estates of deceased Swedish individuals, who sell their Securities, are subject to capital gains taxation. The tax rate is 30 per cent. of the gain. The capital gain or loss is equal to the difference between the sales proceeds after deduction of the acquisition cost and sales costs of the Securities. The acquisition cost is calculated according to the so-called average method. In brief this means that the costs of acquiring all Securities of the same type and class are added together and calculated collectively, with respect to changes to the holding.

Optionally, the so-called standard method under which the acquisition cost is deemed to be the equivalent of 20 per cent. of the net sales price, may be applied on the disposal of listed Securities (except for options and forward contracts) that are taxed in the same way as shares. A Security should be regarded as listed for Swedish tax purposes if it is listed on a regulated market considered to be a stock exchange under Swedish tax law.

As a main rule, 70 per cent. of a capital loss is deductible for tax purposes against any other taxable income derived from capital. However, capital losses on listed Securities that are taxed in the same way as shares are fully deductible against taxable capital gains on such listed assets or capital gains on listed as well as non-listed shares in Swedish limited liability companies and foreign legal entities. Any remaining capital loss is deductible at 70 per cent. against any other capital income.

Capital losses on listed Securities qualifying as Swedish receivables (i.e. denominated in SEK) are currently fully deductible. Moreover, under EU law capital losses on receivables denominated in foreign currency should also be fully deductible.

If a deficit arises on income from capital, a reduction of the tax on income from employment and from business, as well as the tax on real estate, is allowed. The tax reduction allowed amounts to 30 per cent. of any deficit not exceeding SEK 100,000 and 21 per cent. of any deficit in excess of SEK 100,000. Deficits may not be carried forward to a subsequent fiscal year.

Gains or losses on currency exchange rate fluctuations may arise in relation to Notes where the sales proceeds received are in a foreign currency. However, no special calculations are required if the sales proceeds are exchanged into SEK (Swedish krona) within 30 days from the time of disposal. In such case, the exchange rate on the date of exchange shall be used when calculating the value of the sales proceeds. The exchange rate on the date of acquisition is generally used when determining the acquisition cost for tax purposes.

Interest

Interest as well as other income derived from the holding of an asset is subject to tax at a rate of 30 per cent. The tax liability arises when the interest (or other income) is paid to the Holder of the Securities, in accordance with the so-called cash method.

Classification of various Notes and return on such Notes for tax purposes

Zero-coupon bonds

No formal interest accrues on zero-coupon bonds.

The gain from a redemption of a zero-coupon bond is regarded as interest, subject to tax at the time of redemption. The interest equals the difference between the subscription amount and the redemption amount (the nominal amount). If the zero-coupon bond is disposed prior to maturity; the appreciation in value due to accrued interest is defined as interest compensation, which is taxed as interest. If there is a loss on the bond, this is deductible as a capital loss in accordance with the principles referred to above.

FX linked notes

FX linked notes constitute receivables and are taxed as capital income. Appreciation or depreciation in value is recognised at disposal or redemption as a capital gain or loss in accordance with the principles referred to above.

Commodity linked notes

Commodity linked notes constitute receivables and are taxed as capital income. Appreciation or depreciation in value is recognised at disposal or redemption as a capital gain or loss in accordance with the principles referred to above.

Share linked notes

Share linked notes constitute securities that are taxed in the same way as shares provided that the return derives from equity. This should apply regardless of whether the Notes are denominated in foreign currency. The Swedish Tax Agency's opinion is, however, that a receivable denominated in foreign currency should, regardless whether the return on the receivable is linked to shares, be treated as a foreign receivable.

Any fixed, guaranteed return is taxed as interest and does not form part of any capital gain. Floating payments that cannot be predicted (based on the performance of a Reference Asset, such as an index) are classified as capital gains or, if the non-interest return is earned before the note is disposed of as other capital income.

Upon disposal prior to maturity an annual guaranteed return shall be regarded as interest compensation. Any remaining amount shall be treated as capital gain or loss. The acquisition cost for the instrument is the difference between the price paid for the note and any interest compensation amount.

At redemption, a yearly guaranteed return is regarded as interest, whereas any remaining part of a yearly floating return shall be treated as other capital income. The remaining part is taxed as a capital gain or loss.

Combination notes

Combination notes are considered as receivables for tax purposes (i.e. not as notes taxed in the same way as shares) if more than 50 per cent. of the return on the instrument derives from assets other than equity. The assessment is made at the time the notes are issued.

Classification of various securities for tax purposes

Certificates and Warrants where the return is linked to equity (e.g. an equity index) are taxed in the same way as shares.

Certificates and Warrants, whose underlying assets are linked to claims in SEK, or to one or several interest indices, are treated as Swedish receivables. If the underlying assets are linked to foreign currency or claims in foreign currency, or if the securities relate to one or several indices depending on foreign currency, the securities are treated as foreign receivables.

Commodity linked certificates and warrants should qualify as so-called "other assets". Gains are taxed at a tax rate of 30 per cent. and only 70 per cent. of any loss is deductible against any other capital income.

Certificates and Warrants with a return deriving from a combination of equity and other assets, are taxed in the same way as shares should more than 50 per cent. of the return on the security derive from equity. The assessment is made at the time the Certificates/Warrants are issued.

Settlement and sale of call warrants

Cash settled warrants

Capital gains taxation is triggered on sale or when settled throughout the duration of the warrant or when the warrant lapses.

The acquisition cost is determined only according to the so-called "average method" described above. The standard method does not apply as the security is not linked to equity. See also the section entitled "*Taxation of individuals resident in Sweden, Capital gains and losses*" above.

If the cash settled warrant lapses, it is deemed sold for no consideration, incurring a loss equal to the acquisition cost. A loss is deductible as set out above.

Physically settled warrants

Taxation is not triggered on the exercise of a physically settled warrant. Instead a future sale of the underlying asset triggers capital gains taxation. The acquisition cost for the underlying asset equals the acquisition cost of the physically settled warrant and the exercise price.

A sale or redemption of a physically settled warrant triggers taxation. The acquisition cost is determined only according to the so-called "average method" described above. The standard method does not apply as the security is not linked to equity. See also the section entitled "*Capital gains and losses*" above.

If the physically settled warrant lapses, it is deemed sold for no consideration, incurring a loss equal to the acquisition cost. A loss is deductible as set out above.

Settlement, sale and lapse of put warrants

The following applies to both cash settled warrants and physically settled warrants.

Taxation is triggered when the underlying asset is disposed of due to an exercise of a put warrant or on cash settlement. The capital gain or loss is calculated to equal the difference between the sales proceeds (the exercise price) after deduction for sales expenses and the acquisition cost of the underlying asset and the put warrant, or the difference between the cash settled sum and the acquisition cost for the warrant. This means that rules regarding disposal of shares will apply, if the relevant put warrant relates to such assets.

Furthermore, a sale or redemption of a put warrant triggers taxation. The rules concerning the acquisition cost, taxation of gains and the deductibility of capital losses are equal to those relating to call warrants and are described above. See the section entitled "*Settlement and sale of call warrants, Cash settled warrants*" above.

If the put warrant lapses, it is deemed sold for no consideration, incurring a loss equal to the acquisition cost. A loss is deductible as set out above.

Settlement, sale and lapse of Certificates

A cash settlement, including redemption, or a sale of a Certificate triggers capital gains taxation. A physical settlement of a Certificate is likely to trigger capital gains taxation as well. A capital loss realised upon settlement, including redemption, is deductible in accordance with the principles referred to above.

The acquisition cost is determined according to the so-called "average method" described above. See also the section entitled "*Taxation of individuals resident in Sweden, Capital gains and losses*" above.

Taxation of non-residents in Sweden

Holders of Securities who are not tax resident in Sweden and who are not carrying on business operations from a permanent establishment in Sweden are generally not liable for Swedish capital gains taxation on the disposal of Securities. The Holders may, nevertheless, be subject to tax in their country of residence.

However, as far as non-resident individuals are concerned, capital gains on the sale of certain Securities (such as securities taxed in the same way as shares) may in some cases be subject to Swedish tax if the individual has been resident or permanently lived in Sweden at any time during the calendar year of the sale or any of the 10 preceding calendar years. This provision is, nevertheless, in many cases limited under tax treaties for the avoidance of double taxation, which Sweden has concluded with other countries.

Stamp duty

There is no stamp duty on the issuing, transfer or redemption of Securities in Sweden.

Gift, Inheritance and Wealth taxes

There is no gift, inheritance or wealth tax in Sweden.

Taxation of Swedish legal entities

Limited liability companies and other legal entities, except for estates of deceased Swedish individuals, are taxed on all income (including income from the sale of Securities) as income from business activities at a flat rate of 20.6 per cent. Regarding the calculation of a capital gain or loss and the acquisition cost, see "*Taxation of individuals resident in Sweden*" above. However, interest income as well as other income derived from the holding of an asset is taxed on an accrual basis. The sale of Securities denominated in foreign currency may also give rise to foreign exchange gains or losses.

Capital losses on Securities that are taxed in the same way as shares (see further above) incurred by a corporate holder of a Security may only be offset against taxable capital gains on shares or other securities taxed in the same manner as shares. Such capital losses may also, under certain circumstances, be tax deductible against capital gains on shares and Securities that are taxed in the same way as shares within the same group of companies, provided the requirements for group contributions (tax consolidation) are met.

Capital losses on shares and Securities that are taxed in the same way as shares which are not deducted against capital gains within a certain year may be carried forward and offset against taxable capital gains on shares and notes taxed in the same way as shares in the future.

Notwithstanding the above, for limited liability companies and economic associations, capital gains on shares and certain share linked rights held for business purposes are tax exempt. Correspondingly, capital losses on shares and share linked rights that are held for business purposes are not tax deductible. Securities under this offer are not treated as share linked rights held for business purposes. However, a capital loss on the Securities is not tax deductible should the underlying assets, directly or indirectly, consist of shares or certain share linked rights held for business purposes.

As mentioned above, there is no stamp duty on the issuing, transfer or redemption of Securities in Sweden.

Switzerland Taxation

The following discussion is a summary of certain material Swiss tax considerations relating to (i) Securities issued by any of the Issuers where the Holder is tax resident in Switzerland or has a tax presence in Switzerland or (ii) Securities where the Paying Agent, custodian or securities dealer is located in Switzerland. The discussion is a summary based on legislation as of the date of this Offering Circular. It does not aim to be a comprehensive description of all the Swiss tax considerations that may be relevant for a decision to invest in Securities. The tax treatment for each investor depends on the particular situation. All investors are advised to consult with their professional tax advisors as to the respective Swiss tax consequences of the purchase, ownership, disposition, lapse, exercise or redemption of Securities (or options embedded therein) in light of their particular circumstances.

Swiss Withholding Tax

Payments under the Securities will not be subject to Swiss federal withholding tax, provided that the Issuer is at all times resident and managed outside Switzerland for Swiss tax purposes.

On 3 April 2020, the Swiss Federal Council proposed draft legislation and opened the consultation procedure regarding the reform of the Swiss withholding tax regime, which had previously been suspended. A main aspect of the draft legislation is the exemption of Swiss-domiciled legal entities and foreign investors from withholding tax on Swiss domestic interest-based investments. In essence, the draft legislation would replace the current debtor-based regime applicable to interest payments with a paying agent-based regime for Swiss withholding tax. Broadly, this paying agent-based regime would (i) subject all interest payments made through paying agents in Switzerland to individuals resident in Switzerland to Swiss withholding tax and (ii) exempt from Swiss withholding tax interest payments to all other persons, including to Swiss-domiciled legal entities and foreign investors (other than for indirect interest payments via foreign and domestic collective investments vehicles). If such a new paying agent-based regime were to be enacted and were to result in the deduction or withholding of Swiss withholding tax on any interest payments in respect of the Notes, the Notes would not be entitled to receive any additional amounts as a result of such deduction or withholding under the terms of the Securities. However, the results of the consultation, which ended on 10 July 2020, were controversial. Consequently, on 15 April 2021, the Swiss Federal Council submitted new draft legislation on the reform of the Swiss withholding tax system providing for the abolition of Swiss withholding tax on interest payments on bonds for submission to the Swiss Federal Parliament, which legislation was accepted by the Swiss Parliament on 17 December 2021. The entry into force of such legislation is still subject to a referendum. If the legislation will be approved in the referendum, it will enter into force on 1 January 2023. Notwithstanding the foregoing, if a new paying agent-based regime were to be enacted as contemplated by the draft legislation published on 3 April 2020 and were to result in the deduction or withholding of Swiss withholding tax on any payment in respect of a Note by any person in Switzerland other than the Issuer, the holder of such Note would not be entitled to any additional amounts with respect to such Note as a result of such deduction or withholding under the Conditions.

Income Taxation

Securities held as Private Assets by a Swiss resident Holder

(a) *Structured Notes*

If a Security classifies as a structured Security, i.e. as derivative financial instrument(s) with a bond-like prefunding component embedded therein, its income taxation depends on whether (i) the embedded bond component and the embedded derivative financial instrument(s) are reported separately from each other, or, if the Security is a standard product, alternatively the values of the embedded bond component and the embedded derivative financial instrument(s) can at any time be determined analytically by using standard valuation programmes, and (ii) the Security classifies as a structured product with or without a predominant one-time interest payment:

Non-transparent derivative financial instruments: If the embedded bond is not recorded separately from the embedded derivative financial instrument(s) and if the conditions for analytical determination of the values of the embedded bond and the embedded derivative financial instrument(s) set forth above do not apply, then the Security classifies as non-transparent structured note and any return over the initial investment classifies as a taxable interest payment. Non-transparent derivative financial instruments generally include a predominant one-time interest payment and are taxed in accordance with the principles set forth below under "—Transparent derivative financial instruments with a predominant one-time interest payment".

Transparent derivative financial instruments without a predominant one-time interest payment: If the embedded bond is recorded separately from the embedded derivative financial instrument(s) or if the values of the embedded bond and the embedded derivative financial instrument(s) can be determined analytically as set forth above and if the yield-to-maturity predominantly derives from periodic interest payments and not from a one-time-interest-payment such as an original issue discount or a repayment premium (see below "*Transparent derivative financial instruments with a predominant one-time interest payment*"), then a person who is an individual resident in Switzerland holding such a Security as a private asset is required

to include any periodic and one-time interest payments received on the Security, converted in each case into Swiss Francs at the exchange rate prevailing at the time of payment, in his or her personal income tax return for the relevant tax period and will be taxable on any net taxable income (including such amounts) for the relevant tax period. Option premium received, and a gain, including in respect of interest accrued, a loss, respectively, realised on the sale of such a Security is a tax-free private capital gain, a non-tax-deductible private capital loss, respectively.

Transparent derivative financial instruments with a predominant one-time interest payment: If the embedded bond is recorded separately from the embedded derivative financial instrument(s) or if the values of the embedded bond and the embedded derivative financial instrument(s) can be determined analytically as set forth above and if the yield-to-maturity predominantly derives from a one-time-interest-payment such as an original issue discount or a repayment premium and not from periodic interest payments, then a person who is an individual resident in Switzerland holding such a Security as a private asset, is required to include any periodic interest payments received on the Security and, in addition, any amount equal to the difference between the value of the Security at redemption or sale, as applicable, and its value at issuance or secondary market purchase, as applicable, and converted in each case into Swiss Francs at the exchange rate prevailing at the time of sale or redemption, issuance or purchase, respectively, in his or her personal income tax return for the relevant tax period and will be taxable on any net taxable income (including such amounts, i.e., including, *inter alia*, any gain in respect of interest accrued or foreign exchange rate) for the relevant tax period. Any compensation received by such a holder for the embedded derivative, i.e., option premium received, and any residual gain, and a loss, respectively, realised on the sale of such a Security is a tax-free private capital gain, a non-tax-deductible private capital loss, respectively. However, notwithstanding the foregoing, such a holder may offset any decrease in value realised by him or her within the same taxation period on sale or redemption of such a Security against any gain (including periodic interest payments) realised by him or her from other securities with a predominant one-time interest payment.

(b) *Bonds*

Bonds without a predominant one-time interest payment: If a Security classifies as a pure bond without a predominant one-time interest payment (i.e., the yield-to-maturity of which predominantly derives from periodic interest payments and not from a one-time-interest-payment such as an original issue discount or a repayment premium), then a person who is an individual resident in Switzerland holding such a Security as a private asset is required to include any periodic and one-time interest payments received on such Security, converted into Swiss Francs at the exchange rate prevailing at the time of payment, in his or her personal income tax return for the relevant tax period and will be taxable on any net taxable income (including such amounts) for the relevant tax period. A gain, including, *inter alia*, in respect of interest accrued or foreign exchange rate, a loss, respectively, realised on the sale of such a Security is a tax-free private capital gain, a non-tax-deductible private capital loss, respectively.

Bonds with a predominant one-time interest payment: If a Security classifies as a pure bond with a predominant one-time interest payment (the yield-to-maturity of which predominantly derives from a one-time-interest-payment such as an original issue discount or a repayment premium and not from periodic interest payments), then a person who is an individual resident in Switzerland holding such a Security as a private asset, is required to include any periodic interest payments received on the Security and, in addition, any amount equal to the difference between the value of the Security at redemption or sale, as applicable, and its value at issuance or secondary market purchase, as applicable, and converted in each case into Swiss Francs at the exchange rate prevailing at the time of sale or redemption, issuance or purchase, respectively, in his or her personal income tax return for the relevant tax period and will be taxable on any net taxable income (including such amounts, i.e., including, *inter alia*, any gain in respect of interest accrued or foreign exchange rate) for the relevant tax period. Such a holder may offset any decrease in value realised by him or her within the same taxation period on sale or redemption of such a Security against any gain (including periodic interest payments) realised by him or her from other securities with a predominant one-time interest payment.

(c) *Pure Derivative Financial Instruments*

A capital gain realised by an individual on the sale or redemption of a Security which classifies as a pure derivative financial instrument (such as pure call and put options, pure futures, static certificates replicating an index or a basket of at least five shares and with a fixed maturity or an annual redemption right and discount certificates with a maturity not exceeding twelve months) and which is held as part of the individual's private assets is a tax-free private capital gain. Conversely, a capital loss realised on the sale or redemption of such a Security cannot be set off against taxable income. Dividend equalisation payments on such a Security constitute taxable investment income.

(d) *Low Exercise Price Warrants*

A fully pre-funded call option with a term of not more than one year classifies as pure derivative financial instrument (see taxation treatment above "Pure Derivative Financial Instruments"). If the term of a call option exceeds one year and the instrument underlying the call option is pre-financed by 50 per cent. or more at the time of issuance then the interest component embedded in such an instrument (i.e., issue discount) constitutes taxable interest income (see taxation treatment above "Structured Notes".

(e) *Fund-like Securities*

A Security which is classified as a fund-like instrument will be considered a pass-through instrument for Swiss tax purposes if dividend and interest income (less attributable costs) from, and capital gains and losses (less costs attributable) realised on, the underlying investments, are reported and distributed separately. Under such conditions, an individual holding a fund-like Security as part of his or her private assets receives taxable income (which he or she must report annually) over such portion of distributions (in case the fund is distributing the income realised on the underlying investments) or earnings credits (in case the fund is reinvesting the income realised on the underlying investment) as derive from dividends and interest (less attributable costs) on the underlying instruments. Any distributions or credits deriving from capital gains realised on the underlying investments constitute a tax-free private capital gain, and any respective loss is a non-tax-deductible private capital loss. Any gain realised within a taxation period on the sale of a fund-like Security (including accrued dividends and interest) is exempt from income taxation as a private capital gain, and, conversely, any loss realised on such a Security a non-tax-deductible capital loss.

Securities held as Assets of a Swiss Business

Corporate entities and individuals who hold Securities as part of a trade or business in Switzerland, in the case of residents abroad carried on through a permanent establishment or a fixed place of business in Switzerland, are required to recognise any payments on, and any capital gains or losses realised on the sale or redemption of, such Securities (irrespective of their classification) in their income statement for the respective taxation period and will be taxed on any net taxable earnings for such period.

The same taxation treatment also applies to Swiss-resident individuals who, for income tax purposes, are classified as "professional securities dealers" for reasons of, *inter alia*, frequent dealing and leveraged investments in securities.

Capital Gains Taxation

Securities held as Private Assets by a Swiss resident Holder

A gain, a loss, respectively, realised by an individual resident in Switzerland for tax purposes upon the sale or other disposal of a Security held as part of his or her private assets is a tax-free private capital gain, or a non-tax deductible capital loss, respectively, unless such individual is classified, for income tax purposes, as a "professional securities dealer" for reasons of, *inter alia*, frequent dealing and leveraged investments in securities. If an individual is classified as "professional securities dealer" he or she will be taxed in accordance with the principles set forth above under "*—Income Taxation, Securities held as Assets of a Swiss Business*". Concerning the bifurcation of a tax-exempt capital gain component, or a non-tax deductible capital loss component, respectively, from taxable income components of a Security see the bifurcation principles set forth above with regard to the different instruments under "*—Income Taxation, Securities held as Private Assets by a Swiss resident Holder*").

Securities held as Assets of a Swiss Business

Capital gains realised on Securities held as Assets of a Swiss Business are taxed in accordance with the taxation principles set forth above under "*—Income Taxation, Securities held as Assets of a Swiss Business*").

Swiss Federal Stamp Taxes

The issuance of Securities on the Issue Date (primary market) is exempt from Swiss federal securities turnover tax (*Umsatzabgabe*), except that the issuance of Securities which are classified as fund-like instruments may be subject to Swiss federal securities turnover tax of up to 0.3 per cent. on the offering price, however, only if a Swiss securities dealer (as defined in the Swiss federal stamp tax act) is a party or an intermediary to the transaction and, additionally, if no exemption applies.

Dealings in Securities (secondary market) which classify as pure derivative financial instruments (such as pure call and put options, including low exercise price options with a maturity not exceeding twelve months, pure futures with a maximal pre-financing of 25 per cent., fully-funded Securities statically replicating an index or a basket of at least five shares and with a fixed maturity or an annual redemption right) are exempt from Swiss federal securities turnover tax. Dealings in other Securities may be subject to Swiss federal securities turnover tax of up to 0.3 per cent. on the consideration paid, however, only if a Swiss securities dealer (as defined in the Swiss federal stamp tax act) is a party or an intermediary to the transaction and, additionally, if no exemption applies.

The physical settlement of a security at exercise or redemption to the holder of the Security may be subject to Swiss federal securities turnover tax of 0.3 per cent. in case a security issued by an issuer outside Switzerland is delivered and of 0.15 per cent. in case a security issued by a Swiss domestic issuer is delivered, however, in each case, only if a Swiss domestic securities dealer (as defined in the Swiss federal stamp tax act) is a party or an intermediary to the delivery and, additionally, if no exemption applies.

Gift, Inheritance and Estate Taxes

Subject to an applicable tax treaty in an international situation, transfers of Securities may be subject to cantonal and/or communal inheritance tax, estate tax or gift tax if the deceased person has had his or her last domicile in Switzerland, the donor is resident in Switzerland, respectively, or in the case of a foreign deceased or resident person the transfer involves an unincorporated business in Switzerland and Securities are held as part of such business. No such taxes exist at the federal level. Rates depend upon the existing relationship (i.e. the relationship between the deceased and the heirs, or between the donor and the donee) and the size of the inheritance or gift. Interspousal gifts and gifts to descendants and inheritances collected by the surviving spouse and descendants are frequently exempt or taxed at low rates (up to 6 per cent.). Gifts and inheritances received from unrelated persons attract rates ranging from 20 per cent. to 40 per cent. The taxable base is usually the market value of the property transferred.

Net Worth and Capital Taxes

A holder of Securities who is an individual resident in Switzerland for tax purposes or is a non-Swiss resident holding Securities as part of a Swiss business operation or a Swiss permanent establishment is required to report Securities as part of private wealth or as part of Swiss business assets, as the case may be, and is subject to annual cantonal and/or communal private wealth tax on any net taxable wealth (including the Securities), in the case of a non-Swiss resident individual holding Securities as part of a Swiss business operation or a Swiss permanent establishment to the extent the aggregate taxable wealth is allocable to Switzerland. Incorporated holders of Securities are subject to cantonal and communal capital tax on net taxable equity, in the case of non-Swiss resident person holding Securities as part of a Swiss permanent establishment, to the extent the aggregate taxable equity is allocable to Switzerland. No net worth and capital taxes are levied at the federal level.

Non-Swiss resident Holders

A holder of a Security who is not resident in Switzerland and who during the taxation year has not engaged in a trade or business carried on through a permanent establishment or fixed place of business in Switzerland will in respect of such Security not be subject to income tax in Switzerland.

United Kingdom Taxation

*The following is an overview of the United Kingdom withholding taxation treatment in relation to payments of principal and interest in respect of the Securities, certain other material UK tax considerations and of certain aspects of the United Kingdom stamp duty and stamp duty reserve tax treatment of the Securities at the date hereof. The comments only apply to Holders that are the beneficial owners of Securities who acquire and hold Securities as an investment and do not apply to dealers in Securities. The special rules applying to UK resident but non-domiciled individuals are not detailed. The comments are based on current law and Her Majesty's Revenue & Customs ("**HMRC**") practice (which are subject to change, possibly also with retroactive or retrospective effect) and are intended as a general guide and should be treated with appropriate caution. This overview is not intended to be exhaustive and nor should it be considered legal or tax advice to any person. This overview does not take into account the effect of any overriding anti-avoidance legislation that may apply to Holders in their particular circumstances or to any wider arrangements to which they may be a party. Each potential purchaser is advised to consult its own tax adviser as to the UK tax consequences attributable to acquiring, holding and disposing of Securities and as to other UK and non-UK applicable taxes, particularly where: (i) an individual holder is only temporarily non-UK resident; or (ii) a corporate holder will "bifurcate" a Security for accounting purposes; as the treatment of such holders is not covered below (save to the extent specifically detailed below). Non-UK domiciled individual investors should take further advice as the so called "situs" rules may mean that any CDIs are UK situs assets for certain UK tax purposes notwithstanding that the Securities represented by the CDIs are not issued by a UK incorporated Company.*

(a) **United Kingdom Withholding Tax**

(i) ***Interest on Securities***

Interest will only be subject to UK withholding tax if it has a UK source, in which case it may fall to be paid under deduction of UK income tax at the basic rate (currently 20 per cent.) subject to such relief as may be available under the provisions of any applicable double taxation treaty or to any other exemption which may apply.

UK source interest may be paid without withholding or deduction for or on account of United Kingdom income tax if (i) the issuer is a "bank" for the purposes of section 991 of the Income Tax Act 2007; and (ii) it pays that interest in the ordinary course of its business.

In accordance with the practice of HMRC, such payments will generally be accepted as being made in the ordinary course of business unless the characteristics of the transaction giving rise to the interest are primarily attributable to an intention to avoid United Kingdom tax.

UK source interest may be paid without withholding or deduction for or on account of United Kingdom income tax if the issuer is authorised for the purposes of the Financial Services and Markets Act 2000 and its business consists wholly or mainly of dealing in financial instruments (as defined by section 984 of the Income Tax Act 2007) as principal and so long as such payments are made by the issuer in the ordinary course of its business.

UK source interest may also be paid without withholding or deduction for or on account of United Kingdom income tax if:

(A) the relevant interest is paid on Securities with a maturity of less than one year from the date of issue and which are not issued under arrangements the effect of which is to render such Securities part of a borrowing with a total term that could be a year or more; or

(B) the Securities are and continue to be quoted Eurobonds. Securities which carry a right to interest will constitute "quoted Eurobonds" provided they are and continue to be either:

(1) "listed" on a recognised stock exchange (designated as such by HMRC) within the meaning of section 1005 of the Income Tax Act 2007; or

(2) admitted to trading on a "multilateral trading facility" operated by a "regulated recognised stock exchange" (in each case for the purposes of section 987 of the Income Tax Act 2007).

Securities admitted to trading on a recognised stock exchange outside the United Kingdom will be treated as "listed" on a recognised stock exchange if (and only if) they are admitted to trading on that exchange and included in the official UK list or are officially listed in a country outside the United Kingdom in which there is a recognised stock exchange in accordance with provisions corresponding to those generally applicable in the European Economic Area states.

Whilst it is expected that either the interest will not have a "UK source" or one of the above exemptions will apply to each issue of Securities, that cannot be guaranteed and unless that is the case at all relevant times, interest payable on the Securities will suffer a withholding of 20 per cent. on account of UK income tax.

The following further points should be noted:

(A) Any premium element of the redemption amount of any Securities redeemable at a premium may constitute a payment of interest subject to the withholding tax provisions discussed above.

(B) The references to "interest" above and below mean "interest" as understood in United Kingdom tax law. The statements above and below do not take any account of any different definitions of "interest" or "principal" which may prevail under any other law or which may be created by the terms and conditions of the Securities or any related documentation.

(C) Payments under Securities which do not amount to interest, rent or annual payments for the purposes of UK tax will normally not be subject to UK withholding tax.

(b) **United Kingdom Income and Capital Gains tax: Individuals resident in the United Kingdom**

Any interest, discount or premium payable on any of the Securities may be subject to United Kingdom income tax by direct assessment even where paid without withholding.

(i) ***Accrued income scheme***

Holders that are UK resident individuals should also have regard to the provisions of the Accrued Income Scheme (the "**Scheme**") which may apply to individuals transferring Securities that bear interest or to individuals to whom such Securities are transferred. The charge to tax on income that may arise as a result of the Scheme will be in respect of an amount representing interest on the Securities which has accrued during the period that they are held. This amount will be taken into account in determining any chargeable gain or loss arising on a disposal of the Securities.

However, where a Security constitutes a variable rate security for the purposes of the Scheme, the amount of accrued interest deemed to be received as income by a Holder upon transfer would be such amount as HMRC decides is just and reasonable and the transferee will not be entitled to any credit under the Scheme to set against any actual or deemed interest that is received or is deemed received.

(ii) ***Taxation of discount and premium***

Where Securities are issued at an issue price of less than 100 per cent. of their nominal amount they may constitute "deeply discounted securities" depending on the level of the discount. It is not considered that Securities would be regarded as deeply discounted securities merely by reason of the fact that they are denominated in a currency other than sterling. Where Securities constitute "deeply discounted securities", a Holder of such Securities who is within the scope of United Kingdom income tax may be liable to United Kingdom income tax on any profit (the amount by which any sum payable on the transfer or redemption of the Security exceeds its acquisition price) made on the sale or other disposal (including redemption) of such Securities.

Where Securities may be redeemed at a premium as opposed to being issued at a discount, then where such premium does not constitute a payment of interest such Securities may constitute "deeply discounted securities" (as mentioned above).

Securities which are deeply discounted securities are qualifying corporate bonds and therefore not subject to tax on chargeable gains.

(iii) ***Capital gains tax***

Where Notes are debts denominated in sterling and not capable of conversion into or redemption in or by reference to any foreign currency they may be treated as qualifying corporate bonds so that no United Kingdom taxation on chargeable gains or allowable losses will arise on any sale, redemption or other disposal. This depends upon (amongst other conditions) the Notes comprising normal commercial loans at all times which may not be the case where the Notes contain a right to acquire other shares or securities, or a return which depends on the results of the Issuer's business or any part of it.

Where Notes are denominated in a currency other than sterling or do not comprise debts which represent normal commercial loans, then provided they are not deeply discounted securities they will be chargeable assets for the purposes of United Kingdom capital gains tax with the result that any gain arising may, depending on the Holder's personal circumstances, give rise to a charge to United Kingdom tax on capital gains or an allowable loss.

Profits on disposal (including redemption) of certain Securities which constitute "excluded indexed securities" for UK tax purposes may be subject to UK capital gains tax rather than income tax but the considerations there are complex and potential holders should take their own UK tax advice.

Certificates to which General Condition 9 applies will generally also be treated as set out in this section (b)(iii).

(iv) ***Taxation of Warrants***

The following paragraphs relate only to Warrants which satisfy all of the following conditions:

(a) there are no interim payments payable under the terms of the Warrants;

(b) there is no element of principal protection under the terms of the Warrants;

(c) the return on the Warrants is calculated with direct reference to fluctuations in the value of a Reference Asset or Reference Assets;

(d) the Warrants constitute either options or futures for UK tax purposes; and

(e) the Warrants are not designed to produce a return equivalent to money invested at interest.

Where Warrants are held as investments, any gain arising may, depending on the Holder's personal circumstances, give rise to a charge to UK tax on capital gains or an allowable loss. Where Warrants fall within the definition of "financial option" for the purposes of UK capital gains tax the rules as to wasting assets which might restrict the amount of the acquisition costs of the Warrant for the purposes of calculating any chargeable gain or allowable loss will not apply.

Certificates to which General Condition 10 (*Exercise Rights in respect of Certificates*) applies and which do not pay any coupon will generally also be treated as set out in this section (b)(iv) provided that they satisfy the conditions set out in sub-paragraphs (a) to (e) in the first paragraph to this section (b)(iv).

The taxation of those Warrants and Certificates which do not satisfy one or more of those conditions is complex and potential holders should take their own UK tax advice.

(c) **Taxation of Holders within the Charge to UK Corporation Tax**

A Holder who is within the charge to United Kingdom corporation tax, in particular a company which is resident for tax purposes in the United Kingdom or which is not so resident but carries on a trade in the United Kingdom through a United Kingdom permanent establishment to which the Securities are attributable or which holds the Securities in connection with certain types of UK real estate businesses, will generally be chargeable to corporation tax on all the returns on, and profits and gains (whether of an income or capital nature) arising from the holding or disposal of, the Securities broadly in accordance with their statutory accounting treatment provided that accounting treatment complies with IFRS or UK generally accepted accounting practice. This means in particular that any discount element (together with any interest) and any foreign exchange profits or loss may be taxed (or relieved) as it accrues over the term of the Security and not when it is paid or received.

Where a Security is split for accounting purposes into a derivative contract and a host loan relationship, the host loan relationship will be taxed in the way described above. In respect of the derivative contract, there are two possibilities:

(i) Where the derivative contract is either:

(A) an option and the underlying subject matter is qualifying ordinary shares of a trading company, holding company or company listed on a recognised stock exchange or mandatory convertible preference shares; or

(B) a contract for differences and the underlying subject matter is qualifying ordinary shares listed on a recognised stock exchange and the contract exactly tracks the value of such underlying subject matter,

then any excess of accounting credits over debits will generally be chargeable to corporation tax on chargeable gains consistently with the way those credits and debits are recognised for accounting purposes.

(ii) In other cases, the tax treatment of the derivative contract is likely to follow its accounting treatment.

For the purposes of the above, "qualifying ordinary shares" means shares which represent some or all of the issued share capital of the company and which carry a right to share in the profits of the company by way of a dividend or otherwise (provided that the rights to share in profits are not restricted to a right to receive fixed rate dividends) and mandatory convertible preference shares means shares which are not qualifying ordinary shares and which are issued on such terms that stipulate that they must be converted into, or exchanged for, qualifying ordinary shares of a trading company, holding company or company listed on a recognised stock exchange by a specified time.

Warrants and Certificates which are not treated as derivative contracts or as loans for tax purposes are likely to be taxed in accordance with the rules set out above in (b)(iv) above.

(d) **United Kingdom Corporation, Income and Capital Gains Tax: Holders not resident in the United Kingdom**

Where interest, discount or premium amounts are received without withholding or deduction for or on account of United Kingdom tax, such amounts will not be chargeable in the hands of a Holder (other than certain trustees) who is not resident for tax purposes in the United Kingdom unless that Holder (i) carries on a trade, profession or vocation in the United Kingdom through a United Kingdom branch or agency or permanent establishment (in the case of a corporate Holder) in connection with which such amounts are received or to which the Securities are attributable or (ii) holds the Securities in connection with certain types of UK real estate businesses.

Where interest on Securities has been paid under deduction of United Kingdom income tax, Holders who are not resident in the United Kingdom may be able to recover all or part of the tax deducted if that is provided for in an applicable double tax treaty between the country of residence of the Holder and the UK.

Holders not resident in the United Kingdom will not be within the charge to United Kingdom tax on chargeable gains in respect of any Securities save broadly where Securities are held in or used for the purposes of a trade carried on by the non-resident through a branch or agency or, in the case of a company, a permanent establishment, and subject also to certain rules that apply in relation to UK real estate businesses or in the case of individuals that are temporary non-residents.

(e) **United Kingdom Stamp Duty and Stamp Duty Reserve Tax** ("**SDRT**")

(i) ***Issue***

No United Kingdom stamp duty will be payable in respect of the issue of the Securities on the basis that the relevant Security is executed and retained outside the United Kingdom, and that the relevant register in which the Securities are registered (if in registered form) is also kept outside the United Kingdom.

(ii) ***Transfer***

SDRT will not generally be payable in respect of any agreement to transfer Securities except where one of the following conditions are met:

(A) where the register of Securities is kept in the UK; or

(B) where the terms of the Securities grant the Holder the right (whether on physical settlement or otherwise) to acquire stock, shares or loan capital in certain companies with a UK connection unless such stock, shares or loan capital would qualify as "exempt loan capital". A company will have a UK connection for these purposes if (i) the company is incorporated in the UK; (ii) a register of the relevant stock, shares or loan capital is kept in the UK by or on behalf of the company; or (iii) the shares are "paired" with shares in a UK incorporated company within the meaning of section 99(6B) of the Finance Act 1986.

Where one of those conditions is met, the agreement to transfer may be subject to SDRT at 0.5 per cent.

There could be stamp duty at 0.5 per cent. in respect of any document transferring any Security that does not constitute "exempt loan capital" but, as a practical matter, it is unlikely that any such stamp duty would have to be paid.

(iii) ***Exercise***

SDRT may be payable in respect of an agreement to transfer an asset pursuant to a Security subject to physical settlement following the exercise of the Security. However, no such liability will arise on the physical settlement of shares or other securities which are both: (a) issued by an issuer incorporated outside the UK; and (b) which do not constitute "chargeable securities" under s 99 Finance Act 1986. There could be stamp duty at 0.5 per cent. in respect of any document arising on physical settlement which transfers any shares or securities that do not constitute "exempt loan capital" but, as a practical matter, it is unlikely that any such stamp duty would have to be paid save where the transferred shares or securities are registered in a UK register.

(iv) ***CDIs***

No United Kingdom stamp duty is payable on the issue of CDIs or on a transfer of CDIs within CREST where no written instrument of transfer or written agreement to transfer arises in relation to such transfer.

Generally, no United Kingdom SDRT should be payable on the issue of CDIs or on a transfer of CDIs within CREST provided that they are under the terms of their issue, depository interests that can only be transferred in accordance with regulations under section 785 of the Companies Act 2006 (provision enabling procedures for evidencing and transferring title) or by means of a transfer within section 186(1) of the Finance Act 1996(5) (transfer of securities to member of electronic transfer system), and:

(A) the central management and control of the Issuer is not exercised in the UK;

(B) the CDIs represent Securities which are not registered in a register kept in the United Kingdom by or on behalf of the Issuer;

(C) the CDIs represent interests in Securities which are, or are of the same class as securities issued by the Issuer which are listed on a recognised stock exchange overseas within the meaning of section 1005 of the Income Tax Act 2007; and

(D) the CDIs fall within the definition of "securities" in regulation 3(1) of the Uncertificated Securities Regulations 2001.

If any of these requirements are not met, United Kingdom stamp duty or SDRT may be payable on the issue or transfer of CDIs.

(f) ***Inheritance Tax***

If a Holder of Securities who is an individual disposes of Securities by way of gift, in form or in substance, or dies, no United Kingdom inheritance tax will be due unless:

(i) the donor is or the deceased was domiciled or deemed to be domiciled in the United Kingdom for the purposes of United Kingdom inheritance tax; or

(ii) the donor or the deceased was neither domiciled nor deemed to be domiciled in the United Kingdom for the purposes of United Kingdom inheritance tax but the Securities are UK-situs assets.

A Security issued in bearer form will be a UK-situs asset if the document of title is located in the United Kingdom at the material time.

The situs of a registered Security (other than Securities cleared through computerised clearing systems and CDIs) will be determined by the place of registration. Provided that the relevant register in which the Securities are registered is kept outside the United Kingdom, the registered Securities will not be UK-situs assets.

The situs of securities dealt with through computerised clearing systems, for example Euroclear, and CDIs is determined by the terms of issue of the particular security. Holders are advised to consult their own tax advisor as to the United Kingdom inheritance tax consequences of acquiring, holding or disposing of a particular Security or CDI.

(g) ***Assets which can be considered non-UK situs for UK tax purposes: UK tax-resident non-domiciled individuals***

(i) ***General***

This section (g) only applies to Securities where the following three conditions are met: (i) the Issuer is not UK tax resident; (ii) the Issuer is not issuing the Securities for or on behalf of a UK branch; and (iii) the Securities are not being cleared through CREST or another UK based clearing system (including CDIs held in CREST).

This section explains which of such Securities can be considered non-UK situs for the purposes of UK income tax, capital gains tax ("**CGT**") and inheritance tax ("**IHT**") (together, the "**Relevant Taxes**"), and may be particularly relevant to those UK resident individuals who are non-UK domiciled. There is a different test for the situs of the Security for the purposes of each of the Relevant Taxes.

This section is limited to certain considerations relevant to the situs of certain Securities only and does not address the complex concepts and rules relevant to determining an individual's domicile or in respect of any potential remittance of income or chargeable gains to the UK. Investors should seek specific advice from their tax advisor on these matters based on the investor's particular circumstances and with regard to the particular terms and conditions of the relevant Securities.

Generally, where the conditions below are satisfied the relevant Securities should be considered non-UK situs assets in respect of the Relevant Taxes. However, it may not be necessary to satisfy all the conditions below in all cases (depending on the particular terms and conditions of the relevant Securities).

There are two main classes of Securities (satisfying the above three conditions) which should be considered non-UK situs for the purposes of all Relevant Taxes. Those are:

(A) those Registered Notes which constitute "debentures" (as set out in further detail below); and

(B) those Warrants and Certificates governed other than under English Law (together, the "**Relevant W&C Securities**") which satisfy the further detailed conditions set out below.

(ii) ***Registered Notes - Conditions required to be considered non-UK situs assets***

Registered Notes should be considered non-UK situs assets for the purposes of all Relevant Taxes provided that they constitute "debentures" for the purposes of English law. There is no particular definition of "debenture" in the tax legislation, and therefore it should take its normal case law meaning. From the case law, it appears that whether an instrument will be regarded as a "debenture" depends on whether the instrument includes sufficient of the main features one would associate with a debenture, including that the instrument acknowledges indebtedness. Accordingly, there must be some positive obligation (or debt) repayable at maturity, albeit the amount repayable may be less than the invested amount, may be determinable at a subsequent date and repayment thereof may be subject to a further condition. Therefore, whether or not a particular Registered Note can be considered a "debenture" and thus non-UK situs for the purposes of all Relevant Taxes will depend on whether its particular terms and conditions are consistent with that of a "debenture" as described above.

(iii) ***Relevant W&C Securities - Conditions required to be considered non-UK situs assets***

The UK tax treatment of Relevant W&C Securities depends on how they are categorised for UK tax purposes, and the position is not straightforward in all cases. For a Relevant W&C Security to be considered non-UK situs for all of the Relevant Taxes it must be both a Registered Security, and:

(A) if the Relevant W&C Security is considered to be a "future" or "option" for the purposes of UK CGT and may be physically settled, then the Reference Asset to be delivered must not be subject to the laws of England or any other part of the UK; or

(B) if the Relevant W&C Security is considered to be a "debt" for the purposes of UK CGT, it must constitute a "debenture" (as described above). This condition is included for the sake of completeness as it should be satisfied in the vast majority of cases.

(iv) ***Bearer Securities that constitute "debt" as a matter of English law – Conditions required to be considered non-UK situs assets***

Assuming the Securities are issued by a non-UK tax resident Issuer (and not issued for or on behalf of a UK branch of that Issuer) then the situs of Bearer Securities that are debt as a matter of English law may be different for the purpose of each of the Relevant Taxes. Investors should consult their tax advisor on these matters.

IMPORTANT LEGAL INFORMATION

1. **Warning**

This Offering Circular does not constitute a "prospectus" for the purposes of Article 8 of Regulation (EU) 2017/1129 (as amended, the "EU Prospectus Regulation"), and has been prepared on the basis that no prospectus shall be required under the EU Prospectus Regulation for any Securities to be offered and sold under it. This Offering Circular has not been approved or reviewed by any competent authority in the European Economic Area (the "EEA") or any other jurisdiction.

This Offering Circular does not constitute a "prospectus" for the purposes of Article 8 of Regulation (EU) 2017/1129 as it forms part of UK domestic law by virtue of the EUWA (as amended, the "UK Prospectus Regulation"), and has been prepared on the basis that no prospectus shall be required under the UK Prospectus Regulation for any Securities to be offered and sold under it. This Offering Circular has not been approved or reviewed by any competent authority in the United Kingdom or any other jurisdiction.

2. **Responsibility Statements**

(a) ***General statement***

Each of the Responsible Persons (as defined below) accepts responsibility for the information given in this Offering Circular and confirms that, having taken all reasonable care to ensure that such is the case, the information contained in this Offering Circular is, to the best of its knowledge, in accordance with the facts and does not omit anything likely to affect its import. However, see "*No consent given or responsibility for any public offerings in the EEA or the United Kingdom*" below.

(b) ***Securities which are the subject of a Swiss Non-Exempt Public Offer***

In relation to any Securities which are subject of a Swiss Non-Exempt Public Offer, each of the Responsible Persons confirms that the information contained in this Offering Circular is, to the best of its knowledge, correct, and that no material facts or circumstances have been omitted from this Offering Circular.

(c) ***Third party information***

None of JPMorgan Chase & Co. or any of its consolidated subsidiaries (each a "**J.P. Morgan affiliate**") accepts responsibility for the accuracy or completeness of the information set forth in the relevant Pricing Supplement concerning any Reference Assets or makes any representation that there has not occurred any event which would affect the accuracy or completeness of such information, provided that each of the Responsible Persons confirms that, where such information has been sourced from a third party, as far as the Responsible Person is aware and is able to ascertain from information sourced from that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. Further, the relevant Pricing Supplement may include tables showing the high and low levels or prices (as applicable) of the Reference Assets (if any) for the periods indicated. While such tables provide some historical data regarding the risks of investing directly or indirectly in the Reference Assets, past results are not a reliable indicator of future performance. Actual results will be different and such differences may be material. Investors in the relevant Securities are advised to consult their own legal, tax, accountancy and other professional advisers to assist them in determining the suitability of Securities for them as an investment. Each investor in the Securities should be fully aware of and understand the complexity and risks inherent in Securities before it makes its investment decision in accordance with its investment objectives.

(d) ***Meaning of "Responsible Persons"***

For the purposes of the above, "**Responsible Persons**" means: (i) in relation to Securities issued by JPMCFC, JPMCFC and JPMorgan Chase & Co. as guarantor, (ii) in relation to Securities issued by JPMSP, JPMSP and JPMorgan Chase Bank, N.A. as guarantor, (iii) in relation to

Securities issued by JPMorgan Chase Bank, N.A., JPMorgan Chase Bank, N.A. and (iv) in relation to Securities issued by JPMorgan Chase & Co., JPMorgan Chase & Co.

3. **No consent given or responsibility for any public offerings in the EEA or the United Kingdom**

None of the Issuers or the Guarantors consents to the use of this Offering Circular by any financial intermediary or any other person for the purpose of making a public offering of the Securities in the EEA or the United Kingdom, and none of the Issuers or the Guarantors accepts any responsibility for the content of this Offering Circular to any person with respect to the making of a public offering of the Securities by any financial intermediary or other person or for the actions of such financial intermediary or other person making such offer.

4. **Websites do not form part of this Offering Circular**

No websites that are cited or referred to in this Offering Circular, shall be deemed to form part of, or to be incorporated by reference into, this Offering Circular.

5. **Securities issued by JPMorgan Chase & Co.**

Any Securities issued by JPMorgan Chase & Co. will not have a maturity of less than one year from the date of their issue.

6. **Securities issued by JPMCFC**

Notwithstanding anything else in this Offering Circular, JPMCFC will not issue Securities in the form of Warrants and Securities issued by JPMCFC will not be subject to physical delivery.

7. **Continuation of the public offering of the Securities after expiry of the period of validity of the Offering Circular; Increase of an issuance of Securities**

Under this Offering Circular, a public offering of Securities which has commenced under the April 2022 Offering Circular may be continued after expiry of the period of validity of the April 2022 Offering Circular.

Further, an issuance of Securities under this Offering Circular may be subsequently increased.

The relevant Pricing Supplement is available from https://sp.jpmorgan.com/spweb/index.html.

The relevant Pricing Supplement in respect of which the public offering may be continued are identified below by reference to their respective ISINs. In respect of a continued public offer in Switzerland, such Pricing Supplement was prepared in respect of the April 2022 Offering Circular and filed with the Reviewing Body at the time and such Pricing Supplement should be read, in addition to the other information contained in the Offering Circular, together with the General Conditions and Specific Product Provisions from the April 2022 Offering Circular, which are incorporated by reference into this Offering Circular:

(1)	XS2309839418	(2)	XS2309839335	(3)	XS2309839251
(4)	XS2168950884	(5)	XS2168945702	(6)	XS2168940497
(7)	XS2168938756	(8)	XS2168938590	(9)	XS2168937600
(10)	XS2168936891	(11)	XS2116472130	(12)	XS2116472056
(13)	XS2116471918	(14)	XS2116471835	(15)	XS1668117242
(16)	XS1668108928	(17)	XS1668108175	(18)	XS1668100271
(19)	XS1668085969	(20)	XS1668079483	(21)	XS1569773903
(22)	XS1569771873	(23)	CH0579226264	(24)	CH0579226256

(25)	CH0579226249	(26)	CH0505007044	(27)	CH0505005857
(28)	CH0505002979	(29)	CH0504997088	(30)	CH0504917144
(31)	CH0489641313	(32)	CH0489641305	(33)	CH0489641289
(34)	CH0489641271	(35)	CH0481852785	(36)	XS1668067637
(37)	XS1668067470	(38)	XS1668066746	(39)	XS1668108845
(40)	XS1668108506	(41)	XS1668112011	(42)	XS1668108415
(43)	XS1668109496	(44)	XS1668112367	(45)	XS1752938339
(46)	XS2168935141	(47)	CH0579242634	(48)	XS2168929177
(49)	CH0466399950	(50)	CH0466400345	(51)	CH0489641404
(52)	CH0489641412	(53)	CH0489641446	(54)	CH0489641651
(55)	CH0504967222	(56)	CH0504968030	(57)	CH0504974848
(58)	CH0504981173	(59)	CH0504986792	(60)	CH0544831180
(61)	CH0579227387	(62)	CH0579233245	(63)	CH0579242535
(64)	CH0579247427	(65)	CH0579255602	(66)	CH0579255867
(67)	CH0579255941	(68)	CH1100220909	(69)	CH1100221006
(70)	CH1100221253	(71)	CH1100221600	(72)	CH1100224893
(73)	CH1100224968	(74)	CH1100226047	(75)	CH1100226278
(76)	CH1100227722	(77)	CH1100230833	(78)	CH1100230882
(79)	CH1100232003	(80)	CH1100232532	(81)	CH1100232607
(82)	CH1100232664	(83)	CH1100234199	(84)	CH1100234231
(85)	CH1100234504	(86)	CH1100235337	(87)	CH1100237028
(88)	CH1100431456	(89)	CH1100431613	(90)	CH1100431746
(91)	CH1100432603	(92)	CH1100432710	(93)	CH1100433718
(94)	CH1100434856	(95)	CH1100436232	(96)	CH1100437305
(97)	CH1100439046	(98)	CH1100439103	(99)	CH1100441455
(100)	CH1100446926	(101)	CH1100447171	(102)	CH1100447858
(103)	CH1100448484	(104)	CH1100448526	(105)	CH1133222856
(106)	CH1133224183	(107)	CH1133224282	(108)	CH1133236146
(109)	CH1133238779	(110)	CH1133239173	(111)	CH1133239181
(112)	CH1133241369	(113)	CH1133246038	(114)	CH1133247051
(115)	CH1133247143	(116)	CH1133249693	(117)	CH1133281068
(118)	CH1133281993	(119)	CH1133284864	(120)	CH1133288022

(121)	CH1133289525	(122)	CH1133291752	(123)	CH1133291877
(124)	CH1133292057	(125)	CH1133294558	(126)	CH1133294731
(127)	CH1133295001	(128)	CH1160695644		

GENERAL INFORMATION

1. JPMCFC

Authorisations

Issuances of Securities by JPMCFC were authorised by a meeting of the Board of Managers of JPMCFC dated 4 February 2016 which has appointed a borrowings committee of the Board of Managers of JPMCFC to authorise issuances of Securities at the time of such issuances. Accession to the Programme by JPMCFC was authorised by a resolution of the borrowings committee of the Board of Directors of JPMCFC dated 5 December 2017 and the update of the Programme was authorised by a resolution of the borrowings committee of the Board of Directors dated 19 September 2022.

No material adverse change in prospects or significant change in financial or trading position

There has been no material adverse change in the prospects of JPMCFC since 31 December 2021, being the date on which JPMorgan Chase & Co. last published audited financial statements.

There has been no significant change in the financial or trading position of JPMCFC since 31 December 2021, being the date on which JPMorgan Chase & Co. last published audited financial statements.

Legal and arbitration proceedings

JPMCFC is not and has not been involved in any governmental, legal or arbitration proceedings that are material during the 12-month period ending on the date of this Offering Circular which may have, or have had in the recent past, significant effects on the financial position or profitability of JPMCFC nor, so far as JPMCFC is aware, are any such governmental, legal or arbitration proceedings pending or threatened.

Limited Liability Company Agreement of JPMCFC

The Amended and Restated Limited Liability Company Agreement of JPMCFC is dated 31 May 2022 (as may be further amended, restated, supplemented and/or replaced from time to time).

2. JPMSP

Authorisations

Accession to the Programme by JPMSP was authorised by a resolution of the Board of Directors of JPMSP dated 16 May 2007 and the update of the Programme was authorised by a resolution of the Board of Directors dated 19 September 2022. Issuances of Securities by JPMSP were authorised by a meeting of the Board of Directors of JPMSP dated 23 April 2008 which has appointed an authorisation committee of the Board of Directors of JPMSP to authorise issuances of Securities at the time of such issuances.

Articles of Association of JPMSP

The Articles of Association of JPMSP are dated 5 August 2010 (as may be further amended, restated, supplemented and/or replaced from time to time).

3. JPMorgan Chase Bank, N.A.

Authorisations

The giving of the JPMorgan Chase Bank, N.A. Guarantee has been authorised pursuant to resolutions adopted by the Board of Directors of JPMorgan Chase Bank, N.A. The issuance of Securities by JPMorgan Chase Bank, N.A. under the Programme was authorised pursuant to resolutions of the Borrowings Committee of JPMorgan Chase Bank, N.A. dated 14 April 2022.

Articles of Association of JPMorgan Chase Bank, N.A.

The Amended and Restated Articles of Association of JPMorgan Chase Bank, N.A. are dated 19 August 2016 (as may be further amended, restated, supplemented and/or replaced from time to time).

4. **JPMorgan Chase & Co.**

Authorisations

The giving of the JPMorgan Chase & Co. Guarantee has been authorised pursuant to resolutions adopted by the Board of Directors of JPMorgan Chase & Co. The issuance of Securities by JPMorgan Chase & Co. under the Programme was authorised pursuant to resolutions of the Borrowings Committee of JPMorgan Chase & Co. dated 14 April 2022.

Certificate of Incorporation of JPMorgan Chase & Co.

The Restated Certificate of Incorporation of JPMorgan Chase & Co. is dated 3 April 2006 (as may be further amended, restated, supplemented and/or replaced from time to time).

5. **Clearing and Settlement**

Each Pricing Supplement in relation to each Series of Securities will specify whether the Securities have been accepted for clearance through Euroclear and Clearstream, Luxembourg (and, if applicable, for settlement in CREST via the CREST Depository Interest (CDI) mechanism) and / or DTC, Euroclear Sweden, the VPS, the VP, Euroclear Finland, Euroclear France, Clearstream Frankfurt, SIX SIS or any other Relevant Clearing System (or in the case of Swiss Certificates (UBS-cleared) through UBS Switzerland AG), as the case may be. The Common Code, the International Securities Identification Number (ISIN) and/or identification number for any other Relevant Clearing System, as the case may be, for each Series of Securities will be set out in the relevant Pricing Supplement.

The address of Euroclear is:	1 boulevard du Roi Albert II B-1210 Brussels Belgium
The address of Clearstream, Luxembourg is:	42 Avenue JF Kennedy L-1855 Luxembourg
The address of Clearstream Frankfurt is:	Mergenthalerallee 61 65760 Eschborn Germany
The address of Euroclear Sweden is:	Klarabergsviadukten 63 Box 191, SE-101 23 Stockholm Sweden
The address of the VPS is:	Fred Olsens gate 1, N-0152 Oslo P.O. Box 1174 Sentrum N-0107 Oslo Norway
The address of the VP is:	Nicolai Eigtveds Gade 8 DK-1402 Copenhagen K Denmark
The address of Euroclear Finland is:	P.O. Box 1110 FI-00101 Helsinki Finland

The address of Euroclear France is:	66 rue de la Victoire 75009 Paris
The address of SIX SIS is:	Baslerstrasse 100 CH-4600 Olten Switzerland
The address of DTC is:	55 Water Street New York, New York 10041 United States of America
The address of CREST is:	33 Cannon Street London EC4M 5SB United Kingdom
The address of UBS Switzerland AG is:	Bahnhofstrasse 45 CH-8001 Zurich Switzerland

6. **Publication on the website of the Luxembourg Stock Exchange**

With respect to any issue of Securities admitted to the Official List and to trading on the GEM or the Luxembourg Stock Exchange's Euro MTF, this Offering Circular, each supplement hereto, any document incorporated by reference herein and the relevant Pricing Supplement will be published on and available electronically from Luxembourg Stock Exchange's website (www.bourse.lu) during the life of this Offering Circular. For so long as any Securities are listed on any other stock exchange or listing authority, such documents shall be published in accordance with the rules of such stock exchange or listing authority.

7. **Documents on Display**

The following documents, or copies thereof, will be available free of charge during normal business hours on any weekday (Saturdays, Sundays and public holidays excepted), in physical or electronic form, at the office of the Principal Programme Agent, the office of the Paying Agent in Luxembourg and the office of the Irish Listing Agent, or at the office of each Relevant Programme Agent, as the case may be for as long as the Securities are listed and/or admitted to trading on any relevant stock exchange:

(a) the JPMorgan Chase & Co. 2021 Form 10-K, the JPMorgan Chase & Co. 2020 Form 10-K, the JPMorgan Chase & Co. 13 April 2022 Form 8-K, the JPMorgan Chase & Co. 2022 Proxy Statement, the JPMorgan Chase Bank, N.A. 2021 Audited Financial Statements, the JPMorgan Chase Bank, N.A. 2020 Audited Financial Statements, the JPMSP 2021 Annual Report and the JPMSP 2020 Annual Report;

(b) Amended and Restated Limited Liability Company Agreement of JPMCFC;

(c) Certificate of Formation of JPMCFC;

(d) the Articles of Association of JPMSP;

(e) the Articles of Association of JPMorgan Chase Bank, N.A.;

(f) the Restated Certificate of Incorporation of JPMorgan Chase & Co.;

(g) a copy of this Offering Circular, including any documents incorporated in this Offering Circular or any supplement to this Offering Circular (in addition to those mentioned in (a));

(h) any Pricing Supplement relating to Securities which are admitted to listing or trading on or by any listing authority or stock exchange;

(i) the Agency Agreement (which includes the form of the Bearer Global Notes, the Registered Global Notes, the Registered Definitive Notes, the Global Certificates and the Global Warrants);

(j) the Deed of Covenant;

(k) the JPMorgan Chase Bank, N.A. Guarantee;

(l) the JPMorgan Chase & Co. Guarantee; and

(m) any supplement or amendment to any of the foregoing.

8. **Rule 144A Information**

With respect to any Rule 144A Securities and Regulation S/Rule 144A Securities, at any time when any Issuer or any Guarantor is not subject to Section 13 or 15(d) of the Exchange Act and is not exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, upon the request of a Holder or beneficial owner of a Security, such Issuer or such Guarantor shall promptly furnish or cause to be furnished "Rule 144A Information" to such Holder or beneficial owner, to an investor in such Security designated by such Holder or beneficial owner, or to the Principal Programme Agent for delivery to such Holder or beneficial owner or to an investor in such Security designated by such Holder or beneficial owner, as the case may be, in order to permit compliance by such Holder or beneficial owner of such Security with Rule 144A in connection with the resale of such Security by such Holder or beneficial owner of such Security, respectively.

"**Rule 144A Information**" means such information as is specified pursuant to Rule 144A(d)(4) under the Securities Act (or any successor provision thereto).

9. **De-listing**

The Issuer has no duty to maintain the listing (if any) of the Securities on the relevant stock exchange(s) over their entire lifetime. Securities may be suspended from trading and/or de-listed at any time in accordance with applicable rules and regulations of the relevant stock exchange(s), provided, however, that, in the case of a Series that is listed on the SIX Swiss Exchange, the Securities of such Series shall be de-listed with respect to the SIX Swiss Exchange, without any further action, if the Issuer has published or caused to be published a notice, in accordance with General Condition 27.7 (*Notices in respect of Securities listed on the SIX Swiss Stock Exchange*), at least three months prior to the last trading day stating that such Securities will be de-listed with respect to the SIX Swiss Exchange.

10. **BNP Paribas Securities Services S.C.A.**

BNP Paribas Securities Services S.C.A. is in the process of preparing an intragroup merger with its parent company BNP Paribas S.A. (the "**BNPP Merger**"). The BNPP Merger is expected to take place on 1 October 2022 (the "**BNPP Merger Effective Date**").

Upon the BNPP Merger, BNP Paribas S.A. will be the surviving legal entity. The French Programme Agent shall be BNP Paribas S.A. and will continue to have its registered office at 16, boulevard des Italiens , 75009 Paris, France. The German Programme Agent shall be BNP Paribas S.A., Frankfurt Branch and will continue to have its registered office at Senckenberganlage 19, 60325 Frankfurt am Main, Germany.

Following the BNPP Merger Effective Date, all references to BNP Paribas Securities Services S.C.A. in this Offering Circular and any related Pricing Supplement and other documents shall be deemed to be references to BNP Paribas S.A.

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