

PROSPECTUS



NATIONAL BANK OF CANADA

(A bank governed by the Bank Act (Canada))

U.S.\$10,000,000,000 Euro Note Programme

Subject to compliance with all relevant laws, regulations and directives, National Bank of Canada (the “**Bank**” or the “**Issuer**”) may from time to time issue Senior Notes (as defined below) under its U.S.\$10,000,000,000 Euro Note Programme (the “**Programme**”). Notes to be issued under the Programme (the “**Senior Notes**”) will comprise unsubordinated Notes which constitute deposit liabilities of the Bank pursuant to the *Bank Act* (Canada) and will rank *pari passu* with all present or future deposit liabilities of the Bank (except as otherwise prescribed by law and subject to the exercise of bank resolution powers) and without preference amongst themselves. Notes may be issued in bearer form (“**Bearer Notes**”), in bearer form exchangeable for Registered Notes (“**Exchangeable Bearer Notes**”) or in registered form (“**Registered Notes**”). The maximum aggregate nominal amount of Senior Notes outstanding issued under the Programme will not at any time exceed U.S.\$10,000,000,000 (or the equivalent thereof in other currencies), subject to increase as described herein. Senior Notes may be offered directly to persons other than the Dealers specified herein.

This base prospectus (this “**Prospectus**”) constitutes a Prospectus within the meaning of Article 8 of Regulation (EU) 2017/1129 (the “**Prospectus Regulation**”) and this Prospectus has been approved by the Commission de Surveillance du Secteur Financier (the “**CSSF**”) as competent authority under the Prospectus Regulation in respect of Senior Notes (other than Exempt Notes (as defined below)). The CSSF only approves this Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation and such approval should not be considered as an endorsement of the Issuer that is the subject of this Prospectus nor an endorsement of the quality of the securities that are the subject of this Prospectus. By approving this Prospectus in accordance with Article 20 of the Prospectus Regulation, the CSSF does not engage in respect of the economic or financial opportunity of the operation or the quality and solvency of the Issuer in accordance with Article 6(4) of the Luxembourg law dated 16 July 2019 on prospectuses for securities (the “**Prospectus Law**”). Investors should make their own assessment as to the suitability of investing in the Senior Notes.

Application has been made to the Luxembourg Stock Exchange to approve this document as (i) an “alleviated prospectus” for the purposes of Part III of the Prospectus Law in respect of money market instruments which have a maturity of less than twelve months to be admitted to trading on the Regulated Market (as defined below) and (ii) a base prospectus for the purposes of Part IV of the Prospectus Law in respect of Exempt Notes (other than money market instruments mentioned in (i) above and German Registered Notes (as defined below)) to be admitted to the Luxembourg Stock Exchange’s Euro MTF Market (the “**Euro MTF Market**”). Application has also been made to the Luxembourg Stock Exchange for Notes issued under the Programme during the period of 12 months from the date of this Prospectus to be listed on the official list of the Luxembourg Stock Exchange (the “**Official List**”) and admitted to trading on either the regulated market (as defined by the Markets in Financial Instruments Directive 2014/65/EU (as amended, “**MiFID II**”) of the Luxembourg Stock Exchange (the “**Regulated Market**”) or the Euro MTF Market, which is not a regulated market for the purposes of MiFID II.

References in this Prospectus to the Senior Notes being listed (and all related references) shall mean that such Senior Notes have been admitted to the Official List and to trading on the Regulated Market or the Euro MTF Market. Senior Notes may also be listed or admitted to trading on such other or further stock exchange(s) or market(s) as may be agreed between the Issuer and the relevant Dealer(s) in relation to such issue. The Bank may also issue unlisted Senior Notes and/or Senior Notes not admitted to trading on any market. The applicable Final Terms (as defined below) or, in the case of Exempt Notes (as defined below), the applicable Pricing Supplement (as defined below) in respect of the issue of any Senior Notes will specify whether or not such Senior Notes will be listed on the Luxembourg Stock Exchange or listed and/or admitted to trading on any other stock exchange or market. Senior Notes which are listed may be de-listed in certain circumstances (see “Risk Factors – Risks related to Senior Notes generally – No obligation to maintain listing”). **This Prospectus is valid for 12 months from its date up to and including 15 June 2023. The obligation to supplement this Prospectus in the event of a significant new factor, material mistake or material inaccuracy does not apply once this Prospectus is no longer valid.**

The requirement to publish a prospectus under the Prospectus Regulation only applies to Senior Notes (other than money market instruments which have a maturity of less than twelve months) which are to be admitted on a regulated market in the European Economic Area (“EEA”), and/or offered to the public in the EEA, other than in circumstances where an exemption is available under Article 1(4) of the Prospectus Regulation. Reference in this Prospectus to “**Exempt Notes**” are to Senior Notes (including German Registered Notes and money market instruments which have a maturity of less than twelve months) for which no prospectus is required to be published under the Prospectus Regulation. **The CSSF has neither approved nor reviewed information contained in this Prospectus in connection with Exempt Notes.**

In the case of Senior Notes which are to be admitted to trading on a regulated market within the EEA, or offered to the public in a Member State of the EEA, in circumstances which otherwise require the publication of a prospectus under the Prospectus Regulation, the minimum denomination will not be less than €100,000 (or its equivalent in any other currency as at the date of the issue of the Senior Notes) and integral multiples (if any) above such minimum denomination as specified in the applicable Final Terms (as herein defined), Pricing Supplement (as defined herein) or Drawdown Prospectus (as herein defined).

Registered Notes under German law (the “**German Registered Notes**”), as they do not qualify as securities pursuant to Article 2 no.1 of the German Securities Prospectus Act (*Wertpapierprospektgesetz*) and pursuant to the Prospectus Regulation, have been included as additional information only and for the purpose of describing the Programme. Therefore, this document cannot be construed as a prospectus for German Registered Notes. Pursuant to Section 2 para. 1 No. 3.c) of the German Capital Investment Act (*Vermögensanlagengesetz*), German Registered Notes will only be offered at a minimum price of at least €200,000 per German Registered Note per investor and provided such investor meets the criteria laid down in Section I (1) (a), (d) (e) or (f) of Annex II to MiFID II and will be exempted from the prospectus requirements under the German Capital Investment Act. No German Registered Note will be admitted to trading on the Regulated Market or the Euro MTF Market under this Programme.

Amounts payable under the Senior Notes may be calculated by reference to EURIBOR, which is provided by the European Money Markets Institute (“EMMI”), Sterling Overnight Index Average (“SONIA”) which is provided by the Bank of England, Secured Overnight Financing Rate (“SOFR”) which is provided by the Federal Reserve Bank of New York, Euro Short-term Rate (“€STR”), which is provided by the European Central Bank, Swiss Average Rate Overnight (“SARON”), which is provided by SIX Index AG and a CMS Rate or Mid-Swap Rate, both of which are provided by ICE Benchmark Administration Limited (“IBA”) in each case specified in the applicable Final Terms. Any such reference rate may constitute a benchmark for the purpose of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016, as amended from time to time (the “Benchmarks Regulation”). As at the date hereof, EMMI and SIX Index AG are included in the register of administrators and benchmarks maintained by the European Securities Markets Authority (“ESMA”) pursuant to article 36 of the Benchmarks Regulation. As at the date of hereof, the Bank of England, the Federal Reserve Bank of New York, European Central Bank and IBA do not appear on the register of administrators and benchmarks established and maintained by ESMA pursuant to article 36 of the Benchmarks Regulation. As central banks, the Bank of England, the Federal Reserve Bank of New York and European Central Bank are not subject to the Benchmarks Regulation. As far as the Issuer is aware, the transitional provisions in Article 51 of Regulation (EU) 2016/1011 apply, such that IBA is not currently required to obtain authorisation or registration (or, if located outside the European Union, recognition, endorsement or equivalence). The registration status of any administrator under the Benchmarks Regulation is a matter of public record, and save where required by applicable law, the Issuer does not intend to update the Final Terms to reflect any change in the registration status of the administrator.

The Senior Notes that are Bail-inable Notes (as defined below) are subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the *Canada Deposit Insurance Corporation Act* (the “CDIC Act”) and to variation or extinguishment in consequence and subject to the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Senior Notes. See discussion under “Risk Factors – Risks applicable to Bail-inable Notes” and Condition 3(b) of the “Terms and Conditions of the Notes”. The applicable Final Terms (or, in the case of Exempt Notes, the applicable Pricing Supplement) will indicate whether the Senior Notes are Bail-inable Notes. Senior Notes are also potentially subject to United Kingdom resolution powers in exceptional circumstances. See “Risk Factors – United Kingdom resolution risks applicable to the Senior Notes” and “Risk Factors - Senior Notes may be subject to write-off, write down or conversion under the resolution powers of authorities outside of Canada”.

Arrangers

BNP PARIBAS
National Bank of Canada Financial Markets

Dealers

BNP PARIBAS

Commerzbank

Goldman Sachs International

J.P. Morgan

Landesbank Baden-Württemberg

NatWest Markets

Citigroup

Crédit Agricole CIB

HSBC

Lloyds Bank Corporate Markets

National Bank of Canada Financial Markets

UBS Investment Bank

The date of this Prospectus is 15 June 2022.

IMPORTANT NOTICES

This Prospectus comprises (i) a base prospectus for the purposes of the Prospectus Regulation in respect of all Senior Notes other than Exempt Notes, (ii) an ‘alleviated prospectus’ for the purposes of Part III of the Prospectus Law in respect of money market instruments which have a maturity of less than twelve months to be admitted to trading on the Regulated Market and (iii) a base prospectus for the purposes of Part IV of the Prospectus Law in respect of Exempt Notes (other than money market instruments mentioned in (ii) above and German Registered Notes) to be admitted to the Euro MTF Market, prepared for the purpose of giving information with regard to the Bank and its subsidiaries, the Programme and the Senior Notes, which, according to the particular nature of the Bank and the Senior Notes, is necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profit and losses and prospects of the Bank.

Senior Notes issued on or after the date of this document which are to be consolidated and form a single series with Senior Notes issued prior to the date of this document will be subject to the Terms and Conditions of the Notes applicable on the date of issue of the first tranche of Senior Notes of such series. Those Terms and Conditions are incorporated by reference in, and form part of, this document.

Under the Bail-in Regime (as defined herein), in certain circumstances, amending or extending the term to maturity of Senior Notes which would otherwise not be Bail-inable Notes because they were issued before 23 September 2018, would mean those Senior Notes could be subject to a Bail-in Conversion. However, the Issuer does not intend to amend or re-open any Series of Senior Notes where such re-opening could have the effect of making the relevant Senior Notes subject to Bail-in Conversion.

Copies of the Final Terms and Pricing Supplement for the Senior Notes that are admitted to trading on the Regulated Market or the Euro MTF Market will be published on the website of the Luxembourg Stock Exchange at www.bourse.lu, and will be available without charge from the head office of the Bank and the specified office of each Paying Agent, as set out at the end of this Prospectus. Copies of each Pricing Supplement relating to Exempt Notes (other than those admitted to trading on the Euro MTF Market) will only be available for inspection by a holder of such Senior Notes upon production of evidence satisfactory to the Fiscal Agent or the Issuer as to the identity of such holder.

The Bank accepts responsibility for the information contained in this Prospectus and any Final Terms or, in the case of Exempt Notes, any Pricing Supplement. To the best of the knowledge of the Bank the information contained in this Prospectus and any Final Terms or, in the case of Exempt Notes, any Pricing Supplement is in accordance with the facts and contains no omission likely to affect the import of such information.

This Prospectus is to be read in conjunction with any prospectus supplement (a “Supplement”) to this Prospectus as approved by the CSSF and, in the case of Exempt Notes to be admitted to the Euro MTF Market or (in respect of money market instruments which have a maturity of less than twelve months only) the Regulated Market, the Luxembourg Stock Exchange from time to time and with all documents which are deemed to be incorporated herein or therein by reference (see “Documents Incorporated by Reference”) and, in relation to any Tranche or Series of Senior Notes, should be read and construed together with the applicable Final Terms or, in the case of Exempt Notes, any Pricing Supplement.

Except as specified in “Documents Incorporated by Reference”, the financial information incorporated by reference or contained in this Prospectus has been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (“IFRS”).

The Senior Notes may be issued on a continuing basis to one or more of the Dealers specified on page 14 and any additional Dealer appointed under the Programme from time to time, which appointment may be for a specific issue or on an ongoing basis (each a “Dealer” and together the “Dealers”). References in this Prospectus to the “relevant Dealer” shall, in the case of an issue of Senior Notes being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to purchase such Senior Notes.

No person has been authorised to give any information or to make any representation other than those contained in or consistent with this Prospectus in connection with the issue or sale of the Senior Notes and, if given or made, such information or representation must not be relied upon as having been authorised by the Bank, any of the Dealers or the Arrangers. Neither the delivery of this Prospectus 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 Bank or its subsidiaries since the date hereof or the date upon which this Prospectus has been most recently supplemented by a Supplement or that there has been no adverse change in the financial position of the Bank since the date hereof or the date upon which this Prospectus has been most recently supplemented by a Supplement 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.

The distribution of this Prospectus and any Final Terms or, in the case of Exempt Notes, any Pricing Supplement and the offering or sale of the Senior Notes in certain jurisdictions may be restricted by law. In particular, no action has been or will be taken by the Bank, the Arrangers or the Dealers which would permit a public offering of the Senior Notes or distribution of this Prospectus in any jurisdiction where action for that purpose is required. Accordingly, the Senior Notes may not be offered or sold, directly or indirectly, and neither this Prospectus nor any advertisement or other offering material may be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the Prospectus Regulation and any other applicable laws and regulations and the Dealers have represented that all offers and sales by them will be made on the same terms. Persons into whose possession this Prospectus, any Final Terms or in the case of Exempt Notes, any Pricing Supplement come are required by the Bank, the Arrangers and the Dealers to inform themselves about and to observe any such restriction. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Dealers or any parent company or affiliate of the Dealers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Dealers or such parent company or affiliate on behalf of the Issuer in such jurisdiction. The Senior Notes have not been and will not be registered under the United States Securities Act of 1933, as amended, and include Senior Notes in bearer form that are subject to United States tax law requirements. Subject to certain exceptions, Senior Notes may not be offered, sold or delivered within the United States or to U.S. persons (as defined below). For a description of certain restrictions on offers and sales of Senior Notes and on distribution of this Prospectus, any Final Terms or in the case of Exempt Notes, any Pricing Supplement and other offering material relating to the Senior Notes in Canada, the United States, the European Economic Area (“EEA”) (including Belgium, France, Germany, Italy and The Netherlands), the United Kingdom (the “UK”), Hong Kong, Japan and Singapore, see “Subscription and Sale”.

This Prospectus has been prepared on the basis that any offer of Senior Notes (with the exemption of German Registered Notes) with a denomination of less than €100,000 (or its equivalent in any other currency) in any member state of the EEA (each, a “Relevant Member State”) will be made pursuant to an exemption under the Prospectus Regulation, from the requirement to publish a prospectus for offers of Senior Notes. Accordingly, any person making or intending to make an offer in that Relevant Member State of Senior Notes (with the exemption of German Registered Notes) which are the subject of an offering contemplated in this Prospectus as completed by Final Terms in relation to the offer of those Senior Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the 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 Senior Notes in circumstances in which an obligation arises for the Issuer or any Dealer to publish or supplement a prospectus for such offer.

MiFID II PRODUCT GOVERNANCE / TARGET MARKET

The Final Terms in respect of any Senior Notes (or the Pricing Supplement in the case of Exempt Notes) may include a legend entitled “MiFID II PRODUCT GOVERNANCE / TARGET MARKET” which will outline the target market assessment in respect of the Senior Notes and which channels for distribution of the Senior Notes are appropriate. Any person subsequently offering, selling or recommending the Senior Notes (a “distributor”) should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Senior Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID II Product Governance rules under Commission Delegated Directive (EU) 2017/593 (the “MiFID II Product Governance Rules”), any Dealer subscribing for any Senior Notes is a manufacturer in respect of such Senior Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID II Product Governance Rules.

UK MiFIR PRODUCT GOVERNANCE / TARGET MARKET

The Final Terms in respect of any Senior Notes (or Pricing Supplement in the case of Exempt Notes), may include a legend entitled “UK MiFIR PRODUCT GOVERNANCE” which will outline the target market assessment in respect of the Senior Notes and which channels for distribution of the Senior Notes are appropriate. Any person subsequently offering, selling or recommending the Senior Notes (a “UK distributor”) should take into consideration the target market assessment; however, a UK distributor subject to the Financial Conduct Authority (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 Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the UK MiFIR Product Governance Rules, any Dealer subscribing for any Senior Notes is a UK manufacturer in respect of such Senior Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a UK manufacturer for the purpose of the UK MiFIR Product Governance Rules.

PRIIPS REGULATION PROHIBITION OF SALES TO EEA RETAIL INVESTORS

If the applicable Final Terms in respect of any Senior Notes, or the applicable Pricing Supplement in the case of Exempt Notes, includes a legend entitled “PRIIPS REGULATION PROHIBITION OF SALES TO EEA RETAIL INVESTORS”, the Senior Notes or Exempt Notes, as the case may be, 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 MiFID II; (ii) a customer within the meaning of Directive (EU) 2016/97, as amended, 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 Regulation (EU) 2017/1129 (the “Prospectus Regulation”). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the “PRIIPs Regulation”) for offering or selling the Senior Notes or Exempt Notes, as the case may be, or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Senior Notes or Exempt Notes, as the case may be, or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PRIIPS REGULATION PROHIBITION OF SALES TO UK RETAIL INVESTORS

If the applicable Final Terms in respect of any Senior Notes, or the applicable Pricing Supplement, in the case of Exempt Notes, includes a legend entitled “PROHIBITION OF SALES TO UK RETAIL INVESTORS”, the Senior Notes or Exempt Notes, as the case may be, 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 UK. 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 domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018, as amended (the “EUWA”); or (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 domestic law of the UK by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law of the UK by virtue of the EUWA. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA (the “UK PRIIPs Regulation”) for offering or selling the Senior Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Senior Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT 2001 (2020 REVISED EDITION) OF SINGAPORE, AS MODIFIED OR AMENDED FROM TIME TO TIME (THE “SFA”)

Unless otherwise stated in the Final Terms in respect of any Senior Notes, or the applicable Pricing Supplement in the case of Exempt Notes, and in each such case notified to the Dealers prior to any offer of Notes, all Senior Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded 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).

Please note that the information items set forth in the Terms and Conditions of German Registered Notes have been included as additional information only and for the purpose of describing the Programme. German Registered Notes do not qualify as securities within the meaning of the Prospectus Regulation and the German Securities Prospectus Act (*Wertpapierprospektgesetz*). Therefore, this document cannot be construed as a Prospectus for German Registered Notes within the meaning of the Prospectus Regulation. In addition, any offer of German Registered Notes in Germany will be made pursuant to an exemption under the applicable German Capital Investment Act (*Vermögensanlagengesetz*) from the requirement to publish a prospectus; pursuant to Section 2 para. 1 No. 3.c) of the German Capital Investment Act, German Registered Notes will only be offered at a minimum price of at least €200,000 per German Registered Note per investor and provided such investor meets the criteria laid down in Section I (1) (a), (d) (e) or (f) of Annex II to MiFID II. No German Registered Note will be admitted to trading on the Regulated Market or the Euro MTF Market under this Programme.

This Prospectus does not constitute an offer of, or an invitation by or on behalf of the Bank or the Dealers to subscribe for, or purchase, any Senior Notes.

None of the Dealers makes any representation, expressed or implied, or accepts any responsibility, with respect to the accuracy or completeness of any of the information in this Prospectus or any of the information incorporated by reference herein or any responsibility for any act or omission of the Issuer or any other person in connection with the issue and offering of the Senior Notes. Neither this Prospectus nor any financial statements are intended to provide the basis of any credit or other evaluation and should not be considered as a recommendation by any of the Bank or the Dealers that any recipient of this Prospectus or any financial statements should purchase the Senior Notes. Each potential purchaser of Senior Notes should determine for itself the relevance of the information contained in this Prospectus and its purchase of Senior Notes should be based upon such investigation as it deems necessary. Any purchaser of Senior Notes is deemed by its purchase to acknowledge that it is relying solely on the information contained in this Prospectus and on its own investigations in making its investment decision and is not relying on the Dealers in any manner whatsoever in relation to their investigation of the Issuer or in relation to such investment decision. None of the Dealers undertakes to review the financial condition or affairs of the Bank during the life of the arrangements contemplated by this Prospectus nor to advise any investor or potential investor in the Senior Notes of any information coming to the attention of any of the Dealers. None of the Dealers accept any liability in relation to the information contained herein or any other information provided by the Issuer in connection with the Senior Notes, except for liability arising from or in respect of any applicable law or regulation. Unless agreed upon between the Bank and the relevant Dealer(s) and otherwise specified in the applicable Final Terms or (in the case of Exempt Notes) the applicable Pricing Supplement, each Tranche (as defined in “Issue of Notes” below) of Bearer Notes having an original maturity of more than one year will initially be represented by a temporary Global Note and each Tranche of Bearer Notes having an original maturity of one year or less will be represented by a permanent Global Note which will be delivered on or prior to the issue date thereof to a common depositary on behalf of Clearstream Banking S.A. (“Clearstream, Luxembourg”) and/or Euroclear Bank SA/NV (“Euroclear”) (the “Common Depositary”) or any other agreed clearing system or be delivered outside a clearing system, as agreed between the Bank and the relevant Dealer(s). Interests in temporary Global Notes will be exchangeable for interests in permanent Global Notes or, if so specified in the applicable Final

Terms or (in the case of Exempt Notes) the applicable Pricing Supplement, for definitive Bearer Notes after the date falling not earlier than 40 days after the relevant issue date upon certification as to non-United States beneficial ownership or for definitive Registered Notes at any time after the issue date. Interests in permanent Global Notes will be exchangeable for definitive Bearer Notes or definitive Registered Notes as described under “Overview of Provisions Relating to the Notes while in Global Form”. Registered Notes in definitive form will be represented by Note certificates (each a “Certificate”), one Certificate being issued in respect of each Noteholder’s entire holding of Registered Notes of one Series. Global Registered Notes will be deposited on or prior to the issue date of the relevant Tranche with a Common Depositary for Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) or be delivered outside a clearing system, as agreed between the Bank and the relevant Dealer(s). Registered Notes which are held in Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) will be represented by a Global Registered Note, registered in the name of nominees for Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) or a common nominee for both and the respective Certificate(s) will be delivered to the appropriate depositary or the Common Depositary, as the case may be.

IN CONNECTION WITH THE ISSUE OF ANY TRANCHE, ONE OR MORE RELEVANT DEALER OR DEALERS (IF ANY) ACTING AS STABILISATION MANAGER(S) (THE “STABILISATION MANAGER(S)”) (OR PERSONS ACTING ON BEHALF OF ANY STABILISATION MANAGER(S)) MAY OVER-ALLOT SENIOR NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE SENIOR NOTES 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 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 AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE RELEVANT TRANCHE. ANY STABILISATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE RELEVANT STABILISATION MANAGER(S) (OR PERSONS ACTING ON BEHALF OF THE RELEVANT STABILISATION MANAGER(S)) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES.

Investors whose investment authority is subject to legal restrictions should consult their legal advisers to determine whether and to what extent the Senior Notes constitute legal investments for them. See “Risk Factors – Legal investment considerations may restrict certain investments”.

Each potential investor in any Senior Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor, either on its own or with the help of its financial or other professional advisers, should consider whether it:

- (i) has sufficient knowledge and experience to make a meaningful evaluation of the relevant Senior Notes, the merits and risks of investing in the relevant Senior Notes and the information contained or incorporated by reference in this Prospectus or any applicable Supplement and any applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement;
- (ii) has access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the relevant Senior Notes and the impact such investment will have on its overall investment portfolio;
- (iii) has sufficient financial resources and liquidity to bear all of the risks of an investment in the relevant Senior Notes, including where principal or interest is payable in one or more currencies, or where

the currency for principal or interest payments is different from the potential investor's currency or Bail-inable Notes which will be converted (in whole or in part) into Common Shares of the Bank or an affiliate upon a Bail-in Conversion (as defined in Condition 3(b));

- (iv) understands thoroughly the terms of the relevant Senior Notes and be familiar with the behaviour of any relevant indices and financial markets; and
- (v) is able to evaluate possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

All references in this Prospectus to the “European Economic Area” or “EEA” are to the Member States of the European Union together with Iceland, Norway and Liechtenstein.

In this Prospectus, unless otherwise specified or the context otherwise requires, references to “U.S.\$” and to “U.S. dollars” are to the currency of the United States of America, to “\$” and “dollars” are to the currency of Canada, to “euro” and “€” are to the currency of the Member States of the European Union that adopt the single currency in accordance with the Treaty on the functioning of the European Union, as amended, to “Japanese yen”, “yen” and “¥” are to the currency of Japan, to “Sterling” and “£” are to the currency of the United Kingdom, to “Swiss francs” and “CHF” are to the currency of Switzerland and “RMB”, “Renminbi” and “CNY” are to the lawful currency of the People’s Republic of China (“PRC” or “China”) which, for the purposes of this Prospectus, excludes the Hong Kong Special Administrative Region of the PRC, the Macau Special Administrative Region of the PRC and Taiwan. In the documents incorporated by reference in this Prospectus, unless otherwise specified or the context otherwise requires, reference to “\$” are to Canadian dollars.

In this Prospectus, unless the contrary intention appears, a reference to a law or regulation or a provision of a law or regulation is a reference, in each case, to that law or regulation or provision thereof as extended, amended or re-enacted.

Certain figures and percentages included in this Prospectus have been subject to rounding adjustments; accordingly, figures shown in the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

Issue of Senior Notes

Senior Notes will be issued on a continuous basis in series (each a “**Series**”) having one or more issue dates. All Senior Notes of the same Series shall have identical terms (or identical other than in respect of the first payment of interest), it being intended that each Senior Note of a Series will be interchangeable with all other Senior Notes of that Series. Each Series may be issued in tranches (each a “**Tranche**”) on different issue dates and at different issue prices. The specific terms of each Tranche will be set forth either (i) (in the case of issues of Senior Notes admitted to trading on a Regulated Market and/or offered to the public in the EEA or in the UK) in the final terms (the “**Final Terms**”) or (in the case of Exempt Notes) in the pricing supplement (“**Pricing Supplement**”) to this Prospectus or (ii) in a stand-alone prospectus (a “**Drawdown Prospectus**”).

In the case of a Tranche which is the subject of a Drawdown Prospectus, each reference in this Prospectus to information being set out, specified, stated, shown, indicated or otherwise provided in the applicable Final Terms shall be read and construed as a reference to such information being set out, specified, stated, shown, indicated or otherwise provided for in the relevant Drawdown Prospectus and, as applicable, each other reference to Final Terms in this Prospectus shall be read and construed as a reference to such Drawdown Prospectus.

This Prospectus should be read and construed in conjunction with any Supplements and any applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement and all documents incorporated herein by reference (see “Documents Incorporated by Reference”).

Caution Regarding Forward-Looking Statements

Certain statements contained or incorporated by reference in this Prospectus are forward-looking statements. All such statements are made in accordance with applicable securities legislation in Canada and the United States. Forward-looking statements in this document may include, but are not limited to, statements with respect to the economy—particularly the Canadian and U.S. economies—market changes, the Issuer’s objectives, outlook and priorities for fiscal year 2022 and beyond, the strategies or actions that will be taken to achieve them, expectations about the Issuer’s financial condition, the regulatory environment in which it operates, the impacts of and the Issuer’s response to the COVID-19 pandemic, and certain risks it faces. These forward-looking statements are typically identified by verbs or words such as “outlook”, “believe”, “foresee”, “forecast”, “anticipate”, “estimate”, “project”, “expect”, “intend” and “plan”, in their future or conditional forms, notably verbs such as “will”, “may”, “should”, “could” or “would”, as well as similar terms and expressions. Such forward-looking statements are made for the purpose of assisting the holders of the Issuer’s securities in understanding the Issuer’s financial position and results of operations as at and for the periods ended on the dates presented, as well as the Issuer’s vision, strategic objectives, and financial performance targets, and may not be appropriate for other purposes.

These forward-looking statements are based on current expectations, estimates, assumptions and intentions and are subject to uncertainty and inherent risks, many of which are beyond the Issuer’s control. Assumptions about the performance of the Canadian and U.S. economies in 2022, including in the context of the COVID-19 pandemic, and how that will affect the Issuer’s business are among the main factors considered in setting the Issuer’s strategic priorities and objectives including provisions for credit losses. In determining its expectations for economic conditions, both broadly and in the financial services sector in particular, the Issuer primarily considers historical economic data provided by the governments of Canada, the United States and certain other countries in which the Issuer conducts business, as well as their agencies.

Statements about the economy, market changes, and the Issuer’s objectives, outlook and priorities for fiscal 2022 and thereafter are based on a number of assumptions and are subject to risk factors, many of which are beyond the Issuer’s control and the impacts of which are difficult to predict. These risk factors include, among others, the general economic environment and financial market conditions in Canada, the United States, and other countries where the Issuer operates; exchange rate and interest rate fluctuations; inflation; higher funding costs and greater market volatility; changes made to fiscal, monetary, and other public policies; changes made to regulations that affect the Issuer’s business; geopolitical and sociopolitical uncertainty; the transition to a low-carbon economy and the Issuer’s ability to satisfy stakeholder expectations on environmental and social issues; significant changes in consumer behaviour; the housing situation, real estate market, and household indebtedness in Canada; the Issuer’s ability to achieve its long-term strategies and key short-term priorities; the timely development and launch of new products and services; the Issuer’s ability to recruit and retain key personnel; technological innovation and heightened competition from established companies and from competitors offering non-traditional services; changes in the performance and creditworthiness of the Issuer’s clients and counterparties; the Issuer’s exposure to significant regulatory matters or litigation; changes made to the accounting policies used by the Issuer to report financial information, including the uncertainty inherent to assumptions and critical accounting estimates; changes to tax legislation in the countries where the Issuer operates, i.e., primarily Canada and the United States; changes made to capital and liquidity guidelines as well as to the presentation and

interpretation thereof; changes to the credit ratings assigned to the Issuer; potential disruption to key suppliers of goods and services to the Issuer; potential disruptions to the Issuer's information technology systems, including evolving cyberattack risk as well as identity theft and theft of personal information; and possible impacts of major events affecting the local and global economies, including international conflicts, natural disasters, and public health crises such as the COVID-19 pandemic.

There is a strong possibility that the Issuer's express or implied predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that its assumptions may not be confirmed and that its vision, strategic objectives and financial performance targets will not be achieved. The Issuer recommends that readers not place undue reliance on forward-looking statements, as a number of factors, including the impacts of the COVID-19 pandemic, could cause actual results to differ significantly from the expectations, estimates or intentions expressed in these forward-looking statements. These risk factors include credit risk, market risk, liquidity and funding risk, operational risk, regulatory compliance risk, reputation risk, strategic risk, environmental and social risk, and certain emerging risks or risks deemed significant, all of which are described in greater detail in the Risk Management section beginning on page 69 of the 2021 Annual Report.

The foregoing list of risk factors is not exhaustive. Additional information about these risk factors is provided in the Risk Management section and in the COVID-19 Pandemic section of the 2021 Annual Report, and in the Risk Management section beginning on page 26 of the 2022 Second Quarter Report incorporated by reference into this Prospectus. Investors and others who rely on the Issuer's forward-looking statements should carefully consider the above factors as well as the uncertainties they represent and the risk they entail.

Except as required by law, none of the Issuer, the Arrangers, the Dealers or any other person undertakes to update any forward-looking statements, whether written or oral, that may be made from time to time, by it or on its behalf. The Issuer cautions investors that these forward-looking statements are not guarantees of future performance and that actual events or results may differ significantly from these statements due to a number of factors.

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GENERAL DESCRIPTION OF THE PROGRAMME

This overview is an introduction to this Prospectus and any decision to invest in Senior Notes should be based on a consideration of this Prospectus as a whole, including documents incorporated by reference.

The following overview is taken from, and is entirely qualified by the remainder of this Prospectus and, concerning each Series, the Final Terms or Pricing Supplement relating to such Series (or, if Senior Notes are issued in more than one Tranche, the Final Terms or Pricing Supplement relating thereto).

This Overview constitutes a general description of the Programme for the purposes of Article 25(1) of Commission Delegated Regulation (EU) 2019/980 (as amended) implementing the Prospectus Regulation. The applicable terms of any Senior Notes will be agreed between the Bank and the relevant Dealer(s) prior to the issue of the Senior Notes and will be set out in the Terms and Conditions of the Notes endorsed on, or annexed to, the Senior Notes, as completed by the applicable Final Terms or, in the case of Exempt Notes, as supplemented, replaced or modified by the Pricing Supplement attached to, or endorsed on, such Senior Notes, as more fully described under “Terms and Conditions of the Notes” or “Terms and Conditions of the German Registered Notes”.

Issuer: National Bank of Canada

Issuer Legal Entity

Identifier (LEI): BSGEFEIOM18Y80CKCV46

Branch of Account: The deposits evidenced by the Senior Notes will be issued by the Bank’s Montreal Branch or such other branch as specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement.

Subject to meeting certain conditions described in Condition 14, the Bank may change the branch of account for the Senior Notes.

Description: Euro Note Programme

Arrangers: BNP Paribas
National Bank Financial Inc.

Dealers: BNP Paribas
Citigroup Global Markets Limited
Commerzbank Aktiengesellschaft
Crédit Agricole Corporate and Investment Bank
Goldman Sachs International
HSBC Bank plc
J.P. Morgan Securities plc
Landesbank Baden-Württemberg
Lloyds Bank Corporate Markets plc
National Bank Financial Inc.
NatWest Markets Plc
UBS AG London Branch

The Bank may from time to time terminate the appointment of any Dealer under the Programme or appoint additional Dealers either for a single Tranche or for the whole Programme. References in this Prospectus to “**Permanent Dealers**” are to the

persons listed above as Dealers and to additional persons appointed as dealers for the whole Programme (whose appointment has not been terminated).

Fiscal Agent: Citibank, N.A., London Branch

Initial Programme

Amount: Up to a maximum aggregate nominal amount of Senior Notes outstanding issued under the Programme of U.S.\$10,000,000,000 (or its equivalent in other currencies at the date of issue) at any one time. The Bank may increase the Programme's amount under the Dealer Agreement.

Currencies: Subject to compliance with relevant laws, regulations and directives, Senior Notes may be issued in Australian dollars, Canadian dollars, Czech koruna, Danish kroner, euro, Hong Kong dollars, New Zealand dollars, Norwegian kroner, Renminbi, Sterling, South African Rand, Swedish kroner, Swiss francs, U.S. dollars or yen or in other currencies if the Bank and the relevant Dealer(s) agree as specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement.

Senior Notes denominated in a currency for which particular laws, guidelines, regulations, restrictions or reporting requirements apply will only be issued in compliance with such laws, guidelines, regulations, restrictions or reporting requirements.

If the Senior Notes are payable in Renminbi and the Bank cannot obtain Renminbi to satisfy its obligations on the Senior Notes as a result of Inconvertibility, Non-transferability or Illiquidity (as defined in Condition 6(j)), the Bank shall be entitled to settle such payment in U.S. dollars.

The Issuer is an authorised person under the *Financial Services and Markets Act 2000*, as amended (the "**FSMA**").

Maturities: Subject to compliance with all relevant laws, regulations, directives and/or central bank requirements applicable to the Bank or the Specified Currency, the Senior Notes will have such maturities as agreed between the Bank and the relevant Dealer(s) and indicated in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement. Money market instruments listed on the Regulated Market will have a maturity of less than twelve months.

An extended final maturity date (the "**Extended Maturity Date**") may be specified in the Pricing Supplement of a Tranche of Exempt Notes (the "**Extendible Notes**").

Denominations: Senior Notes will be in such denominations as specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, save that in the case of any Senior Notes admitted to trading on a regulated market for the purposes of the Markets in Financial Instruments Directive or offered to the public in a Relevant Member State in circumstances which would otherwise require the publication of a prospectus under the Prospectus Regulation, the minimum denomination will be €100,000 (or its equivalent in any other currency as at the date of issue).

Method of Issue: The Senior Notes will be issued on a syndicated or non-syndicated basis. The Senior Notes will be issued in one or more Series (which may be issued on the same date or in more than one Tranche on different dates). Further Senior Notes may be issued as part of an existing Series.

Form of Notes: Bearer Notes, Exchangeable Bearer Notes or Registered Notes may be issued. Unless otherwise specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement, each Tranche of Bearer Notes and Exchangeable Bearer Notes having an original maturity of more than one year will initially be represented by a temporary Global Note and each Tranche of Bearer Notes having an original maturity of one year or less will initially be represented by a permanent Global Note.

Each Global Bearer Note will be delivered on or prior to the issue date thereof to a Common Depositary or any other agreed clearing system or be delivered outside a clearing system, as agreed between the Bank and the relevant Dealer(s).

No interest will be collectible in respect of a temporary Global Note except as described under “Overview of Provisions Relating to the Notes while in Global Form”. Interests in temporary Global Notes will be exchangeable for interests in permanent Global Notes or, if so specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, for definitive Bearer Notes after the date falling not earlier than 40 days after the issue date upon certification as to non-United States beneficial ownership or (in the case of Exchangeable Bearer Notes) definitive Registered Notes at any time after the issue date. The applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement will specify whether TEFRA C Rules or TEFRA D Rules or the TEFRA Rules in general are or are not applicable. Interests in permanent Global Notes will be exchangeable for definitive Bearer Notes or (if Exchangeable Bearer Notes) definitive Registered Notes as described under “Overview of Provisions Relating to the Notes while in Global Form”.

Registered Notes in definitive form will be represented by Note Certificates (each a “**Certificate**”), one Certificate being issued for each Noteholder’s entire holding of Registered Notes of one Series. Global Registered Notes will be deposited on or prior to the issue date of the relevant Tranche with a Common Depositary for Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) or be delivered outside a clearing system, as agreed between the Bank and the relevant Dealer(s). Global Registered Notes which are held in Clearstream, Luxembourg and/or Euroclear or any other agreed clearing system will be registered in the name of nominees for Clearstream, Luxembourg and/or Euroclear or other agreed clearing system or a common nominee for both, as the case may be, and the respective Certificate(s) will be delivered to the appropriate depositary or the Common Depositary, as the case may be. Any interest in a Global Registered Note will be transferable only in accordance with the rules and procedures in effect at Clearstream, Luxembourg, Euroclear and/or any other agreed clearing system.

Any reference herein to Clearstream, Luxembourg and/or Euroclear shall, whenever the context so permits, be deemed to include a reference to any successor operator and/or successor clearing system and/or any additional or

alternative clearing system specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement.

German Registered Notes will be issued substantially in the form of the German Registered Note set out in the Agency Agreement (including the form of German Registered Notes (*Namensschuldverschreibung*) with the Terms and Conditions of the German Registered Notes attached thereto).

**Status of the Senior
Notes:**

Senior Notes will constitute deposit liabilities of the Bank for the purposes of the *Bank Act* (Canada) (the “**Bank Act**”), which are unsubordinated and unsecured obligations of the Bank and will rank *pari passu* with all other deposit liabilities of the Bank (except as otherwise prescribed by law and subject to the exercise of bank resolution powers) and without any preference amongst themselves.

Senior Notes that are Bail-inable Notes (as defined in Condition 3(b)) are subject to a Bail-in Conversion (as defined below) under subsection 39.2(2.3) of the CDIC Act and to variation or extinguishment in consequence and subject to the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes.

The Senior Notes will not be deposits insured under the CDIC Act.

**Agreement with
respect to the
exercise of Canadian
Bail-in powers in
relation to Bail-inable**

Notes:

By acquiring an interest in Bail-inable Notes, each Noteholder (including each beneficial owner) is deemed to:

(i) agree to be bound, in respect of the Bail-inable Notes, by the CDIC Act, including the conversion of the Bail-inable Notes, in whole or in part – by means of a transaction or series of transactions and in one or more steps - into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of the Bail-inable Notes in consequence, and by the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to such Bail-inable Notes (a “**Bail-in Conversion**”);

(ii) attorn to the jurisdiction of the courts in the Province of Québec in Canada with respect to the CDIC Act and the laws of the Province of Quebec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes;

(iii) have represented and warranted to the Bank that the Bank has not directly or indirectly provided financing to the Noteholder of the Bail-inable Notes for the express purpose of investing in the Bail-inable Notes; and

(iv) acknowledge and agree that the terms referred to in paragraphs (i) and (ii), above, are binding on such Noteholder despite any provisions in these Conditions, any other law that governs such Bail-inable Notes and any other agreement, arrangement or understanding between such Noteholder and the Bank with respect to such Bail-inable Notes.

The applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement will indicate whether Senior Notes are Bail-inable Notes. All Bail-inable Notes are subject to Bail-in Conversion.

Each Noteholder or beneficial owner of the Bail-inable Notes that acquires an interest in the Bail-inable Notes in the secondary market and any successors, assigns, heirs, executors, administrators, trustees in bankruptcy and legal representatives of any such Noteholder or beneficial owner shall be deemed to acknowledge, accept, agree to be bound by and consent to the same provisions specified herein to the same extent as the Noteholders or beneficial owners that acquire an interest in the Bail-inable Notes upon their initial issuance, including, without limitation, with respect to the acknowledgement and agreement to be bound by and consent to the terms of the Bail-inable Notes related to the Bail-in Regime.

- Issue Price:** Senior Notes may be issued at any price or at a discount or premium to their Nominal Amount. Exempt Notes that are Partly-Paid Notes may be issued, the Issue Price of which will be payable in several instalments.
- Fixed Rate Notes:** Fixed rate interest will be payable in arrear on the date(s) and calculated on the basis of such Day Count Fraction specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement.
- Fixed Rate Reset Notes:** Fixed Rate Reset Notes will bear interest calculated by reference to a fixed rate of interest for an initial period and thereafter by reference to a fixed rate of interest recalculated on certain dates and by reference to a mid-market swap rate, a benchmark gilt rate or a reference bond rate, as adjusted for any applicable margin, in each case as may be specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement, such interest being payable in arrear on the date(s) in each year specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement.
- Floating Rate Notes:** As specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, Floating Rate Notes will bear interest calculated at a rate determined: (i) based on the floating rate under a notional rate of interest swap transaction in the Specified Currency governed by an agreement incorporating the 2006 ISDA Definitions (as published by the International Swaps and Derivatives Association, Inc. ("**ISDA**"), as supplemented, amended and updated as at the Issue Date of the first Tranche of Senior Notes of the relevant Series) or the latest version of the 2021 ISDA Interest Rate Derivatives Definitions (including each Matrix (as defined therein)), as published by ISDA as at the Issue Date of the first Tranche of the relevant Series (the "**ISDA Definitions**"); (ii) based

on a reference rate appearing on the screen page of a commercial quoting service; or (iii) on another basis agreed between the Bank and the relevant Dealer(s), for Exempt Notes only.

The Margin (if any) relating to floating rate will be agreed between the Bank and the relevant Dealer(s) for each issue of Floating Rate Notes.

Floating Rate Notes may also have a maximum or minimum rate of interest.

Range

Accrual Notes:

Range Accrual Notes will pay interest in respect of each Interest Period equal to the product of (i) either (a) a specified fixed rate or (b) a floating rate or a spread rate plus or minus a margin, as the case may be, and (ii) a relevant fraction, calculated as set out in the Conditions.

Benchmark

Discontinuation:

Unless Benchmark Discontinuation is specified as being not applicable in the applicable Final Terms, on the occurrence of a Benchmark Event the Bank may (subject to certain conditions and following consultation with an Independent Adviser (if any) (as defined in “*Terms and Conditions of the Notes*”)) determine a Successor Rate, failing which an Alternative Rate and, in either case, an Adjustment Spread, if any, and any Benchmark Amendments in accordance with Condition 4(o) (and if the Issuer is unable to appoint an Independent Adviser or unable to make the relevant determination in consultation with an Independent Adviser, determined by the Issuer itself) (other than for Notes where the Original Reference Rate specified in the Final Terms is (x) SOFR Compounded Rate and Condition 4(p) (Benchmark Replacement Provisions – Compounded SOFR) is specified as applicable or (y) the Original Reference Rate specified in the Final Terms is SARON Compounded and Condition 4(q) (Benchmark Replacement Provisions – SARON Compounded) is specified as applicable in the Final Terms, in which case the provisions in Condition 4(p) or Condition 4(q) will apply, respectively).

Zero Coupon Notes: Zero Coupon Notes may be issued at their nominal amount or at a discount and will not bear interest other than in relation to interest due after the Maturity Date. In the case of early redemption of Zero Coupon Notes, the Early Redemption Amount shall be determined either on the basis of compounding of the Amortisation Yield or without any compounding of the Amortisation Yield, as specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement.

Exempt Notes:

The Bank may issue Exempt Notes which are Index Linked Notes, Dual Currency Notes or Partly Paid Notes redeemable in one or more increments.

Index-Linked Notes: Payments (whether for principal or interest, at maturity or otherwise) in respect of Index-Linked Redemption Notes or Index-Linked Interest Notes (“**Index-Linked Notes**”) will be calculated by reference to such index and/or formula or to changes in the prices of securities or commodities or to such factors as agreed by Bank and the relevant Dealer(s) and as specified in the applicable Pricing Supplement, if appropriate.

Dual Currency Notes: Payments (whether in respect of principal or interest and whether at maturity or otherwise) in respect of Dual Currency Notes will be made in

such currencies, and based on such rates of exchange, as the Issuer and the relevant Dealer may agree.

Partly Paid Notes: The Issuer may issue Senior Notes in respect of which the issue price is paid in separate instalments in such amounts and on such dates as the Issuer and the relevant Dealer may agree.

Senior Notes redeemable in instalments: The Issuer may issue Senior Notes which may be redeemable in separate instalments in such amounts and on such dates as the Issuer and the relevant Dealer may agree. Bail-inable Notes may not be redeemable in instalments.

The Issuer may agree with any Dealer that Exempt Notes may be issued in a form not contemplated by the Terms and Conditions of the Notes, in which event the relevant provisions will be included in the applicable Pricing Supplement.

Interest Periods and

Rates of Interest: The interest periods for the Senior Notes and the applicable rate of interest or its method of calculation may differ from time to time or be constant for any Series. Senior Notes may have a maximum or minimum rate of interest.

Events of Default for

Senior Notes: The terms of the Senior Notes provide for events of default which are limited to (a) non-payment for more than 30 business days of interest or principal; and (b) if the Bank becomes insolvent or bankrupt or subject to the provisions of the *Winding-up and Restructuring Act* (Canada) (“**WURA**”) or any statute hereafter enacted in substitution therefor, as WURA, or any such substituted statute, may be amended from time to time, or if the Bank goes into liquidation, either voluntarily or under an order of a court of competent jurisdiction, passes a resolution for the winding-up, liquidation or dissolution of the Bank, is ordered wound-up or otherwise acknowledges its insolvency; provided that Noteholders may only exercise, or direct the exercise of, those rights to accelerate the Bail-inable Notes upon such an event where an order has not been made pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank and, notwithstanding the exercise of any right to accelerate the Bail-inable Notes, Bail-inable Notes will continue to be subject to a Bail-in Conversion until repaid in full. A Bail-in Conversion will not be an Event of Default.

Waiver of Set-Off for

Bail-inable Notes: Bail-inable Notes are not subject to set-off or netting rights.

Redemption: The Final Terms (or, in the case of Exempt Notes, the Pricing Supplement) for each Tranche of Senior Notes will indicate either that the Senior Notes cannot be redeemed prior to their stated maturity (other than in the case of Exempt Notes in specified instalments, if applicable, or for taxation reasons as described in Condition 5(b), or for illegality as described in Condition 5(d), or for a Disruption Event as described in Condition 5(e), or for Special Circumstance as described in Condition 5(f), or as set out under “Early Redemption for TLAC Disqualification” disclosed below, in each case if applicable), or that such Senior Notes will be redeemable at

the Bank's and/or the Noteholders option upon giving prior notice to the Noteholders or the Bank on a date(s) specified and at a price(s) as specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement. Where a redemption of Bail-inable Notes by the Bank would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent of Financial Institutions (Canada) (the "**Superintendent**").

Bail-inable Notes may not be redeemed prior to maturity at the option of the Noteholders.

The Pricing Supplement for Exempt Notes may provide that Senior Notes are repayable in several instalments as specified in the applicable Pricing Supplement.

Bail-inable Notes will continue to be subject to Bail-in Conversion (as defined below) prior to their repayment in full.

**Early Redemption
For TLAC
Disqualification
Event:**

If the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement, for the Senior Notes of such Series specify that a TLAC Disqualification Event Call is applicable, the Bank may, at its option with the prior approval of the Superintendent, redeem all, but not less than all of the outstanding Senior Notes of that Series prior to their stated maturity date on, or within 90 days after, the occurrence of a TLAC Disqualification Event (as defined in the Conditions) at the Early Redemption Amount specified in the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement, together (if applicable) with any accrued but unpaid interest to (but excluding) the date fixed for redemption.

Negative Pledge:

None.

Cross Default:

None.

**Terms and
Conditions:**

Either (i) Final Terms, (ii) in the case of Exempt Notes, a Pricing Supplement or (iii) a Drawdown Prospectus will be prepared for each Tranche of Senior Notes. A copy of each Final Terms will, in the case of Senior Notes to be listed on the Official List, be delivered to the Luxembourg Stock Exchange. The terms and conditions applicable to each Tranche will be as provided under "Terms and Conditions of the Notes", completed by the applicable Final Terms or supplemented, modified or replaced by the applicable Pricing Supplement or Drawdown Prospectus, as the case may be.

In the case of a Tranche which is the subject of a Drawdown Prospectus, each reference in this Prospectus to information being set out, specified, stated, shown, indicated or otherwise provided in the applicable Final Terms shall be read and construed as a reference to such information being set out, specified, stated, shown, indicated or otherwise provided for in the relevant Drawdown Prospectus and, as applicable, each other reference to Final Terms in this Prospectus shall be read and construed as a reference to such Drawdown Prospectus.

The Bank does not intend to re-open a Series of Senior Notes where such re-opening would have the effect of making the relevant Senior Notes subject to Bail-in Conversion.

A German Registered Note (with the “Terms and Conditions of the German Registered Notes” attached thereto) will be prepared in respect of each Series of German Registered Notes and will constitute the Pricing Supplement in respect of such Series of German Registered Notes.

In the case of German Registered Notes, each reference in this document to information being set out, specified, stated, shown, indicated or otherwise provided for in the applicable Pricing Supplement shall be read and construed as a reference to such information being set out, specified, stated, shown, indicated or otherwise provided in the relevant German Registered Note and the “Terms and Conditions of the German Registered Notes” attached thereto and, as applicable, each other reference to Pricing Supplement in the document shall be construed and read as a reference to such German Registered Note and “Terms and Conditions of the German Registered Notes” attached thereto.

**Enforcement of
Senior Notes:**

In certain circumstances, Senior Notes in global form are exchangeable for Senior Notes in definitive form. If a Global Note becomes due and payable because of acceleration, as described under “Terms and Conditions of the Notes - Events of Default”, or if the Maturity Date has occurred and, payment in full of the amount due is not made on the due date, the owner of a beneficial interest in such Global Note will become entitled to proceed directly against the Bank based on account statements provided by the relevant clearing system as if it were a holder of Senior Notes in bearer definitive form or Certificates.

**Set Off in respect
of German Registered
Notes:**

If the Noteholder is an insurance company and the claims under the Registered Note belong to the security assets (*Sicherungsvermögen*) within the meaning of Sections 124 to 131 of the German Insurance Supervision Act (*Versicherungsaufsichtsgesetz - VAG*) (or any equivalent provisions in the laws of any other jurisdiction), the Bank hereby waives any right of set-off against the claims arising from the Registered Note as well as the exercise of any pledge, right of retention or other rights through which the claims of the Noteholder could be prejudiced even in the event of insolvency, administration (whether voluntary or involuntary) or similar proceedings to the extent permitted pursuant to applicable law. The same applies if the Noteholder is a German mortgage bank (*Pfandbriefbank*) and the claims under the Registered Note belong to cover assets (*Deckungswerte*) of a German mortgage bank within the meaning of the German Pfandbrief Act (*Pfandbriefgesetz*).

Clearing Systems: Clearstream, Luxembourg, Euroclear and/or any other agreed clearing system as may be specified in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement. Definitive German Registered Notes will not be settled in a clearing system.

Rating:	A Tranche of Senior Notes issued under the Programme may be rated or unrated. Ratings of rated Tranche may differ from ratings of other Senior Notes. The rating of the Senior Notes is not a recommendation to purchase, hold or sell the Senior Notes, and may be subject to suspension, reduction, revision or withdrawal at any time by the assigning rating agencies. There is no assurance that the rating of the Senior Notes will remain for any given period of time or that rating agencies will not lower or withdraw their ratings. Investors may suffer losses if a credit rating assigned to the Senior Notes does not reflect the then creditworthiness of such Senior Notes.
Withholding Tax:	All payments of principal and interest by the Bank under the Senior Notes, Receipts and Coupons will be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of Canada, its provinces or territories, or the country in which the branch of account for Senior Notes is located, subject to certain exceptions. If any such withholding or deduction is made, the Bank will, subject to certain exceptions, be required to pay additional amounts in respect of the amounts so withheld or deducted. See “Terms and Conditions of the Notes - Taxation”.
Redenomination and Consolidation:	The applicable Pricing Supplement in respect of Exempt Notes may provide that Exempt Notes may be redenominated in euro or consolidated as specified in the applicable Pricing Supplement in respect of Exempt Notes.
Governing Law and Jurisdiction:	The Senior Notes (other than German Registered Notes) will be governed by and construed in accordance with the laws applicable in the Province of Québec and the federal laws of Canada applicable therein or, if so specified in the applicable Final Terms or (in the case of Exempt Notes) Pricing Supplement, (except as set forth under “Agreement with respect to the exercise of Canadian bail-in powers in relation to Bail-inable Notes” above) English law. All contractual documentation related to the Senior Notes will be governed by and construed in accordance with the laws of the Province of Québec and the federal laws of Canada applicable therein, with the exception of the Deed of Covenant applicable to Senior Notes governed by English law, which will be governed by English law. Québec courts have non-exclusive jurisdiction in the event of litigation in respect of the contractual documentation and the Senior Notes governed by the laws of the Province of Québec and the federal laws of Canada applicable therein. The English courts have non-exclusive jurisdiction in the event of litigation in respect of Senior Notes and related Deed of Covenant governed by English law (except as set forth under “Agreement with respect to the exercise of Canadian Bail-in powers in relation to Bail-inable Notes” above). For the avoidance of doubt, unless otherwise specified in the applicable Final Terms or (in the case of Exempt Notes) Pricing Supplement, the Senior Notes (other than German Registered Notes) will be governed by and construed in accordance with the laws applicable in the Province of Québec and the federal laws of Canada applicable therein.

German Registered Notes (except as set forth under “Agreement with respect to the exercise of Canadian Bail-in powers in relation to Bail-inable Notes” above) will be governed by and construed in accordance with the laws applicable in the Federal Republic of Germany. Except as set forth under “Agreement with respect to the exercise of Canadian Bail-in powers in relation to Bail-inable Notes” above, the competent courts in Frankfurt am Main shall have non-exclusive jurisdiction in the event of litigation in respect of the German Registered Notes.

**Listing and
Admission to
Trading:**

Application has been made to the Luxembourg Stock Exchange for Senior Notes issued under the Programme during the period of 12 months from the date of the Prospectus to be listed on the Official List and admitted to trading on either the Regulated Market or the Euro MTF Market, which is not a regulated market for purposes of MiFID II. Senior Notes may also be listed or admitted to trading on such other or further stock exchange(s) or market(s) as may be agreed between the Issuer and the relevant Dealer(s) in relation to such issue. The Bank may also issue Senior Notes which are neither listed nor admitted to trading on any market. The applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement will state whether or not the relevant Senior Notes are to be listed and/or admitted to trading and, if so, on which stock exchanges or markets.

The Bank is not under any obligation to Noteholders to maintain any listing of Senior Notes and if it is unduly onerous to maintain such listing, the Bank may seek to terminate the listing of such Senior Notes provided it uses its best endeavours to seek an alternative admission to listing, trading and/or quotation of such Notes by another listing authority, securities exchange and/or quotation system (including a market which is not a regulated market for the purposes of the Markets in Financial Instruments Directive or a market outside of the EEA) to be notified by the Bank to the relevant Dealer(s). However, if such alternative listing is not available or is unduly onerous, the Senior Notes may be delisted, an alternative listing may not be obtained and the Issuer is not required to so obtain. See “Risk Factors – Risks related to Senior Notes generally - No obligation to maintain listing”.

Selling Restrictions: For a description of certain restrictions on offers, sales and deliveries of Senior Notes and on the distribution of offering material in Canada, the United States of America, the EEA (including France, Germany, Italy and The Netherlands), the UK, Switzerland, Hong Kong, Japan and Singapore, see “Subscription and Sale”.

Transfer

Restrictions: A transfer of German Registered Notes is not effective until the transferee has delivered to the Registrar a duly executed copy of the Terms and Conditions relating to such German Registered Note along with a duly executed Assignment Agreement.

United States Selling

Restrictions: The Issuer is Category 2 for purposes of Regulation S under the Securities Act.

The Senior Notes will be issued in compliance with United States Treas. Reg. §1.163-5(c)(2)(i)(D) (or any successor United States Treasury Regulation section,

including without limitation, regulations issued in accordance with Internal Revenue Service Notice 2012-20 or otherwise in connection with the *United States Hiring Incentives to Restore Employment Act of 2010*) (the “**D Rules**”) unless (i) the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement state that Senior Notes are issued in compliance with United States Treas. Reg. §1.163-5(c)(2)(i)(C) (or any successor United States Treasury Regulation section, including without limitation, regulations issued in accordance with Internal Revenue Service Notice 2012-20 or otherwise in connection with the *United States Hiring Incentives to Restore Employment Act of 2010*) (the “**C Rules**”) or (ii) the Senior Notes are issued other than in compliance with the D Rules or the C Rules but in circumstances in which the Senior Notes will not constitute “registration required obligations” under the *United States Tax Equity and Fiscal Responsibility Act of 1982* (“**TEFRA**”) and specified as a transaction not subject to TEFRA in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement.

Risk Factors:

There are certain risks related to any investment in Senior Notes under the Programme, which investors should ensure they fully understand. A description of such risks is set out under “*Risk Factors*” from page 26 of this Prospectus.

RISK FACTORS

The Bank believes that the following factors may affect its ability to fulfil its obligations under Senior Notes issued under the Programme. Most of these factors are contingencies which may or may not occur and the Bank is not in a position to express a view on the likelihood of any such contingency occurring. In addition, factors which the Bank believes are material for the purpose of assessing the market risks associated with Senior Notes issued under the Programme are also described below.

The Bank believes that the factors described below (and as may be set out in the documents incorporated by reference on page 81) represent the principal risks inherent in investing in Senior Notes issued under the Programme, but the change in the secondary market value of the Senior Notes, the inability of an investor to sell its Senior Notes in the secondary market or the inability of the Bank to pay interest, principal or other amounts on or in connection with any Senior Notes or to perform any of its obligations may occur for other reasons which may not be considered significant by the Bank based on information currently available to it or which they may not be able to anticipate. Prospective investors should also read the detailed information set out elsewhere in this Prospectus and any applicable Supplement (including any documents deemed to be incorporated by reference herein or therein) to reach their own views prior to making any investment decision.

THE PURCHASE OF SENIOR NOTES MAY INVOLVE SUBSTANTIAL RISKS AND MAY BE SUITABLE ONLY FOR INVESTORS WHO HAVE THE KNOWLEDGE AND EXPERIENCE IN FINANCIAL AND BUSINESS MATTERS NECESSARY TO ENABLE THEM TO EVALUATE THE RISKS AND THE MERITS OF AN INVESTMENT IN THE SENIOR NOTES. PRIOR TO MAKING AN INVESTMENT DECISION, PROSPECTIVE INVESTORS SHOULD CONSIDER CAREFULLY, IN LIGHT OF THEIR OWN FINANCIAL CIRCUMSTANCES AND INVESTMENT OBJECTIVES, (I) ALL THE INFORMATION SET FORTH IN THIS PROSPECTUS AND, IN PARTICULAR, THE CONSIDERATIONS SET FORTH BELOW AND (II) ALL THE INFORMATION SET FORTH IN THE APPLICABLE FINAL TERMS OR, IN THE CASE OF EXEMPT NOTES, THE APPLICABLE PRICING SUPPLEMENT. PROSPECTIVE INVESTORS SHOULD MAKE SUCH ENQUIRIES AS THEY DEEM NECESSARY, INCLUDING (WITHOUT LIMITATION) WITH THEIR OWN FINANCIAL, TAX AND LEGAL ADVISERS, WITHOUT RELYING ON THE BANK OR ANY DEALER.

AN INVESTMENT IN EXEMPT NOTES LINKED TO ONE OR MORE RELEVANT FACTORS MAY ENTAIL SIGNIFICANT RISKS NOT ASSOCIATED WITH INVESTMENTS IN A CONVENTIONAL DEBT SECURITY, INCLUDING BUT NOT LIMITED TO THE RISKS SET OUT BELOW. THE AMOUNT PAID BY THE BANK ON REDEMPTION OF THE SENIOR NOTES MAY BE LESS THAN THE NOMINAL AMOUNT OF THE SENIOR NOTES, TOGETHER WITH ANY ACCRUED INTEREST, AND MAY IN CERTAIN CIRCUMSTANCES BE ZERO.

CERTAIN ISSUES OF SENIOR NOTES INVOLVE A HIGH DEGREE OF RISK AND POTENTIAL INVESTORS SHOULD BE PREPARED TO SUSTAIN A LOSS OF ALL OR PART OF THEIR INVESTMENT.

Factors which are material for the purpose of assessing the risks associated with the Bank and which may affect the Bank's ability to fulfil its obligations under Senior Notes issued under the Programme

The Bank's financial condition, financial performance and cash flows are affected by, among other things, known material trends, demands, commitments, events and other risks and uncertainties. Prospective purchasers of Senior Notes should consider the categories of risks identified and discussed herein including management of credit risk, market risk, operational risk, asset liability management, liquidity risk, reputational risk, risks related to off-balance sheet arrangements and other contractual obligations, risks related to capital management, changes in creditworthiness, risks of operating in a regulatory environment, risks related to general economic conditions and risks related to legal proceedings and regulatory investigations and actions, each of which can affect the general creditworthiness of the Bank and in turn affect the value of the Senior Notes.

(a) Risks related to the Issuer's financial, operational and strategic situation

Changes to the Bank's credit ratings may adversely affect the market value of the Senior Notes

There is no assurance that the Bank's credit ratings, which are set out on page 225 of this Prospectus or the credit ratings of the Senior Notes, which will be set out in the applicable Final Terms for each series, will remain for any given period of time or that a rating will not be suspended, lowered or withdrawn by the relevant rating agency if, in its judgment, circumstances in the future so warrant. In the event that a rating assigned to the Bank or the Senior Notes is subsequently suspended, lowered or withdrawn for any reason other than as specified therein, no person or entity is obliged to provide any additional support or credit enhancement with respect to the Senior Notes, the Bank may be adversely affected, the market value of the Senior Notes is likely to be adversely affected and the ability of the Bank to make payments under the Senior Notes may be adversely affected.

Borrower and Counterparty risk exposure

The ability of the Bank to make payments in connection with any Senior Notes is subject to general credit risks, including credit risks of borrowers. Third parties that owe the Bank money, securities or other assets may not pay or perform under their obligations. These parties include borrowers under loans granted, trading counterparties, counterparties under swaps and credit and other derivative contracts, agents and financial intermediaries. These parties may default on their obligations to the Bank due to bankruptcy, lack of liquidity, downturns in the economy or real estate values, operational failure or other reasons.

A number of the Bank's counterparties are EU credit institutions and investment firms, including the Dealers under the Programme (collectively, "**EU Firms**"), which are subject to Directive 2014/59/EU [**as amended by Directive 2019/879/EU**] (the "**BRRD**"), which is intended to enable a range of actions to be taken in relation to EU Firms considered to be at risk of failing. A description of the Bank's business relationship with the Dealers can be found in the section entitled "*Subscription and Sale*" on page 248 of this Prospectus. In the United Kingdom, the Banking Act implements the BRRD. The BRRD is designed to provide authorities with a credible set of tools to intervene sufficiently early and quickly in an unsound or failing EU Firm so as to ensure the continuity of the institution's critical financial and economic functions, whilst minimising the impact of the institution's failure on the economy and financial system. The BRRD was

applied in Relevant Member States and the United Kingdom from 1 January 2015 with the exception of the bail-in tool (referred to below) which was applicable from 1 January 2016.

The BRRD contains four resolution tools and powers which may be used alone or in combination where the relevant resolution authority considers that (a) any of the Bank's EU Firm counterparties is failing or likely to fail; (b) there is no reasonable prospect that any alternative private sector measures would prevent the failure of such institution within a reasonable timeframe, and (c) a resolution action is in the public interest. Such resolution tools and powers are: (i) sale of business; (ii) bridge institution; (iii) asset separation; and (iv) bail-in. The bail-in tool gives the resolution authority the ability to write-down or convert certain unsecured debt instruments of any of the Bank's EU Firm counterparties into shares (or other instruments of ownership), to reduce the outstanding amount due under such debt instruments (including reducing such amounts to zero) or to cancel, modify or vary the terms of such debt instruments (including varying the maturity of such instruments) and other contractual arrangements. The BRRD also provides for a Relevant Member State as a last resort, after having assessed and exploited the above resolution tools to the maximum extent possible whilst maintaining financial stability, to be able to provide extraordinary public financial support through additional financial stabilisation tools. These consist of the public equity support and temporary public ownership tools. Any such extraordinary financial support must be provided in accordance with the applicable state aid framework.

An EU Firm will be considered as failing or likely to fail when: (i) it is, or is likely in the near future to be, in breach of its requirements for continuing authorisation; (ii) its assets are, or are likely in the near future to be, less than its liabilities; (iii) it is, or is likely in the near future to be, unable to pay its debts as they fall due; or (iv) it requires extraordinary public financial support (except in limited circumstances).

In the normal course of business, the Bank deals with EU Firms to whom the BRRD and its bail-in power applies. The powers set out in the BRRD will impact how such EU Firms are managed as well as, in certain circumstances, the rights of their creditors including the Bank. For instance, the Bank and its debtholders may be affected by disruptions due to an EU Firm counterparty not being able to fulfil its obligations as issuing and paying agent, European registrar, calculation agent or similar roles.

The Bank is exposed to operational and infrastructure risks

The Bank is exposed to many types of operational risk, including the risk of loss resulting from an inadequacy or a failure ascribable to human resources, equipment, processes, technology or external events. Operational risk exists in all of the Bank's activities. Theft, fraud, cyberattacks, unauthorized transactions, system errors, human error, amendments to or misinterpretation of laws and regulations, litigation or disputes with clients, inappropriate sales practice behaviour or property damage are just a few examples of events likely to cause financial loss, harm the Bank's reputation, or lead to regulatory penalties or sanctions.

The Bank's business segments use several operational risk management tools and methods to identify, assess, and manage their operational risk and control measures. Given the high volume of transactions the Bank processes on a daily basis, certain errors may be repeated or compounded before they are discovered and successfully rectified. Shortcomings or failures in the Bank's internal processes, systems or people, including any of the Bank's financial, accounting or other data processing systems, could lead to, among other consequences, financial loss and reputational damage.

In addition, despite any contingency plans the Bank may have in place, the Bank's ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports the Bank's

businesses and the communities in which they are located. This may include a disruption involving electrical, communications, transportation or other services used by the Bank or by third parties with which the Bank conducts business. The occurrence of any of the foregoing could have a material adverse effect on the Bank's business, prospects, financial conditions, reputation and or results of operations.

Information system disruptions and security breaches may adversely affect the Bank's operating results

Technology, which is now omnipresent in our daily lives, is at the heart of banking services and has become the main driver of innovation in the financial sector. While this digital transformation meets the growing needs of customers by enhancing the operational efficiency of institutions, it nevertheless comes with information security and cybersecurity risks. The personal information and financial data of financial institution customers are prime targets for criminals. These criminals, who are increasingly well organised and employing ever more sophisticated schemes, try to use technology to steal information.

Faced with a resurgence of cyberthreats and the sophistication of cybercriminals, the Bank is exposed to the risks associated with data breaches, malicious software, unauthorized access, hacking, phishing, identity theft, intellectual property theft, asset theft, industrial espionage, and possible denial of service due to activities causing network failures and service interruptions.

Cyberattacks, as with system breaches or interruptions that support the Bank and its customers, could cause client attrition; financial loss; inability of clients to do their banking; non-compliance with privacy legislation or any other laws in effect; legal disputes; fines; penalties or regulatory action; reputational damage; compliance costs, corrective measures, investigative, or restoration costs; cost hikes to maintain and upgrade technological infrastructures and systems, all of which could affect the Bank's operating results or financial position, in addition to having an impact on its reputation.

It is also possible for the Bank to be unable to prevent or implement effective preventive measures against every potential cyberthreat, as the tactics used are multiplying, change frequently, come from a wide range of sources and are increasingly sophisticated.

Within this context, the Bank works to ensure the integrity and protection of its systems and the information they contain. The Bank reaffirms its commitment to continuous improvement in the area of information security, the ultimate goal being to protect its customers and maintain their trust. Along with its partners in the financial sector and with the regulatory authorities, the Bank is committed to making a sustained effort to mitigate technology risks. Measures specifically directed at anticipating this type of threat include the formation of multidisciplinary teams comprising cybersecurity and fraud prevention specialists. The Bank is also pursuing initiatives under its own cybersecurity program aimed at adapting its protection, surveillance, detection and response capabilities in response to changing threats, the aim being to continue to reduce delays in detecting any anomalies or cybersecurity incidents and limiting the impact thereof as much as possible. A governance and accountability structure has also been established to support decision-making based on sound risk management, which includes a subcommittee that is regularly informed of cybersecurity trends and developments and of lessons learned from operational incidents that have occurred in other large organizations in order to gain a better understanding of potential risks, particularly risks related to cybersecurity and the protection of personal information.

The risks related to protecting personal information exist throughout the lifecycle of the data and arise, in particular, from inadequate control measures and weak processes. Such risks can translate into financial risk, reputation risk, technology risk, and even legal risk, among others. Innovations and proliferation in

technologies that collect, use, and share personal information have led to substantial legislative changes in recent years.

These changes have come about swiftly in several jurisdictions, including Canada and Quebec. In September 2021, the Quebec government passed An Act to modernize legislative provisions as regards the protection of personal information, which will gradually come into effect over the next three years. The tabling of a new federal bill is expected soon. The Bank continues to monitor relevant legislative developments and has bolstered its governance structure by updating its policies and deploying a personal information privacy program that reflects its determination to maintain the trust of its clients.

Despite the Bank's commitment to continuous improvement in the area of information security and to making a sustained effort to mitigate technology risks, there can be no assurance that the Bank will be successful in all respects and it remains exposed to failures or disruptions which may adversely affect its operating results.

The failure to properly implement technological innovation may adversely affect the Bank's operating results or financial position

On the one hand, the Bank's financial performance depends on its ability to develop and market new and innovative products and services, adopt and develop new technologies that help differentiate its products and services and generate cost savings, and market these new products and services at the right time and at competitive prices. On the other hand, failure to properly review critical changes within the business before and during the implementation and deployment of key technological systems or failure to align client

expectations with the Bank's client commitments and operating capabilities could adversely affect the Bank's business, operating results, financial position, and reputation.

The transition towards new digital channels and solutions has accelerated greatly following the COVID-19 pandemic, where demand for digital banking services grew to the detriment of traditional banking services. The arrival of new, non-conventional players in the market has intensified competitive pressure, as they offer new technologies that enhance the client experience due to the development of new data analysis tools and customized solutions while meeting user expectations for simplicity, and doing so at a lower cost. These new digital businesses, which are not necessarily subject to the same regulatory requirements, have the ability to react quickly to new consumer trends through the deployment of new technologies. As such, to mitigate disintermediation risk and help make innovative technologies accessible to its clients, the Bank continues to incorporate artificial intelligence into its business processes and it remains highly committed to innovation by making strategic investments in emerging technologies through its specialized venture capital arm NAventures.

The Bank's success in developing and introducing new products and services, expanding distribution channels, developing new distribution channels and realising revenue from these channels could affect the Bank's revenues and earnings.

The Bank's ability to maintain or increase market share depends, in part, on the way in which it adapts its products and services to changes in industry standards and markets. There is increasing pressure on financial institutions such as the Bank to provide products and services at lower prices, which may reduce the Bank's net interest income and revenues from fee-based products and services. In addition, the implementation of or changes to new technologies to adapt them to the Bank's products and services could require the Bank to make substantial expenditures without being able to guarantee successful deployment

of its new products or services or a client base for them. The Bank may not be successful in adapting its products and services and this may adversely affect its revenues and earnings. See the risks in the sub-category entitled “*Risks associated with technological developments and cyber threats*” below for details on the technological risks facing the Bank.

The Bank’s ability to properly complete acquisitions and subsequent integration may affect the Bank’s results.

The Bank’s ability to successfully complete an acquisition is often conditional on regulatory approval, and the Bank cannot be certain when or under what conditions, if any, approval will be granted. Acquisitions could affect future results should the Bank experience difficulty integrating the acquired business. If the Bank does encounter difficulty integrating an acquired business, maintaining an appropriate governance level over the acquired business, or retaining key officers within the acquired business, these factors could prevent the Bank from realising expected revenue growth, cost savings, market share gains, and other projected benefits of the acquisition.

Failure to obtain accurate and complete information from or on behalf of the Bank’s clients and counterparties could adversely affect the Bank’s results.

In decisions related to authorising credit or other transactions with clients and third parties, the Bank may use information provided by them, particularly their financial statements and other financial information. The Bank may also refer to statements made by clients and third parties regarding the accuracy and completeness of such information and independent auditor’s reports on their financial statements. In the event the financial statements are misleading or do not present fairly, in all material respects, their financial position or operating results, the Bank’s results could be adversely affected. For more details on the risks the Bank faces related to third parties, see the risk factor entitled “*Reliance on technology and third parties may affect the Bank’s ability to serve and retain its clients*” below in this Prospectus.

The accounting policies, methods and estimates the Bank utilises determine how it reports its financial condition and financial performance, and they may require management to make estimates or rely on assumptions about matters that are inherently uncertain, such estimates and assumptions may require revision, and changes to them could have a significant impact on the Bank’s operating results and financial position.

Management exercises judgment in selecting and applying the Bank’s accounting policies and methods to ensure that, while IFRS compliant, they reflect the Bank’s best judgment of the most appropriate manner in which to record and report the Banks’ financial condition and financial performance.

Certain accounting policies are “critical” to understanding the financial performance and the financial condition of the Bank as they (i) require management to make certain judgments and estimates, some of which may relate to matters that are uncertain and (ii) changes in these judgments and estimates could have a material impact on the Bank’s financial results and financial condition. These significant accounting policies and estimates relate to the fair value determination of financial instruments, the impairment of financial assets, the impairment of non-financial assets, pension plans and other post-employment benefits, income taxes, provisions, consolidation of structured entities and classification of debt instruments. Any changes to these estimates and assumptions may have a significant impact on the Bank’s operating results and financial position.

Risks related to the Issuer's financial, operational and strategic situation incorporated by reference.

Additional information on risks related to the Issuer's financial, operational and strategic situation can be found in the Risk Management section of the Issuer's 2021 Annual Report and the Risk Management section of the 2022 Second Quarter Report incorporated by reference into this prospectus under the following headings: credit risk on pages 78 to 86 of the Issuer's 2021 Annual Report and on pages 26 to 27 of the 2022 Second Quarter Report, liquidity and funding risk on pages 94 to 103 of the Issuer's 2021 Annual Report and on pages 31 to 40 of the 2022 Second Quarter Report, operational risk on pages 103 to 104 of the Issuer's 2021 Annual Report and strategic risk on page 107 of the Issuer's 2021 Annual Report.

(b) Risks related to the Issuer's business activities and industry

Changes in market rates and prices may adversely affect the value of financial products held by the Bank.

Market risk is the risk of losses arising from movements in market prices. Market risk comes from a number of factors, particularly changes to market variables such as interest rates, credit spreads, exchange rates, equity prices, commodity prices and implied volatilities. The Bank is exposed to market risk through its participation in trading, investment and asset/liability management activities. Trading activities involve taking positions on various instruments such as bonds, shares, currencies, commodities or derivative financial instruments. The Bank is exposed to non-trading market risk through its asset/liability management and investment portfolios.

At its onset, the COVID-19 pandemic sent stock markets into sharp decline and rendered them more volatile, pushed interest rates downwards, triggered a rapid and sudden rise in unemployment, and prompted an economic slowdown. In spring 2020, governments, monetary authorities, and regulators intervened to support the economy and the financial system, notably by deploying fiscal and monetary measures designed to increase liquidity and support incomes. Although the global economy recovered during fiscal 2021, if the COVID-19 pandemic persists, in particular through subsequent waves, its impacts on the global economy could worsen, and the measures in place might not be sufficient over the long term to completely avoid recessionary conditions.

The Bank's trading portfolios include positions in financial instruments and commodities held either with trading intent or to hedge other elements of the trading book. Positions held with trading intent are those held for short-term resale and/or with the intent of taking advantage of actual or expected short-term price movements or to lock in arbitrage profits. These portfolios target one of the following objectives: market making, liquidating positions for clients or selling financial products to clients.

The Bank's non-trading portfolios include financial instruments intended to be held to maturity as well as those held for daily cash management or for the purpose of maintaining targeted returns or ensuring asset and liability management.

It is difficult to predict with accuracy changes in economic and market conditions and to anticipate the effects that such changes could have on the Bank's financial performance, which may adversely affect the value of financial products held by the Bank and in turn could have an adverse effect on the Bank's revenues.

Movements of the Canadian dollar relative to other currencies, particularly the U.S. dollar and the currencies of other jurisdictions in which the Bank conducts business, may affect the Bank's revenues, expenses and earnings.

Currency rate movements in Canada, the United States and other countries in which the Bank does business could significantly impact the Bank's financial position, as a result of foreign currency translation adjustments, and the Bank's future earnings. For example, if the value of the Canadian dollar rises against the U.S. dollar, the Bank's investments and earnings in the U.S. may be negatively affected. Changes in the value of the Canadian dollar relative to the U.S. dollar may also affect the earnings of the Bank's small business, commercial and corporate clients in Canada. The Bank's structural foreign exchange risk arises from investments in foreign operations denominated in currencies other than the Canadian dollar. This risk, predominantly in U.S. dollars, is measured by assessing the impact of currency fluctuations on retained earnings. The Bank uses financial instruments (derivative and non-derivative) to hedge this risk. An adverse change in foreign exchange rates can also impact the Bank's capital ratios due to the amount of risk-weighted assets denominated in a foreign currency. The structural foreign exchange risk is managed to ensure that the potential impacts on the capital ratios and net income are within tolerable limits set by risk policies. However, there is no guarantee that such policies will provide adequate protection in all instances and any fluctuation of the Canadian dollar has the potential to adversely affect the Bank's investments and earnings and the earnings of the Bank's small business, commercial and corporate clients, particularly if those clients are present in import/export-oriented sectors, which in turn may affect the Bank's revenues, expenses and earnings.

The Bank's earnings are affected by the monetary policies of the Bank of Canada and the Board of Governors of the Federal Reserve System in the United States and other financial market developments.

The monetary policies of the Bank of Canada and the United States Federal Reserve Board as well as other interventionist measures in capital markets have repercussions on the Bank's revenues. Variations in the money supply and the general level of interest rates could impact the Bank's profitability. A change in the level of interest rates can affect the interest spread between the Bank's deposits and loans and as a result could impact the Bank's net interest income. Changes in monetary policy and developments in the financial markets are beyond the Bank's control and difficult to predict or anticipate and could have an adverse effect on the Bank's earnings and its ability to fulfil its obligations under the Notes.

The Bank's revenues and earnings are substantially dependant on the general economic and business conditions in regions where it operates.

Although the Bank operates primarily in Canada, it also has business operations in the United States and other countries. The Bank is exposed to financial risks outside Canada and the United States primarily through its interbank transactions on international financial markets or through international trade finance activities. This geographic exposure represents a moderate proportion of the Bank's total risk.

The Bank's revenues could therefore be affected by the economic and business conditions prevailing in the countries in which it operates, including as a result of the strength of the economy and inflation, the credit conditions of businesses, financial market and exchange rate fluctuations, monetary policy trends and interest rates. All of these factors affect the business and economic conditions in a given geographic region and, consequently, affect the Bank's level of business activity and resulting earnings in that region. Although some risks may seem remotely related to the Bank's business context, strong global economic and financial integration requires a vigilant approach.

After a strong rebound, the global economy appears to be losing steam. In Europe, a rise in the number of COVID-19 cases coupled with a spike in energy prices could certainly dampen consumer spending and business profitability. The news coming out of China has also been mixed. Given soaring electricity prices in 2021, Beijing was forced to impose temporary power cuts, which obviously had repercussions on manufacturing operations. Now that the energy situation is improving, COVID-19 is limiting plant operations. The woes of the real estate sector, which is currently engaged in a painful debt reduction process, are also noteworthy. Despite these challenges, the global economy is still expected to grow by 4.0%¹ in 2022, after posting 5.5% growth in 2021.²

Unlike the global economy, which appears to be slowing down, the Canadian economy is performing relatively well. Employment has returned to pre-pandemic levels in just under 19 months. That is not only the fastest recovery seen in the past four recessions but also an outstanding performance compared to the U.S.—where employment levels remain at nearly 3% below the pre-recession peak. Canada's private sector brought in 618,000 more workers between May and October 2021—the largest increase ever seen excluding the post-lockdown reopening period in 2020. While an upsurge in raw material prices will continue to benefit the Canadian economy, supply chain disruptions and the resulting inflation are a risk in the current context. That said, the labour market recovery suggests that Canadian households are ready to stand on their own with no extraordinary government assistance. Substantial surplus savings have already been amassed (11.4% of GDP), helping to cushion the blow of the rising cost of living. 3.8%³ growth is anticipated in 2022.

The Bank monitors international developments that may affect the Canadian economy. Even though Canada has reached a trade agreement with its North American partners, American protectionism continues to pose a risk to Canada. For example, the U.S. administration did not hesitate to threaten Mexico with tariffs during the migrant dispute, even though a trade agreement had just been reached. In addition, the current Chinese-American conflict may gradually lead to the development of two quite separate supply chains. Should this occur, Canadian companies that choose to focus on the U.S. market may be denied access to the Chinese market, while those that choose the Chinese market may have more difficulty gaining market share in the United States. These uncertainties may significantly destabilize certain sectors, and the Bank has responded by continuing to monitor market developments and remaining vigilant in line with its risk tolerance policy.

However, despite the Bank's vigilance, its revenues remain exposed to the economic and business conditions prevailing in Canada, the United States and other countries in which the Bank operates.

The COVID-19 pandemic has impacted the global economy, the financial markets and the Bank, and the ultimate impact of the pandemic will depend on future events that are highly uncertain and cannot be predicted.

On 11 March 2020, the World Health Organization (WHO) declared that the COVID-19 outbreak constituted a pandemic, requiring important protective measures be taken to prevent overcrowding of health services and to strengthen preventive hygiene. This global pandemic prompted many countries, including Canada,

¹ GDP growth expectations, Economic and Strategy group of National Bank Financial.

² GDP growth expectations, Economic and Strategy group of National Bank Financial.

³ GDP growth expectations, Economic and Strategy group of National Bank Financial.

to implement lockdown and social distancing measures designed to prevent new outbreaks. In many countries, those measures included the closing of aerial, maritime, and land borders.

During the summer of 2020, some of the restrictions imposed at the start of the pandemic were eased, but subsequent waves of COVID-19 in autumn 2020 forced authorities in a number of countries, including Canada, to reintroduce lockdown measures, effectively shutting down parts of the economy again. During the winter of 2021, a vaccination campaign began in Canada and picked up steam in the spring, leading to a reopening in early summer 2021. The authorities in many countries, including Canada, actively worked to ensure that widespread vaccination coverage was achieved as quickly as possible. However, uncertainty remains regarding the long-term effectiveness of the vaccines, the acceptance thereof by the public, and the anticipated reduction of infection rates, especially given a rise in cases linked to COVID-19 variants, which appear to be more contagious. Certain measures by the public health authorities in Canada are expected to remain in place to continue limiting the spread of COVID-19 and its variants.

In Canada, banking services are considered essential services and were therefore maintained despite the lockdown and social distancing measures. Given the current economic and social conditions, the Bank is committed to supporting its employees, clients, and communities.

At its onset, the COVID-19 pandemic had disruptive and adverse effects in the countries where the Bank operates and, more broadly, on the global economy. Among other disruptions, COVID-19 sent stock markets into sharp decline and rendered them more volatile, disrupted global supply chains, triggered a rapid and sudden rise in unemployment, and prompted an economic slowdown.

In spring 2020, governments, monetary authorities, and regulators intervened to support the economy and the financial system, notably by deploying fiscal and monetary measures designed to increase liquidity and support incomes. They also eased the capital and liquidity requirements imposed on financial institutions. While a global economic rebound was seen during fiscal 2021, if the COVID-19 pandemic persists, in particular through subsequent waves, its impacts on the global economy could worsen and the measures in place might not be enough over the long term to completely avoid recessive conditions.

Aside from its impacts on the global economy and in the countries where the Bank operates, the COVID-19 pandemic has had, and may continue to have, impacts on the Bank, on the way in which it operates, and on its clients. Since much of the Bank's business involves granting loans or providing liquidity to clients (which include individuals, businesses, and governments), the impacts of the COVID-19 pandemic on these clients could have a significant adverse effect on the Bank's business, results of operations, financial position, and reputation by, for example, causing higher credit losses.

Given the measures taken by the Bank to support telework, which could continue for some time, and given increased client use of digital tools, the Bank, its clients, and its service providers are also exposed to a greater risk of cyberthreats, cyberattacks, breaches, and fraudulent activities as well as to operational risks. The Bank closely monitors its operations to detect any indications of increased phishing, fraud, privacy breaches, and cyberattacks, and it raises awareness about information security threats among its clients, employees, and service providers. The Bank is unaware of how the societal landscape (including changes in consumer behaviour, in policies, and in regulations) will evolve or how it will have changed after the COVID-19 pandemic.

Given these circumstances, the COVID-19 pandemic has put into perspective and may continue to put into perspective many of the top and emerging risks to which the Bank is exposed, i.e., credit risk, market risk, liquidity and funding risk, operational risk, regulatory compliance risk, reputation risk, strategic risk,

information security and cybersecurity risk, and the risk of reliance on technology and third parties. These risks are described in more detail in the Risk Management section of the 2021 Annual Report.

The Bank is continuing to closely monitor the potential impacts of the COVID-19 pandemic. It is not possible to predict the full impacts that the pandemic will have on the global economy, on the countries in which the Bank operates, on the Bank's clients, and on the Bank itself, including its business activities, results of operations, financial position, regulatory capital and liquidity ratios, reputation, and ability to satisfy regulatory requirements. The actual impacts will depend on future events that are highly uncertain, including the extent, severity, and duration of the COVID-19 pandemic, and on the effectiveness of actions and measures taken by governments, monetary authorities, and regulators over the long term.

The Bank faces intense competition in all aspects of its business from established competitors and new entrants in the financial services industry.

The level of competition in the Bank's markets has an impact on its performance. Retaining clients hinges on several factors, including the prices of products and services, quality of service, and changes to the products and services offered. A description of the Bank's principal business segments, including their related competitive conditions can be found under the section entitled "National Bank of Canada" in this Prospectus.

On the one hand, the Bank's financial performance depends on its ability to develop and market new and innovative products and services, adopt and develop new technologies that help differentiate its products and services and generate cost savings, and market these new products and services at the right time and at competitive prices. On the other hand, failure to properly review critical changes within the business before and during the implementation and deployment of key technological systems or failure to align client expectations with the Bank's client commitments and operating capabilities could adversely affect the Bank's business, operating results, financial position, and reputation.

The Bank's more limited ability to acquire intellectual property rights.

The Bank protects the intellectual property developed by its employees in connection with their duties. However, in some cases, it may have a more limited ability to acquire intellectual property rights. Moreover, the intellectual property rights acquired by the Bank provide no guarantees that they will be effective in deterring or preventing a third party from misappropriating intellectual property or providing a defense against the misappropriation of intellectual property. For details on other risks the Bank faces related to technology and third parties, see the risk factor entitled "Reliance on technology and third parties may affect the Bank's ability to serve and retain its clients" below in this Prospectus.

Moreover, the goods and services developed by the Bank are provided in a competitive market where third parties could hold intellectual property rights prior to those held by the Bank. In such circumstances, there is no guarantee that the Bank will successfully provide a defense against an infringement claim, that it will be able to modify its goods and services to avoid infringing upon third party rights, or that it will obtain a licence with commercially acceptable conditions, which could have an adverse impact on the Bank's business and results of operations. See also the risk factor sub-category entitled "Risks related to the Issuer's business activities and industry" above in this Prospectus for more details on risks facing the Bank in connection with its competitive market.

The Bank's ability to attract and retain key resources may affect the Bank's future performance.

The Bank's future performance depends greatly on its ability to recruit, develop, and retain key resources. There is strong competition in the financial services sector in terms of attracting and retaining the most qualified people, notably with the arrival of new players in certain sectors and the emergence of the global workforce concept. As a result, reports are periodically presented to the Board through the governance mechanisms of the Human Resources Committee, the aim being to deploy appropriate strategies to implement conditions favourable to the Bank's competitiveness as an employer. There is no assurance that the Bank or a business acquired by the Bank will be able to continue recruiting or retaining talented people.

The Bank is exposed to international risks which may affect future results.

Through the operations of some of its units (mainly its New York and London offices) and subsidiaries in Canada and abroad (in particular, Credigy Ltd., NBC Global Finance Limited and Advanced Bank of Asia Limited), the Bank is exposed to risks arising from its presence in international markets and foreign jurisdictions. While these risks do not affect a significant proportion of the Bank's portfolios, their impact must not be overlooked, especially those that are of a legal or regulatory nature. Such risk can be particularly high when the exposure is in a territory where the enforceability of agreements signed by the Bank is uncertain, in countries and regions facing political or socio-economic disturbances, or in countries that may be subject to international sanctions.

Generally speaking, there are many ways in which the Bank may be exposed to the risks posed by other countries, not the least of which being foreign laws and regulations. In all such situations, it is important to consider what is referred to as "country risk." Country risk affects not only the activities that the Bank carries out abroad, but also the business that it conducts with non-resident clients as well as the services it provides to clients doing business abroad, such as electronic funds transfers, international products and transactions made from Canada in foreign currencies.

To control country risk, the Bank sets credit concentration limits by country and reviews and submits them to the Board for approval upon renewal of the Credit Risk Management Policy. These limits are based on a percentage of the Bank's regulatory capital, in line with the level of risk represented by each country, particularly emerging countries. The risk is rated using a classification mechanism similar to the one used for credit default risk. In addition to the country limits, authorization caps and limits are established, as a percentage of capital, for the world's high-risk regions, i.e., essentially all regions except for North America, Western European countries and the developed countries of Asia. See also the risk factors under the sub-category entitled "Legal and Regulatory Risk" below for further details on risks to the Bank related to legal and regulatory compliance matters.

In addition, as part of its activities, the Bank must adhere to anti-money laundering and anti-terrorist financing (AML/ATF) regulatory requirements in effect in each jurisdiction where it conducts business. It must also comply with the requirements pertaining to current international sanctions in these various jurisdictions. Money laundering and terrorist financing is a financial, regulatory and reputation risk. In order to meet these regulatory requirements, the Bank has implemented a programme to combat AML/ATF in addition to a programme on international sanctions.

Despite the Bank's programmes, it is not possible for the Bank to prevent exposure entirely which could affect its future results.

Environmental, social and governance ("ESG") approach and climate change.

Environmental and social risk is the possibility that environmental and social matters would result in a financial loss for the Bank or affect its business activities. This risk encompasses many topics, in particular pollution and waste; the use of energy, water, and other resources; climate change; biodiversity; human rights; inclusion and diversity; labour standards; community health; occupational health and safety; the rights of Indigenous Peoples and consultation thereof; as well as cultural heritage. The impact of environmental and social risk could also increase exposure to strategic, reputation, and regulatory compliance risks if the Bank's response is deemed inadequate or non-compliant with commitments. The Bank is directly exposed to such risk through its own activities and indirectly exposed through the activities of its clients.

Assessing and mitigating environmental and social risk are integral parts of the Bank's risk management framework. Environmental and social issues are now central to the Bank's decision-making process and are becoming increasingly strategic matters for the Bank. Taking these risks into consideration could even be viewed as a considerable asset in certain financing or investment transactions, and doing so also contributes to promoting exemplary practices to the Bank's stakeholders.

The Bank has adopted environmental, social and governance (ESG) principles that show the importance it attaches to sustainable development and to balancing the interests of societal stakeholders. These ESG principles have already been incorporated into the organization's priorities. ESG indicators have also been added to various monitoring dashboards and are gradually being integrated into the risk appetite framework. Reports on these indicators and on the Bank's ESG commitments are periodically presented to several Board committees.

The Bank has also implemented an environmental policy that applies to all activities and decisions made across the Bank. This policy clearly sets out the principles used to identify and limit environmental risk and climate risk as well as the impacts therefrom on the community and on the Bank's business segments. To proactively ensure the strategic positioning of its entire portfolio, the Bank continues to express its commitment to support the transition towards a low-carbon economy while continuing to closely monitor related developments and implications.

Accordingly, the Bank supports a wide range of sustainable development initiatives and further demonstrates its commitment by deploying many initiatives that incorporate environmental and social topics into its business and operational decisions. These efforts also entail a continuous and stronger adaptation, as well as additional mitigation measures, in the event of an interruption or disruption of its activities due to major crises such as natural disasters or health crises.

ESG factors continue to be integrated into the Bank's processes as part of the implementation of its strategy and guiding principles approved by the Board. This integration is being conducted with due diligence, specifically in the area of the credit-granting process, starting with the corporate credit portfolio. For this clientele, the ESG risk analysis framework calls for the collection of information on carbon emissions and includes a climate risk classification (transition and physical risks) based on industry as well as scores assigned by ESG rating agencies. Several other criteria are also taken into consideration, in particular the management of waste, labour standards, corporate governance, product liability as well as human rights policies.

The Bank also works with various industry partners to identify and implement sound management practices that promote a transition to a low-carbon economy. Aware that it has a mobilizing role to play, the Bank supports the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Moreover, it has continued to demonstrate its commitment to mitigating climate risk by becoming a signatory

to the Partnership for Carbon Accounting Financials (PCAF) as well as by joining the United Nations' Net-Zero Banking Alliance (NZBA) in addition to setting GHG emission reduction targets for its own business activities. The Bank is working on a plan, for the upcoming year, to define the actions to be undertaken to meet the above-mentioned commitments; at present time, it is impossible to determine the related amounts. The Bank is also committed to communicating, in full transparency, the information recommended by these groups as well as to periodically publishing its own performance reports.

Reliance on technology and third-party providers may affect the Bank's ability to serve and retain its clients

The Bank is reliant on technology, as clients are seeking greater access to products and services on a variety of platforms that must support substantial data volumes. The fast pace of technological change combined with both client and competitive pressures require significant and sustained technology investments. Inadequate implementation of technological improvements or new products or services could significantly affect the Bank's ability to serve and retain clients. Third parties provide essential components of the Bank's technological infrastructure such as Internet connections and access to network and other communications services. The Bank also relies on the services of third parties to support certain business processes and to handle certain IT activities. An interruption of these services or a breach of security could have an unfavourable impact on the Bank's ability to provide products and services to its customers and to conduct business, not to mention the impact that such events would have on the Bank's reputation. To mitigate this risk, the Bank has a third-party risk management framework wherein information security, financial health, and performance are validated before any agreements are reached and throughout the life of the agreements. It also includes business continuity plans, which are tested periodically to ensure their effectiveness in times of crisis. A governance and accountability structure has also been established to support decision-making based on sound risk management.

Aware of the significance of third-party risk, the Bank makes sure that its practices evolve in collaboration with its financial sector partners and with regulatory authorities. Despite these preventive measures and the efforts deployed by the Bank's teams to manage third parties, there remains a possibility that certain risks will materialize. In such cases, the Bank would rely on mitigation mechanisms developed in collaboration with the various agreement owners and third parties concerned. If, despite its mitigation efforts, certain risks do materialize, it could adversely affect the Bank's ability to serve and retain its clients, which in turn could have an adverse effect on its results.

Risks related to the Issuer's business activities and industry incorporated by reference

Additional information on risks related to the Issuer's business activities and industry can be found in the Risk Management section of the Issuer's 2021 Annual Report and the Risk Management section of the 2022 Second Quarter Report incorporated by reference into this prospectus under the following headings: market risk on pages 87 to 93 of the Issuer's 2021 Annual Report and on pages 28 to 31 of the 2022 Second Quarter Report, reputation risk on page 106 of the Issuer's 2021 Annual Report and environmental and social risk on page 107 of the Issuer's 2021 Annual Report.

(c) Legal and regulatory risk

Legislative and regulatory amendments and changes to guidelines in the jurisdictions where the Bank operates could affect the Bank's results.

The Bank operates in a highly regulated industry. Regulatory compliance risk is present in all of the daily operations of each Bank segment. A situation of regulatory non-compliance can adversely affect the Bank's reputation and result in penalties and sanctions or increased oversight by regulators. Changes in regulatory and legal frameworks are a significant potential risk factor for the Bank. Various laws, regulations and other guidelines have been introduced by governments and regulatory bodies to protect the interests of the general public as well as the Bank's clients, employees and shareholders.

Like all Canadian financial institutions, the Bank is facing regulatory changes that are being implemented at an increasing rate. As part of a coordinated effort by Government of Canada agencies, Office of the Superintendent of Financial Institutions (Canada) ("OSFI") and other regulatory authorities governing the Bank's activities have taken a number of actions to reinforce the resilience of Canadian banks and improve the stability of the Canadian financial system and economy in response to challenges posed by COVID-19 and current market conditions. Regulatory authorities are also stepping up their oversight activities and focusing on the effects of the pandemic on the activities, capital strength, and liquidity of regulated entities.

Several regulatory changes came into effect in 2021, such as the *Code of Conduct for the Delivery of Banking Services to Seniors*. Other changes will soon come into force, including Bill C-86 and its regulations, which amend the *Bank Act* (Canada). The purpose of these regulatory changes is to ensure that consumers are protected by way of enhanced disclosures, assessments of the appropriateness of products and services, employee training, and procedures related to the processing of complaints.

Given changing technologies and societal behaviours, privacy and the protection of personal information is a topical issue in Canada. Recent regulatory measures (such as the *General Data Protection Regulation* (GDPR) in Europe in 2018 and the *California Consumer Privacy Act* in the United States in 2020) reflect a desire to implement a stronger legislative framework in the areas of confidentiality and use of personal information. In Quebec, in September 2021, the government adopted Bill 64, *An Act to Modernize Legislative Provisions as Regards the Protection of Personal Information*, which has introduced substantial changes when it comes to the protection of personal information. Essentially, the *Act* promotes transparency, raises the level of confidentiality of data, and provides a framework for the collection, use, and sharing of personal information. A new federal bill that will modernize the protection of personal information is expected soon. On April 30, 2022, separate coverage for registered education savings plans and registered disability savings plans took effect as part of changes to the *Canada Deposit Insurance Corporation Act*.

Changes to these and other laws, regulations and other guidelines, including changes in their interpretation and application, could have a significant impact on the Bank's results. In particular, such changes could limit its product and service offering or enhance its competitors' ability to rival the Bank's offering with their own. Also, in spite of the precautions the Bank takes to prevent such an eventuality, failure to comply with laws, regulations and other guidelines could give rise to penalties and fines likely to have an adverse impact on its financial results and reputation.

Legal proceedings and judicial or regulatory orders, decisions or judgments against the Bank may adversely affect the Bank's results

The Bank takes reasonable measures to comply with the laws and regulations in effect in the jurisdictions where it operates. Should these measures prove ineffective, the Bank could be subject to judicial or regulatory decisions resulting in fines, damages, or other costs or to restrictions likely to adversely affect its operating results or its reputation. The Bank may also be subject to litigation in the normal course of business. It is impossible to determine the outcome of the claims instituted or which may be instituted against the Bank and its subsidiaries. The Bank estimates, based on the information at its disposal, that

while the amount of contingent liabilities pertaining to these claims, taken individually or in the aggregate, could have a material impact on the Bank's consolidated results of operations for a particular period, it would not have a material adverse impact on the Bank's consolidated financial position. Nevertheless, although the Bank establishes provisions for the measures it is subject to under accounting requirements, actual losses resulting from such litigation could differ significantly from the recognized amounts, and unfavourable outcomes in such cases could have a significant adverse effect on the Bank's operating results. The resulting reputational damage could also affect the Bank's future business prospects.

Legal and regulatory risk incorporated by reference

Additional information on risks related to the Issuer's legal and regulatory risk can be found in the Risk Management section of the Issuer's 2021 Annual Report incorporated by reference into this prospectus under the heading regulatory compliance risk on pages 104 to 106.

Factors which are material for the purpose of assessing the market risks associated with Senior Notes issued under the Programme

(1) Risks related to the structure of a particular issue of Securities

A wide range of Senior Notes may be issued under the Programme. A number of these Senior Notes may have features which contain particular risks for potential investors. Set out below is a description of the most common of such features distinguishing between factors which may occur in relation to any Senior Notes and those which impact access in relation to certain types of Exempt Notes.

(a) Risks applicable to all Senior Notes

- *Senior Notes subject to optional redemption by the Bank*

An optional redemption feature is likely to limit the market value of Senior Notes and could reduce their secondary market liquidity. During any period when the Bank may elect to redeem Senior Notes, the market value of those Senior Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The Bank may be expected to redeem Senior Notes when its cost of borrowing is lower than the interest rate on the Senior Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Senior Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

- *Fixed/Floating Rate Notes*

Fixed/Floating Rate Notes may bear interest at a rate that converts from a fixed rate to a floating rate, or from a floating rate to a fixed rate. If the rate converts from a fixed rate to a floating rate, the spread on the Fixed/Floating Rate Notes may be less favourable than then prevailing spreads on comparable Floating Rate Notes tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on other Senior Notes. If the rate converts from a floating rate to a fixed rate, the fixed rate may be lower than then prevailing rates on its Senior Notes.

- *Range Accrual Notes*

If the Notes include a “range accrual” feature (“**Range Accrual Notes**”) then interest will only be paid if the level of the underlying interest rates on the relevant valuation date(s) is at or above one or more specified lower barrier(s) and/or at or below one or more specified upper barrier(s) (as applicable). It is possible that such level of the underlying interest rates on the relevant valuation date(s) will not be at or above/below the specified barrier(s) or not be within the specified range during the relevant interest determination period (as applicable) and, therefore, no interest will be payable on the relevant interest payment date. This means that the amount of interest payable to a Noteholder over the term of the Range Accrual Notes may vary and may be zero.

- *Fixed Rate Reset Notes*

A holder of Senior Notes with a fixed rate of interest that will periodically reset during the term of the relevant Senior Notes is exposed to the risk of fluctuating interest rate levels and uncertain interest income. Fixed Rate Reset Notes will initially bear interest at the Initial Rate of Interest until (but excluding) the First Reset Date. On the First Reset Date, the Second Reset Date (if applicable) and each Subsequent Reset Date (if any) thereafter, the interest rate will be reset to be the sum of (i) the applicable Mid-Swap Rate, Benchmark Gilt Rate or Reference Bond Rate and (ii) the relevant Margin as determined by the Calculation Agent on the relevant Reset Determination Date (each such interest rate, a “Subsequent Reset Rate”). The Subsequent Reset Rate for any Reset Period could be less than the Initial Rate of Interest or the Subsequent Reset Rate for prior Reset Periods and could affect the value of an investment in the Fixed Rate Reset Notes.

- *Zero Coupon Notes*

Changes in market interest rates have a substantially stronger impact on the prices of Zero Coupon Notes than on the prices of ordinary Senior Notes because the discounted issue prices are substantially below par. If market interest rates increase, Zero Coupon Notes can suffer higher price losses than other Senior Notes having the same maturity and credit rating. Due to their leverage effect, Zero Coupon Notes are a type of investment associated with a particularly high price risk.

- *Senior Notes issued at a substantial discount or premium may experience significant price volatility in response to changes in interest rates*

The issue price of Senior Notes specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement may be more than the market value of such Senior Notes as of the issue date, and the price, if any at which a Dealer or any other person is willing to purchase the Senior Notes in secondary market transactions may be lower than the issue price.

The market values of Senior Notes issued at a substantial discount or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing Senior Notes. If market interest rates increase, such Senior Notes can suffer higher price losses as compared to conventional interest-bearing Senior Notes having the same maturity and credit rating. Generally, the longer the remaining term of the Senior Notes, the greater the price volatility as compared to conventional interest-bearing Senior Notes with comparable maturities and credit.

(b) Risks applicable to Bail-inable Notes

Senior Notes will be subject to risks, including non-payment in full or conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates, under Canadian bank resolution powers.

Bail-inable Notes (as defined below) are subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the *Canada Deposit Insurance Corporation Act* (the “**CDIC Act**”) and to variation or extinguishment in consequence and subject to the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Senior Notes. Notwithstanding any other terms of the Bank’s liability, any other law that governs the Bank’s liability and any other agreement, arrangement or understanding between the parties with respect to the Bank’s liability, each holder or beneficial owner of an interest in the Bail-inable Notes is deemed to be bound by the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes and is deemed to attorn to the jurisdiction of the courts in the Province of Québec in Canada.

Certain provisions of and regulations under the *Bank Act* (Canada) (the “**Bank Act**”), the CDIC Act and certain other Canadian federal statutes pertaining to banks (collectively, the “**Bail-in Regime**”), provide for a bank recapitalization regime for banks designated by the Superintendent of Financial Institutions (Canada) (the “**Superintendent**”) as domestic systemically important banks (“**D-SIBs**”), which include the Bank.

The expressed objectives of the Bail-in Regime include reducing government and taxpayer exposure in the unlikely event of a failure of a D-SIB, reducing the likelihood of such a failure by increasing market discipline and reinforcing that bank shareholders and creditors are responsible for the D-SIBs’ risks and not taxpayers, and preserving financial stability by empowering the *Canada Deposit Insurance Corporation* (“**CDIC**”), Canada’s resolution authority, to quickly restore a failed D-SIB to viability and allow it to remain open and operating, even where the D-SIB has experienced severe losses.

Under the CDIC Act, in circumstances where the Superintendent is of the opinion that the Bank has ceased, or is about to cease, to be viable and viability cannot be restored or preserved by exercise of the Superintendent’s powers under the Bank Act, the Superintendent, after providing the Bank with a reasonable opportunity to make representations, is required to provide a report to CDIC. Following receipt of the Superintendent’s report, CDIC may request the Minister of Finance for Canada (the “**Minister of Finance**”) to recommend that the Governor in Council (Canada) make an Order (as defined below) and, if the Minister of Finance is of the opinion that it is in the public interest to do so, the Minister of Finance may recommend that the Governor in Council (Canada) make, and on such recommendation, the Governor in Council (Canada) may make, one or more Orders including a Conversion Order (see “*Risks related to the Senior Notes generally – Canadian bank resolution powers confer substantial powers on Canadian authorities designed to enable them to take a range of actions in relation to the Bank where a determination is made that the Bank has ceased, or is about to cease, to be viable and such viability cannot be restored or preserved, which if taken could result in holders or beneficial owners of Senior Notes being exposed to losses*”).

Upon the making of a Conversion Order, prescribed shares and liabilities under the Bail-in Regime that are subject to that Conversion Order will, to the extent converted, be converted into common shares of the Bank or any of its affiliates, as determined by CDIC (a “**Bail-in Conversion**”). Subject to certain exceptions discussed below, the Bail-in Regime provides that senior debt issued on or after 23 September 2018, with an initial or amended term to maturity (including explicit or embedded options) greater than 400 days, that

is unsecured or partially secured and that has been assigned a CUSIP or ISIN or similar identification number are subject to a Bail-in Conversion. Shares, other than common shares, and subordinated debt of the Bank will also be subject to a Bail-in Conversion, unless they are non-viability contingent capital. All Senior Notes that are subject to Bail-in Conversion will be identified as Bail-inable Notes in the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement (**"Bail-inable Notes"**).

Covered bonds, derivatives and certain structured notes (as such term is used under the Bail-in Regime) are expressly excluded from a Bail-in Conversion. To the extent that any Senior Notes constitute structured notes (as such term is used under the Bail-in Regime) they will not be Bail-inable Notes and will not be identified as Bail-inable Notes in the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement. As a result, claims of some creditors whose claims would otherwise rank equally with those of the holders of Bail-inable Notes would be excluded from a Bail-in Conversion and thus the holders and beneficial owners of Bail-inable Notes will have to absorb losses ahead of these other creditors as a result of the Bail-in Conversion while other creditors may not be exposed to losses.

If the CDIC were to take action under the Canadian bank resolution powers with respect to the Bank, this could result in holders or beneficial owners of Bail-inable Notes being exposed to conversion of the Bail-inable Notes in whole or in part. Upon a Bail-in Conversion, the holders of Bail-inable Notes that are converted will be obligated to accept the common shares of the Bank or any of its affiliates into which such Bail-inable Notes, or any portion thereof, are converted even if such holders do not at the time consider such common shares to be an appropriate investment for them, and despite any change in the Bank or any of its affiliates or the fact that such common shares are issued by an affiliate of the Bank or any disruption to or lack of a market for such common shares or disruption to capital markets generally. The terms and conditions of the Bail-in Conversion will be determined by CDIC in accordance with and subject to certain requirements discussed below (see *"The number of common shares to be issued in connection with, and the number of common shares that will be outstanding following, a Bail-in Conversion are unknown. It is also unknown whether the shares to be issued will be those of the Bank or one of its affiliates"* below). See also *"Risks related to Senior Notes generally - Investors who hold less than the minimum Specified Denomination (including after a partial Bail-in Conversion or any other resolution action) may be unable to sell their Senior Notes and may be adversely affected if definitive Senior Notes are subsequently required to be issued"* below for a risk of partial conversions.

As a result, holders of Bail-inable Notes should consider the risk that they may lose all or part of their investment, plus any accrued interest or additional amounts, if CDIC were to take action under the Canadian bank resolution powers, including the Bail-in Regime, and that any remaining outstanding Senior Notes, or common shares of the Bank or any of its affiliates into which Bail-inable Notes are converted, may be of little value at the time of a Bail-in Conversion and thereafter.

Bail-inable Notes will provide only limited acceleration and enforcement rights for the Bail-inable Notes and will include other provisions intended to qualify such Senior Notes as TLAC.

In connection with the Bail-in Regime, the Office of the Superintendent of Financial Institutions' ("OSFI") guideline as interpreted by the Superintendent (the **"TLAC Guideline"**) on Total Loss Absorbing Capacity (**"TLAC"**) applies to and establishes standards for D-SIBs, including the Bank. Under the TLAC Guideline, beginning November 1, 2021, the Bank is required to maintain a minimum capacity to absorb losses composed of unsecured external long-term debt that meets the prescribed criteria or regulatory capital instruments to support recapitalization in the event of a failure. Bail-inable Notes and regulatory capital instruments that meet the prescribed criteria will constitute TLAC of the Bank.

In order to comply with the TLAC Guideline, Bail-inable Notes must provide for terms and conditions necessary to meet the prescribed criteria and qualify at their issuance as TLAC instruments of the Bank under the TLAC Guideline. Those criteria include the following:

- the Bank cannot directly or indirectly have provided financing to any person for the express purpose of investing in the Bail-inable Notes;
- the Bail-inable Notes are not subject to set-off or netting rights;
- the Bail-inable Notes must not provide rights to accelerate repayment of principal or interest payments outside of bankruptcy, insolvency, wind-up or liquidation, except that events of default relating to the non-payment of scheduled principal and/or interest payments will be permitted where they are subject to a cure period of no less than 30 business days and clearly disclose to investors that: (i) acceleration is only permitted where an Order (as defined below) has not been made in respect of the Bank; and (ii) notwithstanding any acceleration, the instrument could still be subject to a Bail-in Conversion prior to its repayment;
- the Bail-inable Notes may be redeemed or purchased for cancellation (as applicable) only at the initiative of the Bank and, where the redemption or purchase would lead to a breach of the Bank's minimum TLAC requirements, that redemption or purchase would be subject to the prior approval of the Superintendent;
- the Bail-inable Notes do not have credit-sensitive dividend or coupon features that are reset periodically based in whole or in part on the Bank's credit standing; and
- where an amendment or variance of the Bail-inable Notes' terms and conditions would affect its recognition as TLAC, such amendment or variance will only be permitted with the prior approval of the Superintendent.

As a result, the terms of the Bail-inable Notes provide that acceleration will only be permitted (i) if the Bank defaults in the payment of the principal or interest for a period of more than 30 business days, or (ii) certain bankruptcy, insolvency or reorganization events occur. Holders and beneficial owners of Bail-inable Notes may only exercise, or direct the exercise of, such rights in respect of Bail-inable Notes where an Order has not been made under Canadian bank resolution powers pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank. Notwithstanding the exercise of those rights, Bail-inable Notes will continue to be subject to Bail-in Conversion until paid in full.

The terms of the Bail-inable Notes also provide that holders or beneficial owners of Bail-inable Notes will not be entitled to exercise, or direct the exercise of, any set-off or netting rights with respect to Bail-inable Notes. In addition, where an amendment, modification or other variance that can be made to the Bail-inable Notes would affect the recognition of the Bail-inable Notes by the Superintendent as TLAC, that amendment, modification or variance will require the prior approval of the Superintendent.

Further information on the bail-in regime and TLAC Guideline can be found in the section entitled "Basel Accord and Regulatory Environment" on pages 60 to 63 of the Bank's 2021 Annual Report, which is incorporated by reference in this Prospectus. The bail-in regime and TLAC Guideline could adversely affect the Bank's cost of funding.

The circumstances surrounding a Bail-in Conversion are unpredictable and can be expected to have an adverse effect on the market price of Bail-inable Notes.

The decision as to whether the Bank has ceased, or is about to cease, to be viable is a subjective determination by the Superintendent that is outside the control of the Bank. Upon a Bail-in Conversion, the interests of depositors and holders of liabilities and securities of the Bank that are not converted will effectively all rank in priority to the portion of Bail-inable Notes that are converted. In addition, except as provided for under the compensation process, the rights of holders in respect of the Bail-inable Notes that have been converted will rank in parity with other holders of common shares of the Bank (or, as applicable, common shares of the affiliate whose common shares are issued on the Bail-in Conversion).

There is no limitation on the type of Order that may be made where it has been determined that the Bank has ceased, or is about to cease, to be viable. As a result, holders of Bail-inable Notes may be exposed to losses through the use of Canadian bank resolution powers other than a Conversion Order or in liquidation.

Because of the uncertainty regarding when and whether an Order will be made and the type of Order that may be made, it will be difficult to predict when, if at all, Bail-inable Notes could be converted into common shares of the Bank or any of its affiliates and there is not likely to be any advance notice of an Order. As a result of this uncertainty, trading behaviour in respect of the Bail-inable Notes may not follow trading behaviour associated with convertible or exchangeable securities or, in circumstances where the Bank is trending towards ceasing to be viable, other senior debt. Any indication, whether real or perceived, that the Bank is trending towards ceasing to be viable can be expected to have an adverse effect on the market price of the Bail-inable Notes. Therefore, in those circumstances, holders of Bail-inable Notes may not be able to sell their Bail-inable Notes easily or at prices comparable to those of senior debt securities not subject to Bail-in Conversion.

The number of common shares to be issued in connection with, and the number of common shares that will be outstanding following, a Bail-in Conversion are unknown. It is also unknown whether the shares to be issued will be those of the Bank or one of its affiliates.

Under the Bail-in Regime there is no fixed and pre-determined contractual conversion ratio for the conversion of the Bail-inable Notes, or other shares or liabilities of the Bank that are subject to a Bail-in Conversion, into common shares of the Bank or any of its affiliates nor are there specific requirements regarding whether liabilities subject to a Bail-in Conversion are converted into common shares of the Bank or any of its affiliates. CDIC determines the timing of the Bail-in Conversion, the portion of Bail-inable shares and liabilities to be converted and the terms and conditions of the Bail-in Conversion, subject to parameters set out in the Bail-in Regime. Those parameters, include that:

- in carrying out a Bail-in Conversion, CDIC must take into consideration the requirement in the Bank Act for banks to maintain adequate capital;
- CDIC must use its best efforts to ensure that shares and liabilities subject to a Bail-in Conversion are only converted after all subordinate ranking shares and liabilities that are subject to a Bail-in Conversion and any subordinate non-viability contingent capital instruments have been previously converted or are converted during the same restructuring period;
- CDIC must use its best efforts to ensure that the converted part of the liquidation entitlement of a share subject to a Bail-in Conversion, or the converted part of the principal amount and accrued and unpaid interest of a liability subject to a Bail-in Conversion, is converted on a pro rata basis for

all shares or liabilities subject to a Bail-in Conversion of equal rank that are converted during the same restructuring period;

- holders of shares and liabilities that are subject to a Bail-in Conversion must receive a greater number of common shares per dollar of the converted part of the liquidation entitlement of their shares, or the converted part of the principal amount and accrued and unpaid interest of their liabilities, than holders of any subordinate shares or liabilities subject to a Bail-in Conversion that are converted during the same restructuring period or of any subordinate non-viability contingent capital that is converted during the same restructuring period;
- holders of shares or liabilities subject to a Bail-in Conversion of equal rank that are converted during the same restructuring period must receive the same number of common shares per dollar of the converted part of the liquidation entitlement of their shares or the converted part of the principal amount and accrued and unpaid interest of their liabilities; and
- holders of shares or liabilities subject to a Bail-in Conversion must receive, if any non-viability contingent capital of equal rank to the shares or liabilities is converted during the same restructuring period, a number of common shares per dollar of the converted part of the liquidation entitlement of their shares, or the converted part of the principal amount and accrued and unpaid interest of their liabilities, that is equal to the largest number of common shares received by any holder of the non-viability contingent capital per dollar of that capital.

As a result, it is not possible to anticipate the potential number of common shares of the Bank or its affiliates that would be issued in respect of any Bail-inable Notes converted on a Bail-in Conversion, the aggregate number of such common shares that will be outstanding following the Bail-in Conversion, the effect of dilution on the common shares received in respect of any Bail-inable Notes converted on a Bail-in Conversion from other issuances of common shares of the same issuer under or in connection with an Order or related actions in respect of the Bank or its affiliates or the value of any common shares received by the holders of converted Bail-inable Notes, which could be significantly less than the amount which may otherwise have been due under the converted Bail-inable Notes. It is also not possible to anticipate whether shares of the Bank or shares of its affiliates would be issued in a Bail-in Conversion. There may be an illiquid market, or no market at all, in the common shares issued upon a Bail-in Conversion and such holders may not be able to sell those common shares at a price equal to the value of the converted Bail-inable Notes and as a result may suffer significant losses that may not be offset by compensation, if any, received as part of the compensation process. Fluctuations in exchange rates may exacerbate such losses.

By acquiring Bail-inable Notes, each holder or beneficial owner of those Bail-inable Notes is deemed to agree to be bound by a Bail-in Conversion and so will have no further rights in respect of its Bail-inable Notes to the extent those Bail-inable Notes are converted in a Bail-in Conversion other than those provided under the Bail-in Regime. Any potential compensation to be provided through the compensation process under the CDIC Act is unknown.

The CDIC Act provides for a compensation process for holders of Bail-inable Notes who immediately prior to the making of an Order, directly or through an intermediary, own Bail-inable Notes that are converted in a Bail-in Conversion. While this process applies to successors of such holders it does not apply to assignees or transferees of the holder following the making of the Order and does not apply if the amounts owing under the relevant Bail-inable Notes are paid in full.

Under the compensation process, the compensation to which such holders are entitled is the difference, to the extent it is positive, between the estimated liquidation value and the estimated resolution value of the relevant Bail-inable Notes. The liquidation value is the estimated value the Bail-inable Notes holders would have received if an order under the *Winding-up and Restructuring Act* (Canada) had been made in respect of the Bank, as if no Order had been made and without taking into consideration any assistance, financial or otherwise, that is or may be provided to the Bank, directly or indirectly, by CDIC, the Bank of Canada, the Government of Canada or a province of Canada, after any order to wind up the Bank has been made.

The resolution value in respect of relevant Bail-inable Notes is the aggregate estimated value of the following: (a) the relevant Bail-inable Notes, if they are not held by CDIC and they are not converted, after the making of an Order, into common shares under a Bail-in Conversion; (b) common shares that are the result of a Bail-in Conversion after the making of an Order; (c) any dividend or interest payments made, after the making of the Order, with respect to the relevant Bail-inable Notes to any person other than CDIC; and (d) any other cash, securities or other rights or interests that are received or to be received with respect to the relevant Bail-inable Notes as a direct or indirect result of the making of the Order and any actions taken in furtherance of the Order, including from CDIC, the Bank, the liquidator of the Bank, if the Bank is wound up, the liquidator of a CDIC subsidiary incorporated or acquired by order of the Governor in Council for the purposes of facilitating the acquisition, management or disposal of real property or other assets of the Bank that CDIC may acquire as the result of its operations that is liquidated or the liquidator of a bridge institution if the bridge institution is wound up.

In connection with the compensation process, CDIC is required to estimate the liquidation value and the resolution value in respect of the portion of converted Bail-inable Notes and is required to consider the difference between the estimated day on which the liquidation value would be received and the estimated day on which the resolution value is, or would be, received.

CDIC must, within a reasonable period following a Bail-in Conversion, make an offer of compensation by notice to the relevant holders that held Bail-inable Notes equal to, or in value estimated to be equal to, the amount of compensation to which such holders are entitled or provide a notice stating that such holders are not entitled to any compensation. In either case such notice is required to include certain prescribed information, including important information regarding the rights of such holders to seek to object and have the compensation to which they are entitled determined by an assessor (a Canadian Federal Court judge) where holders of liabilities representing at least 10 per cent. of the principal amount and accrued and unpaid interest of the liabilities of the same class object to the offer or absence of compensation. The period for objecting is limited (45 days following the day on which a summary of the notice is published in the *Canada Gazette*) and failure by holders holding a sufficient principal amount plus accrued and unpaid interest of affected Bail-inable Notes to object within the prescribed period will result in the loss of any ability to object to the offered compensation or absence of compensation, as applicable. CDIC will pay each relevant holder the offered compensation within 135 days after the date on which a summary of the notice is published in the *Canada Gazette* if the offer of compensation is accepted by the holder, the holder does not notify CDIC of acceptance or objection to the offer within the aforementioned 45-day period or the holder objects to the offer but the 10 per cent. threshold described above is not met within the aforementioned 45-day period.

Where an assessor is appointed, the assessor could determine a different amount of compensation payable, which could either be higher or lower than the original amount. The assessor is required to provide holders, whose compensation it determines, notice of its determination. The assessor's determination is final and there are no further opportunities for review or appeal. CDIC will pay the relevant holders the compensation amount determined by the assessor within 90 days of the assessor's notice.

By its acquisition of an interest in any Bail-inable Note, each holder or beneficial owner of those Bail-inable Notes is deemed to agree to be bound by a Bail-in Conversion and so will have no further rights in respect of its Bail-inable Notes to the extent those Bail-inable Notes are converted in a Bail-in Conversion, other than those provided under the Bail-in Regime.

A similar compensation process to the one set out above applies, in certain circumstances, where as a result of CDIC's exercise of bank resolution powers, Senior Notes are assigned to an entity which is then wound-up.

Following a Bail-in Conversion, holders that held Bail-inable Notes that have been converted will no longer have rights against the Bank as creditors.

Upon a Bail-in Conversion, the rights, terms and conditions of the portion of Bail-inable Notes that are converted, including with respect to priority and rights on liquidation, will no longer apply as the portion of converted Bail-inable Notes will have been converted on a full and permanent basis into common shares of the Bank or any of its affiliates ranking on parity with all other outstanding common shares of that entity. If a Bail-in Conversion occurs, then the interest of the depositors, other creditors and holders of liabilities of the Bank not bailed-in as a result of the Bail-in Conversion will all rank in priority to those common shares.

Given the nature of the Bail-in Conversion, holders or beneficial owners of Bail-inable Notes that are converted will become holders or beneficial owners of common shares at a time when the Bank's and potentially its affiliates' financial condition has deteriorated. They may also become holders or beneficial owners of common shares at a time when the relevant entity may have received or may receive a capital injection or equivalent support with terms that may rank in priority to the common shares issued in a Bail-in Conversion with respect to the payment of dividends, rights on liquidation or other terms although there is no certainty that any such capital injection or support will be forthcoming.

Bail-inable Notes may be redeemed after the occurrence of a TLAC Disqualification Event.

If the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement, for the Senior Notes of such Series specify that a TLAC Disqualification Event Call is applicable, the Bank may, at its option with the prior approval of the Superintendent, redeem all, but not less than all of the outstanding Senior Notes of that Series within 90 days of the occurrence of the TLAC Disqualification Event (as defined in the Conditions) at the Early Redemption Amount specified in the applicable Final Terms or, in the case of Exempt Notes, any applicable Pricing Supplement, together (if applicable) with any accrued but unpaid interest to (but excluding) the date fixed for redemption. If the Bank redeems the outstanding Senior Notes of that Series, holders of such Bail-inable Notes may not be able to reinvest the proceeds from such redemption in securities offering a comparable anticipated rate of return. Additionally, although the terms of each Series of Bail-inable Notes are anticipated to be established to satisfy the TLAC criteria within the meaning of the TLAC Guideline to which the Bank is subject, it is possible that any Series of Bail-inable Notes may not satisfy the criteria in future rulemaking or interpretations.

(c) United Kingdom resolution risks applicable to the Senior Notes

The United Kingdom's Banking Act 2009 (as amended, the "UK Banking Act") confers substantial powers on a number of United Kingdom authorities designed to enable them to take a range of actions in relation to United Kingdom banks, United Kingdom building societies, United Kingdom investment firms and United Kingdom recognised central counterparties which are considered to be at risk of failing. In certain circumstances such actions may also be taken with modifications, against a third country institution or investment firm. The exercise of any of these actions in relation to the Bank could materially adversely affect the value of any Senior Notes.

Under the UK Banking Act, substantial powers are granted to HM Treasury, the Bank of England, the FCA and the Prudential Regulation Authority (the "**PRA**") (together, the "**Authorities**") as part of a special resolution regime ("**SRR**").

These SRR powers can be exercised, as applicable, by the Authorities in respect of a third country incorporated credit institution (such as the Bank) or a third country incorporated investment firm ("**third country entity**") or third country parent undertaking, either where that third country entity is subject to resolution in its jurisdiction of incorporation (a "**third country resolution action**") or where no third country resolution actions have been taken, but the Authorities consider that the commencement of resolution proceedings meet certain conditions including that it is in the public interest. The Authorities' powers (such as those to bail-in liabilities) are subject to additional conditions where they are used in respect of branches of third-country entities (such as the Bank) as compared with their use in respect of United Kingdom banks.

Risks related to Senior Notes issued by the Bank's London branch

The Authorities can choose to recognise a third country resolution action, either in whole or in part. Alternatively, under the UK Banking Act, the Authorities can independently resolve a London branch of a third country entity (such as the Bank's London branch) even if it is not subject to third country resolution action (including resolution proceedings of the Canadian authorities), or where the Authorities have refused to recognise or enforce third country resolution action.

Under the SRR, the Authorities can make a statutory instrument that provides for the exercise of the stabilisation options. The stabilisation options include: (i) private sector purchaser option; (ii) bridge bank option; (iii) asset management vehicle option; (iv) bail-in option; and (v) temporary public sector ownership option. Exercise of the SRR options is possible where the relevant Authorities are acting to support or give full effect to a resolution carried out by the Canadian resolution authority and the Authorities' actions may include actions such as transferring assets located in the UK to a purchaser under the Canadian equivalent of a sale of business tool, or to a bridge bank in Canada.

If the Authorities independently resolved the London branch of a third country entity, their stabilisation options are limited to the 'business of the UK branch' and are: (i) to transfer some or all of the assets, rights and liabilities to a private sector purchaser, bridge bank or asset management vehicle; and (ii) to bail-in liabilities (including the Senior Notes) in connection with the transfer to the private-sector purchaser, bridge bank or asset management vehicle (the "**IRUKBPs**").

The concept of the 'business of the UK branch' is defined as: (i) any rights and liabilities of the third-country institution arising as a result of the operations of the UK branch; and (ii) any other property in the UK of the third-country institution. The Senior Notes will be considered to be within the business of the branch where they arise 'as a result of the operations of the Bank's London branch'. Where the Senior Notes are issued in the name of the Bank's London branch and/or are otherwise part of the business of the branch, for example, through being included within the London branch's return form (a type of semi-annual account for

the branch) to the PRA it is likely that such Senior Notes will be considered by the Authorities to be within the business of the branch. However, these powers are untested, and if there is an adequate degree of operational involvement by the Bank's London branch in the issuance, there is a risk that the Authorities may consider that the Senior Notes issued by the Bank in Canada to be within the business of the branch due to the broad definition of this term.

Risks for Noteholders

Noteholders may be subject to the relevant powers listed above, which may result in such Noteholders losing some or all of their investment. As at the date of this Prospectus, the Authorities have not exercised any powers under the SRR in respect of either the Bank or the Bank's London branch and there has been no indication that they will do so. However, there can be no assurance that this will not change and any exercise of any power under the SRR or any suggestion of such exercise could, therefore, adversely affect the rights of the Noteholders, the price or value of their investment in the Senior Notes and/or the ability of the Bank to satisfy its obligations under the relevant Senior Notes.

The paragraphs below set out some of the possible consequences of the exercise of the powers under the SRR.

The SRR may be triggered prior to insolvency of the Bank

The purpose of the SRR is to address the situation where all or part of the business of a third country entity has encountered, or is likely to encounter, financial difficulties, giving rise to wider public interest concerns in the UK, and so to provide the Authorities with the appropriate powers to transfer (and then write down where necessary) those rights and liabilities of the branch of the third country entity. Where support is given to third country resolution actions, under the UK Banking Act the Authorities must have regard to the Special Resolution Objectives including Special Resolution Objective 8 which applies when using or considering the use of their powers. Alternatively, the Authorities may exercise the IRUKBPs if at least one of the following apply: (a) the PRA is satisfied that Condition 1 is met, and the Bank of England is satisfied that Conditions 2, 4 and 5 are met; (b) the Bank of England is satisfied that Conditions 3 and 4 are met; or (c) the Bank of England is satisfied that Condition 4 is met and Condition 5 is met by virtue of its first limb (Condition 5 (a)).

The Conditions referred to above are as follows: Condition 1: The Bank is failing or likely to fail (i.e. failing to satisfy the threshold conditions or the Bank or its London branch being unable or unwilling to pay debts or liabilities owed to EEA creditors or otherwise arising from the business of the branch as they fall due); Condition 2: It is not reasonably likely that action will be taken by or in respect of the Bank that will result in Condition 1 above ceasing to be met; Condition 3: Either: (a) the third-country entity is unable or unwilling, or is likely in the near future to be unable or unwilling, to pay its debts or other liabilities owed to UK creditors or otherwise arising from the business of the branch as they fall due; and (b) no Canadian resolution action has been taken, or other normal insolvency proceedings initiated, and it is not likely in the near future that resolution action will be taken or proceedings initiated; Condition 4: Making a property transfer instrument is necessary having regard to public interest in the advancement of one or more resolution objectives; and Condition 5: Either: (a) Canadian resolution action has been taken (or the Authorities have been notified that action will be taken) and the Authorities have refused or propose to refuse to recognise such action; or (b) Canadian resolution action has not been, and is not likely to be, taken in relation to the Bank. It is therefore possible that the IRUKBPs could be exercised prior to the point at which any insolvency proceedings with respect to the relevant entity could be initiated.

A partial transfer of business of the Bank's London branch may result in a deterioration of the Bank's creditworthiness

If the Bank's London branch were made subject to the IRUKBPs, and a partial transfer of its business to another entity were effected, the quality of the assets and the quantum of the liabilities not transferred and remaining with the Bank's London branch (which may include the Senior Notes) will result in a deterioration in the creditworthiness of the Bank and, as a result, increase the risk that it will be unable to meet its obligations in respect of the Senior Notes and/or eventually become subject to administration or insolvency proceedings. In such circumstances, Noteholders may have a claim for compensation under compensation schemes in Canada, but there can be no assurance that the Noteholders would thereby recover compensation promptly or equal to any loss actually incurred.

Depositor preference

In addition, amendments to the United Kingdom's Insolvency Act 1986 have introduced changes to the treatment and ranking of certain preferential debts with the result that certain eligible deposits will rank in priority to the claims of ordinary (i.e. non-preferred) unsecured creditors in the event of an insolvency. This means that if the Senior Notes are transferred to another entity subject to the UK Banking Act in the United Kingdom under the IRUKBPs, the claims of Noteholders would rank junior to the claims in respect of liabilities afforded preferred status and accordingly, in the event of insolvency or resolution of that United Kingdom entity, Senior Notes would be available to absorb losses ahead of liabilities which benefit from such preference.

As at the date of this Prospectus, the relevant Authorities have not made an instrument or order under the UK Banking Act in respect of the Bank or the Bank's London branch and there has been no indication that they will make any such instrument or order. However, there can be no assurance that this will not change and/or that the Noteholders will not be adversely affected by any such order or instrument if made.

(d) Risks relating to benchmark reforms and discontinuation

The regulation and reform of benchmarks may adversely affect the value of and return on any Senior Notes linked to or referencing such benchmarks

Various interest rates and other indices which are deemed to be benchmarks (including the Euro Interbank Offered Rate ("**EURIBOR**") and the Constant Maturity Swap Rate ("**CMS Rate**")) are the subject of recent national, international and other regulatory guidance and proposals for reform. Some of these reforms are already effective whilst others are still to be implemented. These reforms may cause such benchmarks to perform differently than in the past, to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on any Senior Notes linked to such a benchmark.

Regulation (EU) 2016/1011 (as amended from time to time, the "**EU Benchmarks Regulation**") was published in the Official Journal of the European Union on 29 June 2016 and has applied from 1 January 2018 (with the exception of provisions specified in Article 59 (mainly on critical benchmarks) that have applied since 30 June 2016). Subject to certain transitional provisions, the EU Benchmarks Regulation applies to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark within the EU and, as it forms part of UK domestic law by virtue of the EUWA, within the UK (the "**UK Benchmarks Regulation**"). Among other things (and subject to similar regimes in the EU (with the register of benchmark administrators administered by ESMA) and the UK (with the register of benchmark administrators administered by the FCA), it: (a) requires benchmark administrators to be

authorised or registered (or, if non-EU based or non-UK based (as applicable), to be subject to an equivalent regime or otherwise recognised or endorsed by the relevant authority) and (b) prevents certain uses by EU-supervised entities and UK-supervised entities (as defined in the EU Benchmarks Regulation or UK Benchmarks Regulation (as applicable)) of benchmarks of administrators that are not authorised or registered by the relevant authority (or if non-EU based or non-UK based (as applicable), not deemed equivalent or recognised or endorsed by the relevant authority). The EU Benchmarks Regulation and/or the UK Benchmarks Regulation could have a material impact on any Notes linked to or referencing a benchmark, in particular, if the methodology or other terms of the benchmark are changed in order to comply with the requirements of such regulation(s). Such changes could (amongst other things) have the effect of reducing, increasing or otherwise affecting the volatility of the published rate or level, of the benchmark.

More broadly, any of the international or national reforms, or the general increased regulatory scrutiny of benchmarks, might increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements.

Unless Benchmark Discontinuation is specified as being not applicable in the applicable Final Terms and subject as provided under "Administrator/Benchmark Event" (other than for Notes where the Original Reference Rate specified in the Final Terms is U.S. dollar LIBOR or SOFR Compounded Rate and Condition 4(p) (*Benchmark Replacement Provisions – Compounded SOFR*) is specified as applicable in the Final Terms, the Conditions provide for certain fallback arrangements in the event of a Benchmark Event (as defined in the Conditions) (including where a published benchmark, such as LIBOR, EURIBOR, SONIA, €STR or CMS Rate, (including any page on which such benchmark may be published (or any successor service)) becomes unavailable, or where the Issuer, the Principal Paying Agent or the Calculation Agent are no longer permitted lawfully to calculate interest on any Senior Notes by reference to such an Original Reference Rate under the Benchmarks Regulation or otherwise), including the possibility that the rate of interest could be determined by the Issuer in consultation with an Independent Adviser (if any) (as defined below) (and if the Issuer is unable to appoint an Independent Adviser or unable to make the relevant determination in consultation with an Independent Adviser, determined by the Issuer itself) and set by reference to a successor rate or an alternative reference rate and that such successor rate or alternative reference rate may be adjusted (if required) in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to investors arising out of the replacement of the relevant benchmark. However, it may not be possible to determine or apply any such adjustment and even if an adjustment is applied, such adjustment may not be effective to reduce or eliminate economic prejudice to investors. In certain circumstances the ultimate fallback of interest for a particular Interest Period may result in the rate of interest for the last preceding Interest Period being used. This may result in the effective application of a fixed rate for Floating Rate Notes based on the rate which was last observed on the Screen Page or, in the case of Fixed Rate Reset Notes, the application of the Reset Rate for the preceding Reset Period or, in the case of the First Reset Date, the Initial Rate of Interest applicable to such Senior Notes on the Interest Commencement Date. Any of these alternative methods may result in interest payments that are lower than or that do not otherwise correlate over time with the payments that would have been made on the Senior Notes if LIBOR, EURIBOR, the CMS Rate or any other relevant benchmark were available in their current form.

Where Benchmark Discontinuation is not specified as being applicable in the applicable Final Terms, there will be no specific provisions applying in the context of a Benchmark Event and the general fallback provisions in the Conditions will apply without the application of Condition 4(o) (*Benchmark Discontinuation*) (other than for Notes where the Original Reference Rate specified in the Final Terms is SOFR Compounded Rate and Condition 4(p) (*Benchmark Replacement Provisions – Compounded SOFR*) is specified as

applicable in the Final Terms. In certain circumstances the ultimate fallback of interest for a particular Interest Period may result in the rate of interest for the last preceding Interest Period being used. This may result in the effective application of a fixed rate for Floating Rate Notes based on the rate which was last observed on the Screen Page or, in the case of Fixed Rate Reset Notes, the application of the Reset Rate for the preceding Reset Period or, in the case of the First Reset Date, the Initial Rate of Interest applicable to such Senior Notes on the Interest Commencement Date. Further the terms of a particular Series of Notes may mean that the Calculation Agent would determine the relevant terms, as applicable – See further “Risk Factors – Risks related to Senior Notes generally – Conflict of Interest”.

Notwithstanding any other provision of the Conditions or the Agency Agreement, the consent or approval of the Noteholders are not required in the case of amendments to the Conditions pursuant to Condition 4(o) (*Benchmark Discontinuation*) to vary the method or basis of calculating the rate or rates or amount of interest or the basis for calculating any Interest Amount in respect of the Senior Notes or for any other variation of the Conditions and/or the Agency Agreement required to be made in the circumstances described Condition 4(o) (*Benchmark Discontinuation*), where the Issuer has delivered to the relevant Agent a certificate in the form and manner required by the benchmark discontinuation provisions. Any such amendment made pursuant to Condition 4(o) (*Benchmark Discontinuation*) could have unexpected commercial consequences and there can be no assurance that, due to the particular circumstances of each Noteholder, any such amendment will be favourable to each Noteholder.

In addition, due to the uncertainty concerning the availability of successor rates and alternative reference rates and the involvement of an Independent Adviser and/or the Issuer, Condition 4(o) (*Benchmark Discontinuation*) may not operate as intended at the relevant time. More generally, any of the above matters or any other significant change to the setting or existence of any relevant reference rate could affect the ability of the Issuer to meet its obligations under the Floating Rate Notes or Fixed Rate Reset Notes and could have a material adverse effect on the value or liquidity of, and the amount payable under, the Floating Rate Notes or Fixed Reset Notes. Investors should consider these matters, should consult their own independent advisers and make their own assessment about the potential risks imposed by benchmark reforms and investigations and licensing issues in making any investment decision with respect to such Senior Notes linked to a benchmark.

In the case of –IBOR or swap rate linked Notes, if an –IBOR or swap rate were discontinued or otherwise unavailable, amounts payable on the Notes which reference such –IBOR or swap rate will be determined for the relevant period by the fall-back provisions applicable to such Notes which may (depending on market circumstances at the relevant time) not operate as intended. Depending on the manner in which the relevant –IBOR or swap rate is to be determined under the Note Conditions and subject as provided in "Administrator/Benchmark Event" and "Benchmark Transition Event" below, this may in certain circumstances (i) be reliant upon the provision by reference banks of offered quotations for the –IBOR rate or bid and offered quotations for the fixed leg of interest rate swap transactions (as applicable) which, depending on market circumstances, may not be available at the relevant time or (ii) in the case of an –IBOR where the applicable fall-back is to use the rate which applied in the previous period when the relevant –IBOR was available, result in the effective application of a fixed rate based on the rate which applied in the previous period or (iii) in the case of a swap rate result in the application of a Calculation Agent determined rate. Any of the foregoing could have an adverse effect on the value or liquidity of, and return on, any the Notes

Benchmark Replacement Provisions

If the Original Reference Rate specified in the Final Terms is SOFR Compounded Rate and Condition 4(p), is specified as applicable in the Final Terms, the benchmark replacement provisions will apply to the Notes. If the Issuer or its designee determines that a Benchmark Transition Event and its related Benchmark Replacement Date has occurred, the then current benchmark will be replaced by a replacement rate (determined by the Issuer or its designee (which may be an affiliate of the Issuer) in accordance with Condition 4(p) and the Issuer or its designee will have the right to make Benchmark Replacement Conforming Changes. In cases where the Issuer (whether alone or in consultation with its designee) makes determinations under Condition 4(p), it may be entitled to exercise substantial discretion and may be subject to conflicts of interest in exercising this discretion.

In light of the foregoing, investors should be aware that:

- any of these fallbacks may result in interest payments that are lower than or that do not otherwise correlate over time with the payments that would have been made on a Series of Notes if SOFR was available in its current form;
- while the benchmark replacement provisions allow the base rate on the Notes of such Series to change from SOFR Compounded Rate to a successor rate or an alternative rate and, in either case, allow for an adjustment spread (as applicable), there can be no assurance that any such modifications will fully or effectively mitigate all or any relevant interest rate risks or result in an equivalent methodology for determining the interest rates on the Notes of such Series which could result in a material adverse effect on the value of and return on such Notes;
- if SOFR is discontinued or unrepresentative such that the benchmark replacement provisions are triggered, there can be no assurance that the applicable fallback provisions under any swap agreements would operate so as to ensure that the benchmark used to determine payments under such swap agreements would be the same as that used to determine interest payments under the Notes;
- the operation of the benchmark replacement provisions (i) will be made without the consent of the Noteholders, (ii) may result in the relevant base rate on the Notes of such Series being materially different from the Original Reference Rate and (iii) may be adverse to the interests of the holders of the Notes and may have an adverse effect on the value of and the return on the Notes of such Series; and
- due to the uncertainty concerning the availability of successor rates and alternative reference rates and the determination of the applicable adjustment spread (if any) and the involvement of the Issuer or its designee, as applicable, the benchmark replacement provisions may not operate as intended at the relevant time.

Any of the factors above and their consequences could have a material adverse effect on the trading market for, value of, and return on, the Notes of any such Series.

The market continues to develop in relation to SONIA as a reference rate for Floating Rate Notes

Where the applicable Final Terms for a Series of Notes (or the applicable Pricing Supplement in the case of Exempt Notes) specifies that the interest rate for such Notes will be determined by reference to SONIA,

interest will be determined on the basis of Compounded Daily SONIA (as defined in the Terms and Conditions of the Notes). Compounded Daily SONIA differs from sterling LIBOR in a number of material respects, including (without limitation) that Compounded Daily SONIA is a backwards-looking, compounded, risk-free overnight rate, whereas sterling LIBOR is expressed on the basis of a forward-looking term and includes a credit risk-element based on inter-bank lending. As such, investors should be aware that sterling LIBOR and SONIA may behave materially differently as interest reference rates for Notes. The use of SONIA as a reference rate for Eurobonds is nascent, and is subject to change and development, both in terms of the substance of the calculation and in the development and adoption of market infrastructure for the issuance and trading of debt securities referencing SONIA.

Accordingly, prospective investors in any Notes referencing Compounded Daily SONIA should be aware that the market continues to develop in relation to SONIA as a reference rate in the capital markets and its adoption as an alternative to sterling LIBOR. In the context of backwards-looking SONIA rates, market participants and relevant working groups are, as at the date of this Prospectus, assessing the differences between compounded rates and weighted average rates, and such groups (including ICE Benchmark Administration Limited, Refinitiv and FTSE Russell) have developed forward-looking 'term' SONIA reference rates (which seek to measure the market's forward expectation of an average SONIA rate over a designated term by reference, primarily, to SONIA Overnight Index Swap quotes provided in interdealer central limit order books and, where such data is unavailable, subject to a waterfall of alternative data). The adoption of SONIA might, accordingly, see component inputs into swap rates or other composite rates transferring from sterling LIBOR or another reference rate to SONIA.

The market or a significant part thereof may adopt an application of SONIA that differs significantly from that set out in the Terms and Conditions as applicable to Notes referencing a SONIA rate that are issued under this Prospectus. Furthermore the Issuer may in the future issue Notes referencing SONIA that differ materially in terms of interest determination when compared with any previous SONIA referenced Notes issued by it under the Programme. The continued development of Compounded Daily SONIA as an interest reference rate for the Eurobond markets, as well as continued development of SONIA-based rates for such market and the market infrastructure for adopting such rates, could result in reduced liquidity or increased volatility or could otherwise affect the market price of any SONIA-referenced Notes issued under the Programme from time to time.

Furthermore, interest on Notes which reference Compounded Daily SONIA is only capable of being determined at the end of the relevant Observation Period and immediately or shortly prior to the relevant Interest Payment Date. It may be difficult for investors in Notes which reference Compounded Daily SONIA to estimate reliably the amount of interest which will be payable on such Notes, and some investors may be unable or unwilling to trade such Notes without changes to their information technology systems, both of which could adversely impact the liquidity of such Notes. Further, in contrast to LIBOR-based Notes, if Notes referencing Compounded Daily SONIA become due and payable as a result of an event of default under Condition 9, or are otherwise redeemed early on a date other than an Interest Payment Date, the rate of interest payable for the final Interest Period in respect of such Notes shall only be determined immediately or shortly prior to the date on which the Notes become due and payable and shall not be reset thereafter.

In addition, the manner of adoption or application of SONIA reference rates in the Eurobond markets may differ materially compared with the application and adoption of SONIA in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of SONIA reference rates 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 Notes referencing Compounded Daily SONIA.

As SONIA and the SONIA Compounded Index are published by the Bank of England based on data from other sources, the Issuer has no control over their determination, calculation or publication. There can be no guarantee that SONIA and the SONIA Compounded Index will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in Floating Rate Notes that reference SONIA. If the manner in which SONIA and/or the SONIA Compounded Index is calculated is changed, that change may result in a reduction of the amount of interest payable on the relevant Floating Rate Notes and the trading prices of such Notes. Furthermore, to the extent SONIA or the SONIA Compounded Index is no longer published, the applicable rate to be used to calculate the Rate of Interest on such Floating Rate Notes will be determined using the alternative methods described in the Terms and Conditions of the Notes. Such alternative methods may result in interest payments that are lower than, or do not otherwise correlate over time with, the payments that would have been made on such Floating Rate Notes if SONIA and/or the SONIA Compounded Index had been provided by the Bank of England in its current form. In addition, the use of such alternative methods may also result in a fixed rate of interest being applied to the relevant Floating Rate Notes.

Accordingly, an investment in Floating Rate Notes that reference SONIA entail significant risks not associated with similar investments in conventional debt securities. Any investor should ensure that it understands the nature of the terms of such Floating Rate Notes and the extent of its exposure to risk, and that it considers the suitability of such Floating Rate Notes as an investment in the light of its own circumstances and financial condition. An investor should consult its own professional advisers about the risks associated with investment in Floating Rate Notes that reference SONIA and the suitability of investing in such Floating Rate Notes in light of its particular circumstances.

The market continues to develop in relation to SOFR as a reference rate for Floating Rate Notes

Where the applicable Final Terms for a Series of Notes (or the applicable Pricing Supplement in the case of Exempt Notes) specifies that the interest rate for such Notes will be determined by reference to SOFR, interest will be determined on the basis of SOFR (as defined in the Terms and Conditions of the Notes). SOFR differs from U.S. dollar LIBOR in a number of material respects, including (without limitation) that SOFR is a backwards-looking, compounded, secured, risk-free overnight rate, whereas U.S. dollar LIBOR is expressed on the basis of a forward-looking term and includes a credit risk-element based on inter-bank lending. As such, investors should be aware that U.S. dollar LIBOR and SOFR may behave materially differently as interest reference rates for Notes. The use of SOFR as a reference rate is nascent, and is subject to change and development, both in terms of the substance of the calculation and in the development and adoption of market infrastructure for the issuance and trading of debt securities referencing SOFR.

The publication of SOFR began in April 2018, and, therefore, it has a limited history. In addition, the future performance of SOFR cannot be predicated based on the limited historical performance. Future levels of SOFR may bear little or no relation to the historical actual or historical indicative SOFR data. Prior observed patterns, if any, in the behaviour of market variables and their relation to SOFR, such as correlations, may change in the future. While some pre-publication historical data have been released by the Federal Reserve Bank of New York, such analysis inherently involves assumptions, estimates and approximations. The future performance of SOFR is impossible to predict and therefore no future performance of SOFR may be inferred from any of the historical actual or historical indicative data. Hypothetical or historical performance

data are not indicative of, and have no bearing on, the potential performance of SOFR. There can be no assurance that SOFR or Compounded SOFR (as defined in Condition 4(d)) will be positive.

Since the initial publication of SOFR, daily changes in the rate have, on occasion, been more volatile than daily changes in other benchmark or market rates, such as three-month U.S. dollar LIBOR, during corresponding periods, and SOFR may bear little or no relation to the historical actual or historical indicative data. For example, volatility in the overnight repo market caused SOFR to increase temporarily to 5.25% in September 2019. In addition, although changes in Compounded SOFR generally are not expected to be as volatile as changes in daily levels of SOFR, the return on value of and market for any SOFR-referenced Notes issued under the Programme from time to time may fluctuate more than floating rate securities that are linked to less volatile rates. In addition, the volatility of SOFR has reflected the underlying volatility of the overnight U.S. Treasury repo market. The Federal Reserve Bank of New York (the “**FRBNY**”) has at times conducted operations in the overnight U.S. Treasury repo market in order to help maintain the federal funds rate within a target range. There can be no assurance that the FRBNY will continue to conduct such operations in the future, and the duration and extent of any such operations is inherently uncertain. The effect of any such operations, or of the cessation of such operations to the extent they are commenced, is uncertain and could be materially adverse to investors in the Notes.

According to the Alternative Reference Rate Committee (“**ARRC**”), SOFR was developed for use in certain U.S. dollar derivatives and other financial contracts as an alternative to U.S. dollar LIBOR in part because it is considered a good representation of general funding conditions in the overnight U.S. Treasury repurchase agreement 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 a suitable replacement 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 cost of banks), which may, in turn, lessen market acceptance of SOFR. Some banks in the U.S. are proposing Bloomberg’s Short-Term Bank Yield Index or Ameribor as alternatives to SOFR. Any failure of SOFR to gain market acceptance could adversely affect the return on and value of any SOFR-referenced Notes issued under the Programme from time to time and the price at which investors can sell such Notes in the secondary market.

For any SOFR-referenced Notes issued under the Programme from time to time, in each Interest Period, the interest rate is based on Compounded SOFR, which is calculated using the specific formula described in Condition 4(d), not the SOFR rate published on or in respect of a particular date during such Interest Period or an arithmetic average of SOFR rates during such period. For this and other reasons, the interest rate on the SOFR-referenced Notes during any Interest Period will not be the same as the interest rate on other SOFR-linked investments that use an alternative basis to determine the applicable interest rate. Further, if the SOFR rate in respect of a particular date during an Interest Period is negative, its contribution to Compounded SOFR will be less than one, resulting in a reduction to Compounded SOFR used to calculate the interest payable on the SOFR-referenced Notes on the Interest Payment Date for such Interest Period.

In addition, the level of Compounded SOFR applicable to a particular Interest Period and, therefore, the amount of interest payable with respect to such Interest Period will be determined on the Interest Determination Date for such Interest Period. Because each date such date is near the end of such Interest Period, investors will not know the amount of interest payable with respect to a particular Interest Period until shortly prior to the related Interest Payment Date and it may be difficult for investors to reliably estimate

the amount of interest that will be payable on each such Interest Payment Date. In addition, some investors may be unwilling or unable to trade such Notes without changes to their information technology systems, both of which could adversely impact the liquidity and trading price of such Notes.

Very limited market precedent exists for securities that use SOFR as the interest rate and the method for calculating an interest rate based upon SOFR in those precedents varies. Accordingly, the specific formula for the Compounded SOFR rate used in any SOFR-referenced Notes may not be widely adopted by other market participants, if at all. If the market adopts a different calculation method, which could adversely affect the market value of such Notes.

If SOFR does not prove to be widely used as a benchmark in securities that are similar or comparable to any SOFR-referenced Notes issued under the Programme from time to time, the trading price of such Notes may be lower than those securities that are linked to rates that are more widely used. Similarly, market teams for securities that are linked to SOFR, including, but not limited to, the spread over the reference rate reflected in the interest rate provisions, or manner of compounding the reference rate, may evolve over time, and as a result, trading prices of any SOFR-referenced Notes may be lower than those of later-issued securities that are based on SOFR. Investors in such Notes may not be able to sell the Notes at all or may not be able to sell the Notes 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.

In addition, there currently is no uniform market convention with respect to the implementation of SOFR as a base rate for floating-rate notes or other securities. The manner of calculation and related conventions with respect to the determination of interest rates based on SOFR in floating-rate note markets may differ materially compared with the manner of calculation and related conventions with respect to the determination of interest rates based on SOFR in other markets, such as the derivatives and loan markets. Investors should carefully consider how any potential inconsistencies between the manner of calculation and related conventions with respect to the determination of interest 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 disposition of the SOFR-referenced Notes.

As noted above, ARRC recommended SOFR as the replacement rate for U.S. dollar LIBOR and has a paced transition plan for developing SOFR markets, and SOFR is the replacement rate for U.S. dollar LIBOR in the event of an Administrator/Benchmark Event. However, the composition and characteristics of SOFR are not the same as those of U.S. dollar LIBOR. While SOFR is a secured rate, U.S. dollar LIBOR is an unsecured rate. And, while SOFR is currently only an overnight rate, U.S. dollar LIBOR is a forward-looking rate that represents interbank funding for a specified term. There can be no assurance that SOFR will perform in the same way as U.S. dollar LIBOR would have at any time, including, without limitation, as a result of changes in interest and yield rates in the market, bank credit risk, market volatility or global or regional economic, financial, political, regulatory, judicial or other events. For the same reasons, SOFR is not expected to be a comparable replacement for U.S. dollar LIBOR.

The market continues to develop in relation €STR as a reference rate for Notes

Where the applicable Final Terms for a Series of Notes (or the applicable Pricing Supplement in the case of Exempt Notes) specifies that the interest rate for such Notes will be determined by reference to €STR, interest will be determined on the basis of €STR (as defined in the Terms and Conditions of the Notes). The interest rate in respect of Notes with €STR as a Reference Rate will be determined on the basis of

Compounded Daily €STR (as defined in the Terms and Conditions of the Notes), which is a backwards-looking, compounded risk-free overnight rate.

Investors should be aware that the market continues to develop in relation to €STR as a reference rate in the capital markets and its adoption as an alternative to EURIBOR. Furthermore, the market or a significant part thereof may adopt an application of €STR that differs significantly from that set out in the Terms and Conditions and the Issuer may in the future issue Notes referencing €STR that differ materially in terms of interest determination when compared with any previous €STR referenced Notes issued by it. The nascent development of Compounded Daily €STR as an interest reference rate for bond markets, as well as continued development of €STR-based rates for such markets and the market infrastructure for adopting such rates, could result in reduced liquidity or increased volatility or could otherwise affect the market price of Notes with €STR as a Reference Rate.

The interest rate for Notes with €STR as a Reference Rate is only capable of being determined at the end of the relevant Observation Period and immediately prior to the relevant Interest Payment Date. It may be difficult for investors in Notes with €STR as a Reference Rate to estimate reliably the amount of interest which will be payable on the Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which factors could adversely affect the liquidity of such Notes. Further, if such Notes become due and payable prior to their stated maturity, the final interest rate payable in respect of such Notes shall only be determined immediately prior to the date on which the Notes become due and payable.

€STR is published by the European Central Bank and there can be no guarantee that €STR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interest of investors in Notes with €STR as a Reference Rate. The manner of adoption or application of €STR in the bond markets may differ materially compared with the application and adoption of €STR in other markets such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of €STR 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 such Notes.

To the extent the €STR Reference Rate is discontinued or is no longer published as described in the Terms and Conditions, the applicable rate to be used to calculate the interest rate on such Notes will be determined using the alternative methods described in Condition 4(o) (“**€STR Fallbacks**”). Any of these €STR Fallbacks may result in interest payments that are lower than, or do not otherwise correlate over time with, the payment that would have been made on the Notes if the €STR Reference Rate had been provided by the European Central Bank in its form as at the Issue Date of the Notes. In addition, use of the €STR Fallbacks may result in a fixed rate of interest being applied to the Notes.

An investment in Notes with €STR as the Reference Rate may entail significant risks not associated with similar investments in conventional debt securities. Any investor should ensure it understands the nature of the terms of such Notes and the extent of its exposure to risk.

The market continues to develop in relation to SARON as a reference rate for Notes

Where the applicable Final Terms for a Series of Notes (or the applicable Pricing Supplement in the case of Exempt Notes) specifies that the interest rate for such Notes will be determined by reference to SARON, interest will be determined on the basis of SARON (as defined in the Terms and Conditions of the Notes). The interest rate in respect of Notes with SARON as a Reference Rate will be determined on the basis of SARON Compounded (as defined in the Terms and Conditions of the Notes), which is a backwards-looking, compounded risk-free overnight rate.

Investors should be aware that the market continues to develop in relation to the daily SARON as a reference rate in the capital markets and its adoption as an alternative to CHF LIBOR. Furthermore, the market or a significant part thereof may adopt an application of SARON as a reference rate that differs significantly from that set out in the Terms and Conditions and the Issuer may in the future issue Notes referencing SARON that differ materially in terms of interest determination when compared with any previous SARON referenced Notes issued by it. The development of SARON as a reference rate, as well as continued development of SARON-based rates for such markets and the market infrastructure for adopting such rates, could result in reduced liquidity or increased volatility or could otherwise affect the market price of Notes with SARON as a Reference Rate.

The interest rate for Notes with SARON as a Reference Rate is only be capable of being determined shortly before the end of the relevant Observation Period and immediately prior to the relevant Interest Payment Date. Consequently, it may be difficult for investors in Notes with SARON as a Reference Rate to estimate reliably the amount of interest that will be payable on such Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which factors could adversely impact the liquidity of such Notes. Further, if any Notes become due and payable prior to their stated maturity, the final interest rate payable in respect of such Notes shall only be determined immediately prior to the date on which the Notes become due and payable.

In addition, the manner of adoption or application of SARON reference rates in the debt capital markets may differ materially when compared with the application and adoption of SARON in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of SARON reference rates across these markets may impact any hedging or other financial arrangements, if any, which they may put in place in connection with such Notes.

To the extent the SARON Reference Rate is discontinued or is no longer published as described in the Terms and Conditions, the applicable rate to be used to calculate the interest rate on such Notes will be determined using the alternative methods described in Condition 4(q) ("**SARON Fallbacks**"). Any of these SARON Fallbacks may result in interest payments that are lower than, or do not otherwise correlate over time with, the payment that would have been made on the Notes if the SARON Reference Rate had been provided by SIX Index AG in its form as at the Issue Date of the Notes. In addition, use of the SARON Fallbacks may result in a fixed rate of interest being applied to the Notes.

An investment in Notes with SARON as the Reference Rate may entail significant risks not associated with similar investments in conventional debt securities. Any investor should ensure it understands the nature of the terms of such Notes and the extent of its exposure to risk.

Administrator/Benchmark Event

The occurrence of an Administrator/Benchmark Event may cause early redemption or termination or adjustment of the Senior Notes which may include selecting one or more successor benchmarks and making related adjustment(s) to the Senior Notes, including if applicable to reflect increased costs. An Administrator/Benchmark Event may arise if any of the following circumstances occurs or may occur: (1) a benchmark is materially changed, permanently or indefinitely cancelled or an official sector entity prohibits its use, (2) (i) the relevant authorisation, registration, recognition, endorsement, equivalence decision or approval in respect of the benchmark or the administrator or sponsor of the benchmark is not obtained, (ii) an application for authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register is rejected, or (iii) any authorisation, registration, recognition, endorsement, equivalence decision or approval is suspended or inclusion in any official register is withdrawn, or (3) a relevant supervisor officially announces the benchmark is or will be no longer representative of any relevant

underlying market(s). If the Senior Notes are redeemed or terminated for an Administrator/Benchmark Event there is no guarantee that the amount paid to investors will be equal to or higher than the investor's initial investment in the relevant Senior Notes and such amount may be substantially less than the investor's initial investment.

(e) Senior Notes denominated in Renminbi are subject to additional risks

Senior Notes denominated in Renminbi (“**RMB Notes**”) may be issued under the Programme. RMB Notes contain particular risks for potential investors, including:

Renminbi is not completely freely convertible; there are significant restrictions on remittance of Renminbi into and out of the PRC which may adversely affect the liquidity of RMB Notes.

Renminbi is not completely freely convertible at present. The PRC government continues to regulate conversion between Renminbi and foreign currencies. However, there has been significant reduction in control by the PRC government in recent years, particularly over trade transactions involving the import and export of goods and services as well as other frequent routine foreign exchange transactions. These transactions are known as current account items.

On the other hand, remittance of Renminbi into and out of the PRC for the settlement of capital account items, such as capital contributions, debt financing and securities investment, is generally only permitted upon obtaining specific approvals from, or completing specific registrations or filings with, the relevant currency control authorities or a close review by qualified local banks, on a case-by-case basis and is subject to a strict monitoring system.

Qualified participating banks (the “**Participating Banks**”) in clearing banks outside the PRC have already been permitted to engage in the settlement of current account trade transactions in Renminbi. Although regulations in the PRC on the remittance of Renminbi into and out of the PRC for settlement of capital account items continue to develop gradually, the Participating Banks have been permitted to settle designated capital account items (e.g. direct capital investment and approved securities investments).

Although effective from 1 October 2016 the Renminbi was included in the Special Drawing Right basket as the fifth currency (along with the U.S. dollar, the euro, Japanese yen and Sterling) and the latest policies for further improving accessibility to Renminbi to settle cross-border transactions in foreign currencies were implemented by the People's Bank of China (the “**PBoC**”) jointly with five other PRC authorities from 4 February 2021, there is no assurance that the PRC government will continue to liberalise control over cross-border Renminbi remittances in the future, that the schemes for Renminbi cross-border utilisation will not be discontinued or that new PRC regulations will not be promulgated in the future which have the effect of restricting or eliminating the remittance of Renminbi into or out of the PRC. If the Bank decided to remit some or all of the proceeds of issue of Renminbi Notes into the PRC in Renminbi, its ability to do so will be subject to obtaining (without guarantee) all necessary approvals from, or registration with, the relevant PRC government authorities. If the Bank does remit some or all of the proceeds of issue of Renminbi Notes into the PRC in Renminbi and the Bank subsequently is not able to repatriate funds outside the PRC in Renminbi, this may affect the ability of the Bank to source Renminbi to perform its obligations under the Renminbi Notes.

There is only limited availability of Renminbi outside the PRC, which may affect the liquidity of the RMB Notes and the Bank's ability to source Renminbi outside the PRC to service such RMB Notes.

As a result of the restrictions by the PRC government on cross-border Renminbi fund flows, the availability of Renminbi outside the PRC is limited. Whilst the PBoC has established Renminbi clearing and settlement mechanisms and entered into agreements on the clearing of Renminbi business with financial institutions that have been permitted to engage in the settlement of transactions in Renminbi in a number of financial centres and cities (the “**Renminbi Clearing Banks**”), the current size of Renminbi denominated financial assets outside the PRC remains limited.

The Participating Banks do not have other direct Renminbi liquidity support from the PBoC. The RMB Clearing Banks only have access to onshore liquidity support from the PBoC for the purpose of squaring open positions of participating banks for limited types of transactions and are not obliged to square for the Participating Banks any open positions resulting from other foreign exchange transactions or conversion services. In cases where the Participating Banks cannot source sufficient Renminbi through the above channels, they will need to source Renminbi from outside the PRC to square such open positions.

Although it is expected that the offshore Renminbi market will continue to grow in depth and size, its growth is subject to many constraints as a result of PRC laws and regulations on foreign exchange. There is no assurance that new PRC regulations will not be promulgated or the agreements on the clearing of Renminbi entered into by the PBoC and the relevant Renminbi Clearing Banks will not be terminated or amended in the future which will have the effect of restricting availability of Renminbi offshore. The limited availability of Renminbi outside the PRC may affect the liquidity of the RMB Notes. To the extent the Bank is required to source Renminbi in the offshore market to service its RMB Notes, there is no assurance that the Bank will be able to source such Renminbi on satisfactory terms, if at all.

An Investment in the RMB Notes is subject to exchange rate risks

The value of the Renminbi against the U.S. dollar and other foreign currencies fluctuates from time to time and is affected by changes in the PRC and international political and economic conditions as well as many other factors. Recently, the PBoC implemented changes to the way it calculates the Renminbi's daily midpoint against the U.S. dollar to take into account market-maker quotes before announcing such daily midpoint. This change and others that may be implemented, may increase the volatility in the value of the Renminbi against other currencies. Except in the limited circumstances as described in the Conditions, the Bank will make all payments of interest and principal with respect to the RMB Notes in Renminbi. As a result, the value of these Renminbi payments in U.S. dollars or other applicable foreign currency terms may vary with the changes in the prevailing exchange rates in the marketplace. If the value of Renminbi depreciates against the U.S. dollar or other applicable foreign currency, the value of a Noteholder's investment in U.S. dollar or other applicable foreign currency terms will decline.

An Investment in the RMB Notes is subject to currency risk

If the Bank is not able, or it is impracticable for it, to satisfy its obligation to pay interest and principal on the RMB Notes when due, in whole or in part, in Renminbi in the Relevant Renminbi Settlement Centre(s) as a result of Inconvertibility, Non transferability or Illiquidity, the Bank shall be entitled, on giving not less than five nor more than 30 days' irrevocable notice to the Noteholders prior to the due date for payment, to settle any such payment, in whole or in part, in U.S. dollars on the due date at the U.S. dollars Equivalent (as defined in the Conditions) of any such interest or principal amount otherwise payable in Renminbi, as the case may be. See also “*If the investor holds Notes which are not denominated in the investor's home currency, they will be exposed to movements in exchange rates adversely affecting the value of this holding. In addition, the imposition of exchange controls and certain other specified events in relation to any Senior Notes could result in an investor not recovering payments on those Senior Notes*” below.

Payments in respect of the RMB Notes may be made only in the manner designated in the RMB Notes

Noteholders of beneficial interests in the RMB Notes may be required to provide certifications and other information (including Renminbi account information) in order to allow such Noteholder to receive payments in Renminbi in accordance with the Renminbi clearing and settlement system for the Participating Banks in the Relevant Renminbi Settlement Centre(s) (as defined in the Conditions).

All Renminbi payments to investors in respect of the RMB Notes will be made solely (i) for so long as the RMB Notes are represented by global certificates held with the common depository for Euroclear and Clearstream, Luxembourg or any alternative clearing system, by transfer to a Renminbi bank account maintained in the Relevant Renminbi Settlement Centre in accordance with prevailing rules and procedures of those clearing systems or (ii) for so long as the RMB Notes are in definitive form, by transfer to a Renminbi bank account maintained in the Relevant Renminbi Settlement Centre in accordance with prevailing rules and regulations. Other than as described in the Conditions, the Bank cannot be required to make payment in relation to RMB Notes by any other means (including in any other currency or by transfer to a bank account in the PRC).

There may be PRC tax consequences with respect to investment in the RMB Notes

In considering whether to invest in the RMB Notes, investors should consult their individual tax advisers with regard to the application of PRC tax laws to their particular situations as well as any tax consequences arising under the laws of any other tax jurisdictions. The value of a Noteholder's investment in the RMB Notes may be materially and adversely affected if the Noteholder is required to pay PRC tax with respect to acquiring, holding or disposing of and receiving payments under those RMB Notes.

(f) Risks applicable to certain types of Exempt Notes

Considerations relevant for Index Linked Notes and Dual Currency Notes

The Bank may issue Senior Notes with principal, premium or interest determined by reference to an index or formula, to changes in the prices of equity or other securities, to movements in currency exchange rates or other financial variables (each, a **"Relevant Factor"**). In addition, the Bank may issue Senior Notes with principal or interest payable in one or more currencies which may be different from the currency in which the Senior Notes are denominated. An investment in such Senior Notes entails significant risks that are not associated with similar investments in a conventional fixed rate or floating rate debt security and in some circumstances the value of the Senior Notes may be less than the principal amount of the Senior Notes and may be zero in which case you may lose some or all of the amount you invested in the Senior Notes. Potential investors should be aware that:

- (i) the market price of such Senior Notes may be volatile;
- (ii) investors may receive no interest or they may receive interest at a rate that is less than that payable on a conventional fixed rate or floating rate debt security issued at the same time;
- (iii) payment of principal or interest may occur at a different time or in a different currency than expected;

- (iv) if the principal of and/or premium on such a Senior Note is so indexed, the amount of principal and/or premium payable in respect thereof may be less than the original purchase price of such Senior Note and less than the nominal or face amount of such Senior Notes, and the amount of principal and/or premium payable may even be zero;
- (v) investors should be willing to hold these Senior Notes until the maturity date as the secondary market for such Senior Notes may be limited or non-existent and if there is a limited secondary market then the lack of demand may reduce the market price at which Senior Notes may be sold prior to maturity;
- (vi) the market price will be affected by a number of factors independent of the creditworthiness of the Bank and will depend on the value of the applicable Relevant Factor as well as the volatility of the applicable Relevant Factor, the specific terms and time remaining to the maturity of such Senior Notes, the amount outstanding of such Senior Notes, market interest rates and the market for other types of related and unrelated financial instruments;
- (vii) a Relevant Factor may be subject to significant fluctuations that may not correlate with changes in interest rates, currencies or other indices and may depend on a number of interrelated factors over which the Bank has no control, including economic, financial and political events. Additionally, if the formula used to determine the amount of principal, premium and/or interest payable with respect to such Senior Notes contains a multiplier or leverage factor, the effect of any change in the Relevant Factor will be increased (or decreased if the multiplier or relevant factor is less than one) and this increase (or decrease) may be significant; and
- (viii) the timing of changes in a Relevant Factor may affect the actual yield to investors, even if the average level is consistent with their expectations. In general, the earlier the change in the Relevant Factor, the greater the effect on yield.

The historical experience of the relevant currencies, interest rates, equities, index or other financial variables should not be taken as an indication of future performance of such currencies, interest rates, equities, index, or other financial variables during the term of any Senior Note. Prospective investors should consult their own financial and legal advisers as to the risks entailed by an investment in such Senior Notes and the suitability of such Senior Notes in light of their particular circumstances.

Considerations relevant for Index Linked Notes where an equity security, basket of equity securities or equity index is the Relevant Factor

Owning Senior Notes with principal, premium or interest determined by reference to an equity, equity basket or index is not the same as owning the reference equity securities. Accordingly, the market value of such Senior Notes may not have a direct relationship with the market price of the reference equity securities or index and changes in the market price of the reference equity securities or index may not result in a comparable change in the market value of the Senior Notes. For example, the market value of such Senior Notes may not increase even if the price of the reference equity securities or index increases. It is also possible for the price of the reference equity securities or index to increase while the market price of such Senior Notes declines.

The Bank or one or more of its affiliates may hedge the obligations under the Senior Notes by purchasing or selling the reference equity securities (or options on those securities), instruments or other derivative instruments with returns linked to or related to changes in the value of the reference equity securities or

equity index and may also adjust these hedges by, among other things, purchasing or selling the reference equity securities, equity options, instruments or other derivative instruments at any time and from time to time. Any of these hedging activities may affect the price of the reference equity securities or index and, therefore, the value of associated Senior Notes. It is possible that the Bank or one or more of its affiliates could receive substantial returns from these hedging activities while the value of the reference equity securities or equity index may decline.

The Bank or one or more of its affiliates may also engage in trading in the reference equity securities or investments relating to the reference equity securities or equity indices on a regular basis as part of general broker-dealer and other businesses of the Bank or its affiliates, for proprietary accounts, for other accounts under management or to facilitate transactions for customers, including block transactions. Any of these activities could affect the price of the reference equity securities or index and, therefore, the value of the associated Senior Notes. The Bank or one or more of its affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to changes in the value of the reference equity securities or indices and the availability of such competing products could adversely affect the value of the Senior Notes.

Neither the Bank nor any of its affiliates will pledge or otherwise hold the reference equity securities, instruments or other derivative instruments for the benefit of Noteholders in order to enable Noteholders to exchange Senior Notes for the associated reference equity securities, instruments or other derivative commitments under any circumstances. Consequently, in the event of a bankruptcy, insolvency or liquidation of the Bank, any of the reference equity securities, instruments or other derivative commitments owned by the Bank or its affiliates will be subject to the claims of the Bank's creditors generally and will not be available specifically for the benefit of Noteholders.

Significant aspects of the tax treatment of such Senior Notes may be uncertain and prospective investors should consult their tax advisors about their own tax situation.

Additional considerations relevant for Index Linked Notes where an equity security, basket of equity securities or equity index is the Relevant Factor

Noteholders will not have voting rights or rights to receive dividends or other distributions or any other rights that holders of the reference equity securities would have and Noteholders will not have any beneficial interest in or right to acquire the reference equity securities or any derivative instruments related thereto.

The Calculation Agent may not be required to make an adjustment for every event that can affect the reference index or equity securities. If an event occurs that does not require the Bank to adjust the amount payable at maturity in respect of the reference equity security or reference index of equity securities, the market price of the associated Senior Notes and the amount of interest or the principal amount payable at the maturity may be materially and adversely affected.

The Bank or one or more of its affiliates may, at present or in the future, engage in business with an issuer of reference equity securities or its competitors, including making loans to or equity investments in an issuer of reference equity securities or its competitors or providing either with investment banking, asset management or other advisory services, including merger and acquisition advisory services. These activities may present a conflict between the Bank's or its affiliates' obligations and the interests of Noteholders. Moreover, the Bank or one or more of its affiliates may have published and may in the future publish research reports on an issuer of reference equity securities or upon any reference index which may be modified from time to time without notice and may express opinions or provide recommendations that

are inconsistent with purchasing or holding the Senior Notes. Any of these activities could affect the price of the reference equity securities or index and, therefore, the value of the associated Senior Notes.

If the Bank and its affiliates are not affiliated with the issuers of the reference equity securities, the Bank will have no ability to control or predict the actions of these issuers, including any corporate actions of the type that would require the Bank to adjust the amount payable on the Senior Notes, and will have no ability to control the public disclosure of these corporate actions or any other events or circumstances affecting the issuers of reference equity securities. The issuers of the reference equity securities will have no obligation to consider the interests of Noteholders in taking any corporate actions that might affect the value of the associated Senior Notes. The issuers of the reference equity securities may take actions that will adversely affect the value of the associated Senior Notes. None of the money paid for the Senior Notes will go to the issuers of the reference equity securities.

Neither the Bank nor any of its affiliates assumes any responsibility for the adequacy, completeness or accuracy of the information about the issuers of the reference equity securities contained in any terms supplement or in any publicly available filings made by the issuers of the reference equity securities. Prospective investors should make their own investigation into the relevant issuers of the reference equity securities.

Partly-Paid Notes

The Bank may issue Senior Notes where the issue price is payable in more than one instalment. Failure to pay any subsequent instalment could result in an investor losing all of its investment.

Inverse Floating Rate Notes

Inverse Floating Rate Notes have an interest rate equal to a fixed rate minus a rate based upon a reference rate such as EURIBOR. The market values of such Senior Notes typically are more volatile than market values of other conventional floating rate debt securities based on the same reference rate (and with otherwise comparable terms). Inverse Floating Rate Notes are more volatile because an increase in the reference rate not only decreases the interest rate of the Senior Notes, but may also reflect an increase in prevailing interest rates, which further adversely affects the market value of these Senior Notes.

Extendible Senior Notes may be redeemed after their initial maturity

The Maturity Date of Extendible Senior Notes may be extended automatically. The payment of the unpaid amount may be automatically deferred and shall become due and payable on the Extended Maturity Date if so specified in the applicable Pricing Supplement.

Section 871(m) withholding may affect payments on the Senior Notes

Section 871(m) of the Internal Revenue Code of 1986, as amended (the “**Code**”), and U.S. Treasury regulations promulgated thereunder impose a 30% withholding tax on amounts attributable to U.S. source dividends that are paid or “deemed paid” under certain financial instruments that have an expected economic return sufficiently similar to that of an underlying U.S. security (such instruments, “**Specified Notes**”) if certain conditions are met. If any Senior Notes are Specified Notes and the Issuer or any withholding agent determines that withholding is required, neither the Issuer nor any withholding agent will be required to pay any additional amounts with respect to amounts so withheld. Prospective investors should refer to the section “*Taxation---Section 871(m) of the Code*”.

For purposes of withholding under the U.S. Foreign Account Tax Compliance Act, commonly known as FATCA, Specified Notes are subject to a different grandfathering rule than other Notes. Prospective investors should refer to the section “Certain Material Income Tax Considerations - *U.S. Foreign Account Tax Compliance Act*”.

(2) Risks related to Senior Notes generally

Set out below is a brief description of certain risks relating to the Senior Notes generally.

(a) Modification, waivers and substitution

The Terms and Conditions of the Senior Notes contain provisions for calling meetings (including at a physical location or by means of an electronic platform (such as a conference call or videoconference) or a combination thereof) of Noteholders, passing written resolutions or obtaining electronic consents to consider matters affecting their interests generally. These provisions permit defined majorities to bind (and to modify or waive certain terms and conditions of the Senior Notes or covenants and agreements made by the Bank) all Noteholders including Noteholders who did not attend and vote at the relevant meeting, sign a written resolution or provide an electronic consent and Noteholders who voted in a manner contrary to the majority, provided that an amendment, modification or variance that may affect the recognition of Bail-inable Notes by the Superintendent as TLAC or, any changes pursuant to the benchmark discontinuation provisions in Condition 4(o) that would change the effective maturity date of the Bail-inable Notes, will require the prior approval of the Superintendent. The Terms and Conditions of the Senior Notes also provide that if the Branch of Account is not in Canada, the Bank may change the Branch of Account for the deposits evidenced by a Senior Note upon and subject to the provisions set forth in Condition 14.

In addition, pursuant to Condition 4(o), certain changes may be made to the Interest Calculation provisions of the Floating Rate Notes or Fixed Rate Reset Notes in the circumstances set out in Condition 4(o), without the requirement for the consent of the Noteholders. See “*Proposals to Regulation and reform of EURIBOR and any other benchmark indices could adversely affect any Senior Notes linked to such “benchmarks”*”.

(b) Canadian bank resolution powers confer substantial powers on Canadian authorities designed to enable them to take a range of actions in relation to the Bank where a determination is made that the Bank has ceased, or is about to cease, to be viable and such viability cannot be restored or preserved, which if taken could result in holders or beneficial owners of Senior Notes being exposed to losses

Under the CDIC Act, in circumstances where the Superintendent is of the opinion that the Bank has ceased, or is about to cease, to be viable and viability cannot be restored or preserved by exercise of the Superintendent’s powers under the Bank Act, the Superintendent, after providing the Bank with a reasonable opportunity to make representations, is required to provide a report to CDIC, Canada’s resolution authority. Following receipt of the Superintendent’s report, CDIC may request the Minister of Finance to recommend that the Governor in Council (Canada) make an Order (as defined below) and, if the Minister of Finance is of the opinion that it is in the public interest to do so, the Minister of Finance may recommend that the Governor in Council (Canada) make, and on such recommendation, the Governor in Council (Canada) may make, one or more of the following orders (each, an “**Order**”):

- vesting in CDIC, the shares and subordinated debt of the Bank specified in the Order (a **“Vesting Order”**);
- appointing CDIC as receiver in respect of the Bank (a **“Receivership Order”**);
- if a Receivership Order has been made, directing the Minister of Finance to incorporate a federal institution designated in the Order as a bridge institution wholly-owned by CDIC and specifying the date and time as of which the Bank’s deposit liabilities are assumed (a **“Bridge Bank Order”**); or
- if a Vesting Order or Receivership Order has been made, directing CDIC to carry out a conversion, by converting or causing the Bank to convert, in whole or in part – by means of a transaction or series of transactions and in one or more steps – the shares and liabilities of the Bank that are subject to the Bail-in Regime into common shares of the Bank or any of its affiliates (a **“Conversion Order”**).

Following a Vesting Order or a Receivership Order, CDIC will assume temporary control or ownership of the Bank and will be granted broad powers under that Order, including the power to sell or dispose of all or a part of the assets of the Bank, and the power to carry out or cause the Bank to carry out a transaction or a series of transactions the purpose of which is to restructure the business of the Bank.

Under a Bridge Bank Order, CDIC has the power to transfer the Bank’s insured deposit liabilities and certain assets and other liabilities of the Bank to a bridge institution. Upon the exercise of that power, any assets and liabilities of the Bank that are not transferred to the bridge institution would remain with the Bank, which would then be wound up. In such a scenario, any liabilities of the Bank, including any outstanding Senior Notes that are not assumed by the bridge institution could receive only partial or no payment in the ensuing wind-up of the Bank.

If the CDIC were to take action under the Canadian bank resolution powers with respect to the Bank, this could result in holders or beneficial owners of Senior Notes being exposed to losses.

(c) Senior Notes may be subject to write-off, write down or conversion under the resolution powers of authorities outside of Canada

The Bank has operations in a number of countries outside of Canada, including in particular the United States and the United Kingdom. In accordance with the Financial Stability Board’s “Key attributes of effective Resolution Regimes for Financial Institutions” dated 15 October 2014, local resolution authorities should have resolution powers over local branches of foreign firms and the capacity to use their powers either to support a resolution carried out by a foreign home authority (for example, by ordering a transfer of property located in its jurisdiction to a bridge institution established by the foreign home authority) or, in exceptional cases, to take measures on its own initiative where the foreign home authority is not taking action or acts in a manner that does not take sufficient account of the need to preserve the local jurisdiction’s financial stability or where other relevant conditions are met.

The UK has implemented such powers and, as such, they may apply to the Bank’s London branch. It is therefore possible that resolution authorities in countries where the Bank has branches or assets, including the United States and the United Kingdom, may adversely affect the rights of holders of the Senior Notes, including by using any powers they may have to write down or convert the Senior Notes (particularly those governed by local law where the Branch of Account specified in the applicable Final Terms or (in the case

of Exempt Notes) Pricing Supplement, as applicable, is in the relevant local jurisdiction). For further information on the risks related to the use of resolution powers by authorities in the United Kingdom, please see “*United Kingdom resolution risks applicable to the Senior Notes*” above.

(d) No obligation to maintain listing

If at any time the Bank, after exercise of all reasonable endeavours is unable to maintain any listing of Senior Notes or it is unduly onerous to maintain such listing, the Bank may seek to terminate the listing of such Senior Notes provided it uses its best endeavours to seek an alternative admission to listing, trading and/or quotation of such Senior Notes by another listing authority, securities exchange and/or quotation system that it deems appropriate (including a market which is not a regulated market for the purposes of the Markets in Financial Instruments Directive or a market outside of the EEA), provided that such stock exchange shall be commonly used for the listing and trading of debt securities in the international bond markets. However, if such alternative listing is not available or is unduly onerous, the Senior Notes may be delisted, an alternative listing may not be obtained and the Bank is not obliged to so obtain,

Although there is no assurance as to the liquidity of any Senior Notes as a result of the admission to trading on a regulated market for the purposes of MiFID II or any other market, delisting such Senior Notes may have a material effect on an investor’s ability to (i) continue to hold such Senior Notes, or (ii) resell the Senior Notes in the secondary market.

- (e) Market perceptions concerning the instability of the euro, the potential re-introduction of individual currencies within the Euro-zone, or the potential dissolution of the euro entirely, could adversely affect the value of the Senior Notes

As a result of the credit crisis in Europe, in particular in Greece, Italy, Ireland, Portugal and Spain, the European Commission created the European Financial Stability Facility (the “**EFSF**”) and the European Financial Stability Mechanism to provide funding to Euro-zone countries in financial difficulties that seek such support. Despite these measures, concerns persist regarding the debt burden of certain Euro-zone countries and their ability to meet future financial obligations, the overall stability of the euro and the suitability of the euro as a single currency given the diverse economic and political circumstances in individual Relevant Member States. These and other concerns could lead to the re-introduction of individual currencies in one or more Relevant Member States, or, in more extreme circumstances, the possible dissolution of the euro entirely. Should the euro dissolve entirely, the legal and contractual consequences for holders of euro-denominated obligations would be determined by laws in effect at such time. These potential developments, or market perceptions concerning these and related issues, could adversely affect the value of the Senior Notes.

(f) Change of Law

The terms and conditions of the Senior Notes are based on the laws of the Province of Québec and the federal laws of Canada applicable therein or English law (as applicable) in effect as at the date of this Prospectus. The terms and conditions of the German Registered Notes are based on the laws of the Federal Republic of Germany as at the date of this Prospectus. No assurance can be given as to the impact of any judicial decision or change to the laws of the Federal Republic of Germany, the laws of the Province of

Québec or the federal laws of Canada, or English law applicable therein or administrative practice after the date of this Prospectus. Such changes in law may include, but are not limited to, changes in statutory, tax and regulatory regimes during the life of the Senior Notes.

(g) Change of Tax Law

Statements in this Prospectus concerning the taxation of investors are of a general nature and are based upon current tax law and published government or administrative practice in the jurisdictions stated. Such law and government or administrative practice is, in principle, subject to change, possibly with retrospective effect, and this could adversely affect Investors.

In addition, any change in the Bank's tax status or in taxation legislation or government or administrative practice in a relevant jurisdiction could adversely impact (i) the ability of the Bank to service the Senior Notes and (ii) the market value of the Senior Notes.

(h) Investors who hold less than the minimum Specified Denomination (including after a partial Bail-in Conversion or any other resolution action) may be unable to sell their Senior Notes and may be adversely affected if definitive Senior Notes are subsequently required to be issued

In relation to any issue of Senior Notes which have denominations consisting of a minimum Specified Denomination and may be tradeable in the clearing systems in the minimum Specified Denomination and one or more higher integral multiples of another smaller amount, it is possible that such Senior Notes may be traded in the clearing systems in amounts in excess of the minimum Specified Denomination that are not integral multiples of such minimum Specified Denomination. In addition, in the case of a partial Bail-in Conversion of Bail-inable Notes or any resolution action in respect of Senior Notes generally, a holder may as a result of such partial Bail-in Conversion and any other resolution action end up with an amount that is less than a Specified Denomination. In such a case, a holder who, as a result of trading such amounts or such partial Bail-in Conversion and any other resolution action, holds an amount that is less than the minimum Specified Denomination in its account with the relevant clearing system would not be able to sell the remainder of such holding without first purchasing a principal amount of Senior Notes at, or in excess of, the minimum Specified Denomination such that it is holding amounts to a Specified Denomination. Further, a holder who, as a result of trading such amounts or such partial Bail-in Conversion and any other resolution action, holds an amount which is less than the minimum Specified Denomination in its account with the relevant clearing system at the relevant time may not receive a definitive Senior Note in respect of such holding (should definitive Senior Notes be printed) and would need to purchase or sell a principal amount of Senior Notes at or in excess of the minimum Specified Denomination such that it is holding amounts to a Specified Denomination.

If definitive Senior Notes are issued, holders should be aware that definitive Senior Notes which have a denomination that is not an integral multiple of the minimum Specified Denomination may be illiquid and difficult to trade.

(i) Interest of Dealers

Certain of the Dealers and their affiliates have engaged, and may in future engage, in investment bank and/or commercial banking transactions with, and may perform services for, the Bank in the ordinary course of business without regard to the Noteholders.

Certain of the Dealers and their affiliates may have positions, deal or make markets in the Senior Notes issued under the Programme, related derivatives and reference obligations, including (but not limited to) entering into hedging strategies on behalf of the Bank or any of its affiliates, investor clients, or as principal in order to manage their exposure, their general market risk, or other trading activities.

The Issuer may sell Senior Notes to one or more of the Dealers including National Bank Financial Inc., which is a wholly-owned indirect subsidiary of the Bank. The terms of the Programme were negotiated at arm's length between the Issuer and the Dealers. In addition to any proceeds from any offering of the Senior Notes under the Programme being applied, directly or indirectly, for the benefit National Bank Financial Inc. in its capacity as a wholly-owned indirect subsidiary of the Bank, National Bank Financial Inc. will receive a portion of any fees and commissions payable in connection with any such offering of Senior Notes in its capacity as a Dealer.

In addition, in the ordinary course of their business activities, the Dealers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers without regard to the effect on the Bank's business or profitability, or to the Noteholders. Such investments and securities activities may involve securities and/or instruments of the Issuer or Issuer's affiliates. Certain of the Dealers or their affiliates that have a lending relationship with the Issuer routinely hedge their credit exposure to the Issuer consistent with their customary risk management policies. Typically, such Dealers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Senior Notes issued under the Programme. Any such short positions could adversely affect future trading prices of Senior Notes issued under the Programme. The Dealers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

(j) The Bank is liable to make payments when due on the Senior Notes and Senior Notes which constitute deposit liabilities of the Bank will not be insured

The Bank is liable to make payments when due on the Senior Notes. Senior Notes which constitute deposit liabilities of the Bank for purposes of the Bank Act will not be insured under the CDIC Act or any other governmental insurance scheme of any other country, and will constitute legal, valid and binding direct, unconditional, unsubordinated and unsecured obligations of the Bank and rank at least *pari passu* with all deposit liabilities of the Bank without any preference among themselves and with all other unsubordinated and unsecured obligations of the Bank, present and future (except as otherwise prescribed by law and subject to the exercise of bank resolution powers).

(k) Canadian usury laws

The Criminal Code (Canada) prohibits the receipt of “interest” at a “criminal rate” (namely, an effective annual rate of interest that exceeds 60 per cent.). Accordingly, the provisions for the payment of interest or for the payment of a redemption amount in excess of the aggregate principal amount of the Senior Notes may not be enforceable if the provision provides for the payment of “interest” (as calculated for the purposes of such statute) which is in excess of an effective annual rate of interest of 60 per cent.

(l) Basel III

The Basel III Liquidity standards require banks to meet the Liquidity Coverage Ratio (“**LCR**”) starting in January 2015 and the Net Stable Funding Ratio starting in January 2020. The Bank has been managing its liquidity risk under a prudent framework and implemented the LCR disclosure requirements in 2015. Additional costs may be incurred to achieve compliance with the liquidity reforms, which has the potential to affect the Bank’s funding costs. The Bank continues to monitor the development of liquidity requirements from the national regulators globally and ensures that its liquidity management and monitoring practices evolve with the changing regulatory landscape. In addition, the Basel III Leverage Ratio is a non-risk based ratio that acts as a supplementary measure to the risk-based capital requirements, with the objective of constraining the build-up of excess leverage in the banking sector. The Leverage Ratio requirement is effective January 2018, and the Bank is compliant with the public disclosure requirement which began in January 2015. Basel completed its Basel III reforms in December 2017 and issued a revised leverage ratio framework which will be effective in January 2023. The Bank continues to monitor and manage its capital and asset levels to ensure compliance.

(3) Risks related to the market generally

Set out below is a brief description of certain additional material market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk.

(a) Risks relating to the secondary market generally

Senior Notes may have no established trading market when issued, and one may never develop. If a market does develop, it may not be liquid and may be sensitive to changes in financial markets. Therefore, investors may not be able to sell their Senior Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed liquid secondary market. This is particularly the case for Senior Notes that are especially sensitive to interest rate, currency or market risks, are designed for specific investment objectives or strategies or have been structured to meet the investment requirements of limited categories of investors or are not admitted for trading on the Regulated Market, the Euro MTF Market or another established securities exchange. These types of Senior Notes generally would have a more limited secondary market and more price volatility than conventional debt securities. Illiquidity may have a severely adverse effect on the market value of Senior Notes. Accordingly, the Senior Notes should not be viewed as trading instruments and investors should be prepared to hold the Senior Notes to maturity.

In addition, Noteholders should be aware of the prevailing and widely reported global credit market conditions (which continue at the date of this Prospectus), whereby there is a potential lack of liquidity in the secondary market for instruments similar to the Senior Notes. Such a lack of liquidity may result in Noteholders suffering losses in secondary market resales even if there is no decline in the performance of the assets of the Bank. The Bank cannot predict which of these circumstances will change and whether, if and when they do change, there will be a more liquid market for the Senior Notes and instruments similar to the Senior Notes at that time. In addition, liquidity may be limited if the Issuer makes large allocations to a limited number of investors.

(b) Exchange rate risks and exchange controls

The Bank will pay principal and interest on the Senior Notes in the Specified Currency. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Specified Currency or the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Specified Currency would decrease (1) the Investor's Currency-equivalent yield on the Senior Notes, (2) the Investor's Currency-equivalent value of the principal payable on the Senior Notes and (3) the Investor's Currency-equivalent market value of the Senior Notes.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal or receive payments in a significantly devalued Specified Currency.

(c) Fixed Rate Notes bear interest at a fixed rate, which may affect the secondary market value and/or the real value of the Senior Notes over time due to fluctuations in market interest rates and the effects of inflation

Investment in Fixed Rate Notes bear interest at a fixed rate. Investors should note that (i) if market interest rates start to rise then the income to be paid on Fixed Rate Notes might become less attractive and the price the investors may get if they sell such Fixed Rate Notes could fall (however, the market price of the Fixed Rate Notes has no effect on the interest amounts due on the Fixed Rate Notes or what investors will be due to be repaid on the Maturity Date if the Fixed Rate Notes are held by the investor until they mature) and (ii) inflation will reduce the real value of the Fixed Rate Note over time which may affect what investors can buy with the investments in the future and which may make the fixed interest rate on the Fixed Rate Notes less attractive in the future.

(d) Credit ratings may not reflect all risks and are subject to change

One or more independent credit rating agencies may assign credit ratings to an issue of Senior Notes. The ratings might not reflect the potential impact of all risks related to the Bank or to structure, market, additional factors discussed above, and other factors that may affect the value of the Senior Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be revised, suspended or withdrawn by the rating agency at any time. Investors may suffer losses if a credit rating assigned to the Senior Notes does

not reflect the then creditworthiness of such Senior Notes.

In general, European Union (the “EU”) and UK regulated investors are restricted under the CRA Regulations (as defined below) from using credit ratings for regulatory purposes, unless such ratings are issued by a credit rating agency established in the EU or the UK (as applicable) and registered under the relevant CRA Regulation (and such registration has not been withdrawn or suspended). Such general restriction will also apply in the case of credit ratings issued by non-EU or non-UK credit rating agencies, unless the relevant credit ratings are endorsed by an EU or a UK registered credit rating agency (as applicable) or the relevant non-EU or non-UK credit rating agency is certified in accordance with the relevant CRA Regulation (and such endorsement action or certification, as the case may be, has not been withdrawn or suspended). Certain information with respect to the credit rating agencies and ratings will be disclosed in the Final Terms or (in the case of Exempt Notes) the applicable Pricing Supplement.

If the status of the rating agency rating the Notes changes for the purposes of the CRA Regulation or the UK CRA Regulation, relevant regulated investors may no longer be able to use the rating for the regulatory purposes of the EEA or the UK, as applicable and the Notes may have a different regulatory treatment which may adversely impact the value of the Notes and their liquidity in the secondary market.

(e) Legal investment considerations may restrict certain investments

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each potential investor should consult its legal advisers to determine whether and to what extent (1) Senior Notes are legal investments for it, (2) Senior Notes can be used as collateral for various types of borrowing, (3) Senior Notes can be used as repo-eligible securities, and (4) other restrictions apply to its purchase or pledge of any Senior Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Senior Notes under any applicable risk-based capital or similar rules.

(f) Notes issued as “green bonds”, “social bonds” or “sustainable bonds” may not be a suitable investment for all investors seeking exposure to green, social or sustainable assets

The Bank may issue Senior Notes under the Programme where the use of proceeds is specified in the applicable Final Terms (or the applicable Pricing Supplement in the case of Exempt Notes) to be for the financing and/or refinancing, in whole or in part, of future or existing eligible businesses and eligible projects, including the Bank’s own operations, that fall within the Eligible Categories (as defined below) (see further under “Sustainability Bond Framework”) (any such Senior Notes which may be “green bonds”, “social bonds” or “sustainable bonds”, the “**Sustainable Bonds**”).

The Bank will exercise its judgement and sole discretion in determining the businesses and projects that will be financed by the proceeds of Sustainable Bonds. If the use of the proceeds of Sustainable Bonds is a factor in an investor's decision to invest in Sustainable Bonds, they should consider the disclosure in "Use of Proceeds" set out in the applicable Final Terms (or the applicable Pricing Supplement in the case of Exempt Notes) and consult with their legal or other advisers before making an investment in Sustainable Bonds. While it is the intention of the Bank to meet the Framework (as defined below), no assurance is given by the Bank, the Arrangers or the Dealers that any of the businesses and projects funded with the

proceeds from Sustainable Bonds will meet the Framework or an investor's expectations or requirements, whether as to sustainable impact or outcome or otherwise.

Furthermore, while the intention of the Bank is to apply the net proceeds of the relevant Sustainable Bonds as described in "Use of Proceeds" set out in the applicable Final Terms (or the applicable Pricing Supplement in the case of Exempt Notes), there is no contractual obligation to allocate the proceeds of such Sustainable Bonds to finance eligible businesses and projects or to provide annual progress reports as described therein.

The Bank's failure to so allocate or report, the failure of any of the businesses and projects funded with the proceeds from Sustainable Bonds to meet the Framework, the failure of external assurance providers to opine on the conformity of the Sustainability Bond Report (as defined below) with the Framework, or the cessation of the listing or admission of Sustainable Bonds to trading on any dedicated "green", "environmental", "sustainable", "social" or other equivalently-labelled segment of any stock exchange on securities market (where applicable) will not constitute an Event of Default with respect to the relevant Sustainable Bonds or give rise to any other claim of a holder of such Sustainable Bonds against the Bank. Any such failure may affect the value of the relevant Sustainable Bonds and/or have adverse consequences for certain investors with portfolio mandates to invest in sustainable or green assets or for a particular purpose.

Furthermore, it should be noted that there is currently no clearly-defined definition (legal, regulatory or otherwise) of, nor market consensus as to what constitutes, a "green", "sustainable", "social" or an equivalently labelled project or business, nor as to what precise attributes are required for a particular project or business to be defined as "green", "sustainable", "social" or such other equivalent label nor can any assurance be given that such a clear definition or consensus will develop over time. Accordingly, while it is the intention of the Bank, no assurance is or can be given by the Bank, the Arrangers or the Dealers to investors that any projects or uses the subject of, or related to, any of the businesses and projects funded with the proceeds from Sustainable Bonds will meet any or all investor expectations regarding such "green", "sustainable", "social" or other equivalently-labelled performance objectives or that any adverse environmental, social and/or other impacts will not occur during the implementation of any projects or uses the subject of, or related to, any of the businesses and projects funded with the proceeds from Sustainable Bonds.

None of the Bank, the Arrangers or the Dealers makes any representation as to the suitability of the Sustainable Bonds to fulfil any green, environmental, sustainable, social or other criteria required by prospective investors, or as to the suitability or reliability for any purpose whatsoever of any report, assessment, opinion or certification of any third party (whether or not solicited by the Bank) which may be made available in connection with the issue of Sustainable Bonds and in particular with any of the businesses and projects funded with the proceeds from Sustainable Bonds to fulfil any environmental, sustainability, social and/or other criteria. For the avoidance of doubt, none of the Framework, the second party opinion or any other report, assessment, opinion or certification of any third party (whether or not solicited by the Bank) is, nor shall they be deemed to be, incorporated in and/or form part of this Prospectus. Any such report, assessment, opinion or certification is not, nor should be deemed to be, a recommendation by the Bank, the Arrangers, the Dealers or any other person to buy, sell or hold Sustainable Bonds. The second party opinion and any such other report, assessment, opinion or certification of any third party (whether or not solicited by the Bank) is only current as at the date that it was initially issued. Prospective investors must determine for themselves the relevance of any such report, assessment, opinion or certification and/or the information contained therein and/or the provider of such opinion or certification for

the purpose of any investment in any Sustainable Bonds. The providers of such reports, assessments, opinions and certifications are not currently subject to any specific regulatory or other regime or oversight. None of the Arrangers or the Dealers have undertaken, nor are they responsible for, any assessment of the Framework or the eligibility criteria for the Sustainable Bonds, any verification of whether any of the businesses or projects fall within the Eligible Categories, or the monitoring of the use of proceeds of the Sustainable Bonds. Investors should refer to the Framework, the Sustainability Bond Report and the second party opinion (details of which are set out under “Sustainability Bond Framework”) for information.

If Sustainable Bonds are at any time listed or admitted to trading on any dedicated "green", "environmental", "sustainable", "social" or other equivalently-labelled segment of any stock exchange or securities market (whether or not regulated), no representation or assurance is given by the Bank, any Arranger, any Dealer or any other person that such listing or admission satisfies, whether in whole or in part, any present or future investor expectations or requirements as regards any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable law or regulations or by its own bylaws or other governing rules or investment portfolio mandates, in particular with regard to any direct or indirect environmental, sustainability or social impact of any projects or uses, the subject of or related to, any of the businesses and projects funded with the proceeds from Sustainable Bonds. Furthermore, it should be noted that the criteria for any such listings or admission to trading may vary from one stock exchange or securities market to another. Nor is any representation or assurance given or made by the Bank, any Arranger, any Dealer or any other person that any such listing or admission to trading will be obtained in respect of Sustainable Bonds or, if obtained, that any such listing or admission to trading will be maintained during the life of the relevant Sustainable Bonds.

While it is the intention of the Bank to apply the net proceeds of any Sustainable Bonds and obtain and publish the relevant reports, assessments, opinions and certifications in, or substantially in, the manner described in “Use of Proceeds” set out in the applicable Final Terms (or the applicable Pricing Supplement in the case of Exempt Notes), there can be no assurance that the Bank will be able to do this. Nor can there be any assurance that any eligible project (where applicable) will be completed within any specified period or at all or with the results or outcome (whether or not related to the environment) as originally expected or anticipated by the Bank.

Any failure by the Bank to apply the net proceeds of any issue of Sustainable Bonds in accordance with the Framework, any withdrawal of any report, assessment, opinion or certification as described above, or any such report, assessment, opinion or certification attesting that the Bank is not complying in whole or in part with any matters for which such report, assessment, opinion or certification is reporting, assessing, opining or certifying on, and/or any such Sustainable Bonds no longer being listed or admitted to trading on any stock exchange or securities market, as aforesaid (where applicable), may have a material adverse effect on the value of such Sustainable Bonds and/or result in adverse consequences for certain investors with portfolio mandates to invest in securities to be used for a particular purpose.

(g) Conflict of Interest

The Calculation Agent (including where the Calculation Agent is the Bank) may have economic interests adverse to those of the Noteholders, including with respect to certain determinations that the Calculation Agent must make in determining the amounts payable under the terms of the Senior Notes (where applicable) and in making certain other determinations with regard to the Senior Notes, including in respect of fallback determinations whether in respect of certain reference rates or in the event of a Benchmark

Event (unless Benchmark Discontinuation is specified as being applicable in the applicable Final Terms), or indices, underlyings or otherwise, in particular with respect to Exempt Notes.

Moreover, the Calculation Agent, and the Bank and/or their respective affiliates expect to engage in trading activities related to the reference rates or assets that are not for the account of Noteholders or on their behalf. These trading activities may present a conflict between the Noteholders' interest in the Senior Notes and the interests of the Calculation Agent, and the Bank and/or their respective affiliates will have in their proprietary accounts in facilitating transactions, including block trades and options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the price or the level of the reference rates or assets, could be adverse to the interests of the Noteholders. Moreover, any of them may have published, and in the future are likely to publish, research reports with respect to the reference rates or asset. This research may be modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Senior Notes. Any of these activities by the Calculation Agent, and the Issuer and/or their respective affiliates thereof may affect the market price and/or the level of the reference rates or assets and, therefore, the market value of the Senior Notes.

The Bank forms part of a major banking group. It is therefore possible that the Bank or one of its subsidiaries or one of their officers, employees, representatives or agents (together the "**Bank Group**") or another client of the Bank Group may have interests, relationships and/or arrangements that give rise to conflicts of interest in relation to business that is transacted with investors in the Senior Notes. Such conflicts of interest will be managed in accordance with the Bank's established policies and procedures.

CREDIT RATING AGENCIES

Where Senior Notes issued under the Programme are rated, they are generally rated Aa3 (legacy senior debt) and A3 (bail-in senior debt) by Moody's Canada Inc. ("**Moody's Canada**"), A (legacy senior debt) and BBB+ (bail-in senior debt) by S&P Global Ratings, acting through S&P Global Ratings Canada, a business unit of S&P Global Canada Corp. ("**S&P Canada**"), and AA- (legacy senior debt) and A+ (bail-in senior debt) by Fitch Ratings, Inc. ("**Fitch**"). A Tranche (as defined herein) of Senior Notes issued under the Programme may be rated or unrated. Where a Tranche of Senior Notes is rated, such rating will not necessarily be the same as the ratings assigned to the Programme. **The rating of the Senior Notes is not a recommendation to purchase, hold or sell the Senior Notes, and may be subject to suspension, reduction, revision or withdrawal at any time by the assigning rating agencies. There is no assurance that the rating of the Senior Notes will remain for any given period of time or that the rating will not be lowered or withdrawn by the rating agencies if in their judgment circumstances so warrant. Investors are cautioned to evaluate each rating independently of any other rating.**

The rating of certain Series of Senior Notes to be issued under the Programme may be specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement. Whether or not each credit rating applied for in relation to a relevant Series of Senior Notes will be issued by a credit rating agency established in the EEA or the UK and registered under the Regulation (EC) No. 1060/2009, as amended (the "**EU CRA Regulation**") or, in relation to the UK, such regulation as it forms part of domestic law of the UK by virtue of the EUWA (the "**UK CRA Regulation**") (and together with the EU CRA Regulation, the "**CRA Regulations**"). The status of the relevant rating agency under the relevant CRA Regulation will be disclosed in the Final Terms or (in the case of Exempt Notes) the applicable Pricing Supplement. In general, EEA and UK regulated investors are restricted under the CRA Regulations from using credit ratings for regulatory purposes, unless such ratings are issued by a credit rating agency established in the EEA or the UK (as applicable) and registered under the relevant CRA Regulation (and such registration has not been withdrawn or suspended). Such general restriction will also apply in the case of credit ratings issued by non-EEA or non-UK credit rating agencies, unless the relevant credit ratings are endorsed by an EEA or a UK registered credit rating agency (as applicable) or the relevant non-EEA or non-UK credit rating agency is certified in accordance with the relevant CRA Regulation (and such endorsement action or certification, as the case may be, has not been withdrawn or suspended). Certain information with respect to the credit rating agencies and ratings will be disclosed in the Final Terms or (in the case of Exempt Notes) the applicable Pricing Supplement.

In addition to the Programme ratings provided by Moody's Canada, S&P Canada and Fitch, each of Moody's Investors Service, Inc. ("**Moody's USA**" and collectively with Moody's Canada, "**Moody's**"), Standard and Poor's Financial Services LLC ("**S&P USA**" and collectively with S&P Canada, "**S&P**"), DBRS Limited ("**DBRS**") and Fitch has provided issuer ratings for the Bank as specified under "National Bank of Canada – Issuer Ratings".

In accordance with Article 4.1 of the relevant CRA Regulation, please note that the 2021 Annual Information Form (as defined in the section entitled "Documents Incorporated by Reference") incorporated by reference in this Prospectus contains credit ratings of the Bank and explanations on credit ratings on pages 13 and 22.

The information relating to credit rating systems below has been extracted from the websites of Moody's, S&P, DBRS and Fitch, as applicable. The Issuer confirms that such information has been accurately reproduced and that, so far as the Issuer is aware, and is able to ascertain from information published by

Moody's USA, S&P USA, DBRS and Fitch, no facts have been omitted which would render the reproduced information inaccurate or misleading.

According to the Moody's rating system, obligations rated "Aa" are judged to be of high quality and are subject to very low credit risk, and obligations rated "A" are judged to be upper-medium grade and subject to low credit risk. Moody's appends numerical modifiers 1, 2 and 3 to each generic ratings classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking and the modifier 3 indicates a ranking in the lower end of that generic rating category.

According to the S&P rating system, obligations rated "A" are somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories, but the obligor's capacity to meet its financial commitment remains strong. As for obligations rated "BBB", those obligations exhibit adequate protection parameters, but adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligations. The ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within major rating categories.

According to the Fitch rating system, obligations rated "A" denote a strong capacity of the obligor for payment of its financial commitments, even if this capacity may be more vulnerable to adverse business or economic conditions than higher ratings. The ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within major rating categories.

None of Moody's, S&P, Fitch or DBRS is established in the EEA or the UK or registered under the CRA Regulations. However, Moody's Deutschland GmbH., S&P Global Ratings Europe Limited, DBRS Ratings GmbH and Fitch Ratings Ireland Limited, which are established and registered in the EEA, have endorsed the ratings of Moody's, S&P, Fitch and DBRS, respectively, for purposes of the EU CRA Regulation. Moody's Investors Service Limited, S&P Global Ratings UK Limited, Fitch Ratings Limited and DBRS Ratings Limited, which are established and registered in the UK, have endorsed the same ratings for purposes of the UK CRA Regulation.

ESMA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the CRA Regulation. This list must be updated within 5 working days of ESMA's adoption of any decision to withdraw the registration of a credit rating agency under the CRA Regulation. The list is located on ESMA's website at <http://www.esma.europa.eu/page/List-registered-and-certified-CRAs>. Please note that this website does not form part of the Prospectus.

The FCA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the UK CRA Regulation. The FCA's website address is <https://www.fca.org.uk/markets/credit-rating-agencies/registered-certified-cras>. Please note that this website does not form part of the Prospectus.

DOCUMENTS INCORPORATED BY REFERENCE

This Prospectus should be read and construed in conjunction with the following documents incorporated by reference, each of which has been previously published and has been approved by or filed with the CSSF and the Luxembourg Stock Exchange, and are deemed to be incorporated by reference herein, and form part of, this Prospectus:

- (a) the Bank's Annual Information Form dated 30 November 2021, excluding all information incorporated therein by reference (the "**2021 Annual Information Form**") (available at: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/assemblee-annuelle/2022/nbc-aif-agm-2022.pdf>);
- (b) the Bank's Annual Report for the financial year ended 31 October 2021, which includes the Bank's comparative consolidated financial statements for the years ended 31 October 2021 and 2020 prepared in accordance with IFRS, together with the Independent Auditor's Report thereon dated 30 November 2021 (the "**2021 Annual Report**") (available at: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/assemblee-annuelle/2022/na-2021-annual-report.pdf>);
- (c) the Bank's Second Quarterly Report to Shareholders for the quarter ended 30 April 2022 which includes the unaudited interim consolidated financial statements for the quarters ended 30 April 2022 and 30 April 2021 (the "**2022 Second Quarter Report**") (available at: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/resultats-trimestriels/2022/report-shareholder-q2-2022.pdf>); and
- (d) the sections entitled Terms and Conditions of the Notes set out in the Bank's prospectuses dated 15 June 2021 (the "**2021 Base Prospectus**") at pages 83 to 149 (available at: <https://www.banquenationale.com/content/dam/bnc/a-propos-de-nous/relations-investisseurs/fonds-propres-et-dette/2021/na-euro-note-programme-prospectus-15-june-2021.pdf>), dated 11 June 2020 (the "**2020 Base Prospectus**") at pages 77 to 126 (available at: <https://www.banquenationale.com/content/dam/bnc/a-propos-de-nous/relations-investisseurs/fonds-propres-et-dette/2020/na-euro-note-programme-prospectus-11-june-2020.pdf>) and 6 June 2019 (the "**2019 Base Prospectus**") at page 70 to 117 (available at: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/fonds-propres-et-dette/2019/na-euro-note-programme-prospectus-6-june-2019.pdf>) relating to the Programme (for the avoidance of doubt, the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement for a Tranche of Senior Notes will indicate the Terms and Conditions applicable to such Tranche and unless otherwise indicated in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, the Terms and Conditions of all Senior Notes issued after the date hereof shall be those set out in this Prospectus); the remaining portions of the 2021 Base Prospectus, the 2020 Base Prospectus and the 2019 Base Prospectus relating to the Programme are not relevant for prospective investors and are not incorporated by reference.

The following table indicates where certain required information may be found in the above-mentioned documents incorporated by reference in this Prospectus.

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Any non-incorporated parts of a document referred to in this section “Documents Incorporated by Reference” (which for the avoidance of doubt, means any parts not listed in the cross-reference list above) are either deemed not relevant to investors or otherwise covered elsewhere in this Prospectus. Any documents which are themselves incorporated by reference in the documents incorporated by reference in this Prospectus shall not form part of this Prospectus. Such documents are either not relevant to investors or the information they contain is covered elsewhere in this Prospectus.

The documents listed in (a) to (d) above shall be deemed to be incorporated by reference in, and form part of, this Prospectus, save that any statement contained in a document which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this Prospectus to the extent that a statement contained therein or in any Supplement thereto (including a statement deemed to be incorporated herein or in any such Supplement) modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

In addition, subject to the Bank complying with Article 23 of the Prospectus Regulation if there is a significant new factor, material mistake or inaccuracy relating to information contained in this Prospectus, as described under “Final Terms, Pricing Supplements and Drawdown Prospectuses” below, the following documents published or issued from time to time after the date hereof shall be deemed to be incorporated in, and form part of, this Prospectus provided that in respect of the base prospectus approved by the CSSF for the purposes of the Prospectus Regulation, only the documents under items (a) to (d) on page 81 are incorporated by reference:

- (a) Annual Information Form of the Bank published subsequent to the date of this Prospectus;
- (b) Annual Report of the Bank published subsequent to the date of this Prospectus;
- (c) Management Proxy Circular of the Bank published subsequent to the date of this Prospectus;
- (d) any Quarterly Reports to the shareholders of the Bank published from time to time subsequent to the date of this Prospectus;
- (e) all supplements or amendments to the Prospectus prepared by the Issuer from time to time (other than those filed pursuant to Article 23 of the Prospectus Regulation); and

- (f) any material change reports (excluding confidential material change reports) filed by the Bank with the various securities commissions or similar authorities in Canada pursuant to the requirements of applicable securities legislation after the date of this Prospectus,

provided that any statement contained herein or in a document all or the relative portion of which is or is deemed to be incorporated by reference will be deemed to be modified or superseded for the purpose of this Prospectus to the extent that a statement contained herein, in any other subsequently filed document which is or is deemed to be incorporated by reference in this Prospectus, or in any supplement approved by the CSSF (including any documents incorporated by reference therein) modifies or supersedes such earlier statement (whether expressly, by implication or otherwise).

Copies of documents deemed to be incorporated by reference in this Prospectus (but excluding (a) through (f) above unless otherwise incorporated in the base prospectus pursuant to a Supplement under Article 23 of the Prospective Regulation approved by the CSSF) and any supplement hereto approved by the CSSF can be reviewed on the website of the Luxembourg Stock Exchange at www.bourse.lu and may be obtained from the head office of the Bank and the specified offices of the each Paying Agent and Listing Agent, as set out at the end of this Prospectus. In addition, CDS Inc., a subsidiary of the Canadian Depository for Securities Limited, maintains an Internet web site through which all of the documents incorporated herein by reference, or deemed incorporated herein, that the Bank files electronically can be retrieved. The address of the site is <http://www.sedar.com>.

Any websites included in this Prospectus are for information purposes only and do not form part of this Prospectus.

FINAL TERMS, PRICING SUPPLEMENTS AND DRAWDOWN PROSPECTUSES

In this section the expression “necessary information” means, in relation to any Tranche of Senior Notes, the information necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profits and losses and prospects of the Bank and of the rights attaching to the Senior Notes.

Any information relating to the Senior Notes which is not included in this Prospectus and which is required in order to complete the necessary information in relation to a Tranche of Senior Notes will be contained either in the applicable Final Terms, Pricing Supplement or in a Drawdown Prospectus. Such information will be contained in the applicable Final Terms or Pricing Supplement unless any of such information constitutes a significant new factor relating to the information contained in this Prospectus in which case such information, together with all of the other necessary information in relation to the relevant Series of Senior Notes (other than Exempt Notes), will be contained in a Drawdown Prospectus.

For a Tranche of Senior Notes that is the subject of the Final Terms or Pricing Supplement, those Final Terms or Pricing Supplement will, for the purposes of that Tranche only, complete this Prospectus and must be read in conjunction with this Prospectus. The terms and conditions applicable to any particular Tranche of Senior Notes which is the subject of Final Terms are the Terms and Conditions as completed to the extent described in the applicable Final Terms and the Terms and Conditions applicable to any particular Tranche of Senior Note which is the subject of a Pricing Supplement are the Conditions as completed, amended or replaced by the applicable Pricing Supplement.

Each Drawdown Prospectus will be a single document containing the necessary information relating to the Bank and the relevant Senior Notes. The terms and conditions applicable to any particular Tranche of Senior Notes which is the subject of a Drawdown Prospectus will be the Conditions as supplemented, amended and/or replaced to the extent described in the relevant Drawdown Prospectus. In the case of a Tranche of Senior Notes that is the subject of a Drawdown Prospectus, each reference in this Prospectus to Final Terms or to information being specified or identified in the applicable Final Terms shall be read and construed as a reference to the relevant Drawdown Prospectus or such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

TERMS AND CONDITIONS OF THE NOTES

*With the exception of German Registered Notes, the following is the text of the terms and conditions (the “**Conditions**”) which, as completed by the applicable Final Terms or completed, supplemented, amended and/or replaced by the applicable Pricing Supplement, will be applicable to the Senior Notes and, subject further to simplification by deletion of non-applicable provisions, will be endorsed on Senior Notes in definitive form (if any). Details of the relevant Tranche will be set out in the applicable Final Terms or Pricing Supplement and, in the case of the issue of Senior Notes or Certificates in definitive form, endorsed on, or attached to, the definitive form of Senior Note or Certificate. References in the Conditions to “**Senior Notes**” are to the Senior Notes of one Series only, not to all Senior Notes which may be issued under the Programme. Capitalised terms not defined in the Conditions but which are defined in the applicable Final Terms will have the meanings given to them in such Final Terms or Pricing Supplement and “herein” or “hereof” when used in the Conditions shall include a reference to such Final Terms where appropriate. The applicable Final Terms or Pricing Supplement (or the relevant provisions thereof) will be endorsed on, or attached to, each temporary Global Note, permanent Global Note and definitive Senior Note or on the Certificates relating to Registered Notes.*

The Conditions applicable to any particular Tranche of Senior Notes which is the subject of a Drawdown Prospectus will be the Conditions as supplemented, amended and/or replaced to the extent described in such Drawdown Prospectus.

This Senior Note is one of a Series of Senior Notes (the “**Senior Notes**”, which expression shall mean (i) in regard to any Senior Notes represented by a Senior Note in temporary global form or in permanent global form (each a “**Global Note**”) or a Senior Note in registered form, units of the lowest Specified Denomination in the currency specified herein of the relevant Senior Notes, (ii) any Senior Note in definitive form issued in exchange for a Global Note, and (iii) any Global Note). The Senior Notes are issued pursuant to an amended and restated Agency Agreement dated 15 June 2022 among National Bank of Canada (the “**Bank**” or the “**Issuer**”), Citibank, N.A., London Branch, and the other parties thereto (as amended, supplemented or restated from time to time, the “**Agency Agreement**”). Under the Agency Agreement, Citibank, N.A., London Branch will act in its capacities as fiscal, issuing and paying agent and calculation agent (the “**Fiscal Agent**”, which expression shall include any successor to Citibank, N.A., London Branch in its capacity as such) and Citibank Europe plc will act in its capacity as registrar (the “**Registrar**”, which expression shall include any successor to Citibank Europe plc in its capacity as such and any additional registrars appointed in accordance with the Agency Agreement either with respect of the Programme or with respect to a particular Series), and National Bank of Canada, London branch, and Banque Internationale à Luxembourg, société anonyme will act as paying agents (together with the Fiscal Agent and any additional or other paying agents in respect of the Senior Notes from time to time appointed, the “**Paying Agents**”) and Citibank, N.A., London Branch and Banque Internationale à Luxembourg, société anonyme will act as transfer agents (together with any additional or other transfer agents in respect of the Senior Notes from time to time appointed, the “**Transfer Agents**”). The initial calculation agent(s) (the “**Calculation Agent(s)**”) (if any) is specified in the applicable Final Terms. The Noteholders (as defined below), the holders of the interest coupons (the “**Coupons**”) appertaining to interest bearing Senior Notes in bearer form and, where applicable in the case of such Senior Notes, talons for further Coupons (the “**Talons**”) (the “**Couponholders**”) and the holders of the instalment receipts (the “**Receipts**”) appertaining to the payment of principal by instalments are deemed to have notice of and are bound by all of the provisions of the Agency Agreement applicable to them.

The holders of Senior Notes governed by English law, the Couponholders and the relevant holders of Receipts are entitled to the benefit of the Deed of Covenant dated 15 June 2022 (as amended, supplemented, restated or replaced from time to time, the “**Deed of Covenant**”) executed by the Issuer.

The original of the Deed of Covenant is held by the Fiscal Agent. All persons from time to time entitled to the benefit of obligations under any Senior Notes governed by English law shall also be deemed to have notice of, and shall be bound by, all of the provisions of the Deed of Covenant insofar as they relate to the relevant Senior Notes.

The final terms for this Senior Note (or the relevant provisions thereof) are set out in Part A of the Final Terms attached to or endorsed hereon which completes these Terms and Conditions or, if the Senior Note is a Senior Note which is neither admitted to trading on a regulated market in the European Economic Area nor offered in the European Economic Area in circumstances where a prospectus is required to be published under Regulation (EU) 2017/1129, as amended or superseded, (an “**Exempt Note**”), the final terms (or the relevant provisions thereof) are set out in Part A of the Pricing Supplement attached to or endorsed hereon which supplements these Terms and Conditions and which shall, to the extent so specified to the extent inconsistent with the Terms and Conditions, replace or modify the Terms and Conditions for the purposes of this Senior Note. References to the “applicable Final Terms” are, unless otherwise stated, to Part A of the Final Terms (or the relevant provision thereof) attached to or endorsed on this Senior Note. References to the “applicable Pricing Supplement” are, unless otherwise stated, to Part A of the Pricing Supplement (or the relevant provision thereof) attached to or endorsed on this Senior Note and any references in the Terms and Conditions to “applicable Final Terms” shall be deemed to include a reference to the applicable Pricing Supplement where relevant.

In respect of any Senior Notes, references herein to these Terms and Conditions are to these terms and conditions as completed by the Final Terms or, in the case of Exempt Notes, as supplemented, replaced or modified by the Pricing Supplement and any reference herein to a “**Condition**” is a reference to the relevant Condition of the Terms and Conditions of the relevant Senior Notes.

Copies of the Agency Agreement and the Deed of Covenant are available for inspection at the specified offices of each of the Paying Agents and the Transfer Agents.

References herein to “**RMB Notes**” are to Senior Notes denominated in Renminbi. References herein to “**Renminbi**”, “**RMB**” and “**CNY**” are to the lawful currency of the People’s Republic of China (the “**PRC**”) which, for the purposes of these Terms and Conditions, excludes the Hong Kong Special Administrative Region of the PRC, the Macau Special Administrative Region of the PRC and Taiwan.

1. Form, Denomination and Title

The Senior Notes are issued in the form specified in the applicable Final Terms. Senior Notes issued in bearer form are referred to herein as “**Bearer Notes**”, which expression includes Senior Notes which are specified to be Exchangeable Bearer Notes. Senior Notes issued in registered form are referred to herein as “**Registered Notes**”. Senior Notes issued in bearer form exchangeable for Registered Notes are referred to herein as “**Exchangeable Bearer Notes**”. Bearer Notes in definitive form will be serially numbered, in the Specified Currency and in the Specified Denomination(s) provided that (a) in the case of any Senior Notes which are to be admitted to trading on a regulated market within the European Economic Area or offered to the public in a Relevant Member State of the European Economic Area in circumstances which would otherwise require the publication of a prospectus under the Prospective Regulation (as amended or superseded), the minimum Specified Denomination shall not be less than €100,000 (or its equivalent in any other currency as at the date of issue of the relevant Senior Notes).

Unless the Senior Note is an Exempt Note, this Senior Note is a Fixed Rate Note, a Floating Rate Note, a CMS Linked Note, a Range Accrual Note or a Zero Coupon Note or a combination of any of the foregoing, depending on the Interest Basis shown in the applicable Final Terms.

If this Senior Note is an Exempt Note, this Senior Note may be a Fixed Rate Note, a Floating Rate Note, a CMS Linked Note, a Range Accrual Note, a Zero Coupon Note, an Index Linked Note, a Dual Currency Interest Note or any other type of Senior Note or a combination of any of the foregoing, depending upon the Interest Basis shown in the applicable Pricing Supplement. Bail-inable Notes (as defined below) will not be Partly Paid Notes or Index Linked Notes.

If this Senior Note is an Exempt Note, this Senior Note may also be an Index Linked Redemption Note, an Instalment Note, a Dual Currency Redemption Note, a Partly Paid Note or a combination of any of the foregoing, depending upon the Redemption/Payment Basis shown in the applicable Pricing Supplement.

Definitive Bearer Notes are issued with Coupons (and, where appropriate, a Talon) attached, save in the case of Senior Notes which do not bear interest in which case references to interest (other than in relation to interest due after the Maturity Date), Coupons and Talons in these Conditions are not applicable. Any Bearer Note the Aggregate Nominal Amount of which is redeemable in instalments ("**Instalment Notes**") is issued with one or more Receipts attached. Bail-inable Notes (as defined below) will not be Instalment Notes.

Registered Notes in definitive form are represented by registered certificates ("**Certificates**"), each Certificate representing one or more Senior Notes registered in the name of the recorded holder of such Certificate. Certificates for Registered Notes shall be issued in the lowest Specified Denomination or an integral multiple thereof.

Title to the Bearer Notes and the Receipts, Coupons and Talons shall pass by delivery. Title to the Registered Notes shall pass by due endorsement. The Bank shall procure that the Registrar keep a register or registers in which shall be entered the names and addresses of the holders of Registered Notes and particulars of the Registered Notes held by them. Such registration shall be noted on the Registered Notes by the Registrar. References herein to "**holders**" of Registered Notes are to the persons in whose names such Registered Notes are so registered in the relevant register and "**Noteholder**" has the corresponding meaning. Except as ordered by a court of competent jurisdiction or as required by law, the holder of any Senior Note, Receipt, Coupon or Talon shall be deemed to be and may be treated as the absolute owner of such Senior Note, Receipt, Coupon or Talon, as the case may be, for the purpose of receiving payment thereof or on account thereof and for all other purposes, whether or not such Senior Note, Receipt, Coupon or Talon shall be overdue and notwithstanding any notice of ownership, theft or loss thereof or any writing thereon made by anyone.

In these Conditions, "**Noteholder**" means the bearer of any Bearer Note in definitive form and the Receipts relating to it, the person in whose name a Registered Note in definitive form is registered. In addition, "**holder**" (in relation to a Senior Note, Receipt, Coupon or Talon) has the corresponding meaning and capitalised terms have the meanings given to them herein, the absence of any such meaning indicating that such term is not applicable to the Senior Notes.

2. Exchange of Exchangeable Bearer Notes and Transfers of Registered Notes

(a) Exchange of Exchangeable Bearer Notes

Subject as provided in Condition 2(e), Exchangeable Bearer Notes may be exchanged for the same aggregate Nominal Amount of Registered Notes at the request in writing of the relevant Noteholder and upon surrender of each Exchangeable Bearer Note to be exchanged, together with all unmatured Receipts, Coupons and Talons relating to it, at the specified office of the Registrar or any Transfer Agent; provided, however, that where an Exchangeable Bearer Note is surrendered for exchange after the Record Date (as defined in Condition 6(b)) for any payment of interest or Instalment Amount, the Coupon in respect of that payment of interest or Receipt in respect of that Instalment Amount need not be surrendered with it.

Registered Notes may not be exchanged for Bearer Notes. Bearer Notes of one Specified Denomination may not be exchanged for Bearer Notes of another Specified Denomination. Bearer Notes which are not Exchangeable Bearer Notes may not be exchanged for Registered Notes.

(b) Transfer of Registered Notes

Subject as provided in Condition 2(e), one or more Registered Notes may upon the terms and subject to the conditions set forth in the Agency Agreement and as required by law be transferred upon the surrender of the Certificate representing such Registered Notes to be transferred, together with the form of transfer endorsed on such Certificate duly completed and executed, at the specified office of the Registrar or any Transfer Agent. In the case of a transfer of part only of a holding of Registered Notes represented by one Certificate, a new Certificate in respect of the balance not transferred will be issued to the transferor.

(c) Delivery of New Certificates

Each new Certificate to be issued upon exchange of Exchangeable Bearer Notes or transfer of Registered Notes will, within three business days (being a day, other than a Saturday or Sunday, on which commercial banks are open for business in the place of the specified office of the Transfer Agent or the Registrar to whom such request for exchange or form of transfer shall have been delivered) of receipt of such request for exchange or form of transfer, be available for delivery at the specified office of the Transfer Agent or the Registrar (as the case may be) to whom such delivery shall have been made or, at the option of the holder making such delivery as aforesaid and as specified in the relevant request for exchange or form of transfer, be mailed at the risk of the holder entitled to the new Certificate to such address as may be specified in such request for exchange or form of transfer.

(d) Exchange Free of Charge

Exchange of Senior Notes on registration or transfer will be effected without charge by or on behalf of the Bank, the Registrar or the Transfer Agents, but on payment (or the giving of such indemnity as the Registrar or the relevant Transfer Agent may require in respect thereof) of any tax or other governmental charges which may be imposed in relation to it.

(e) Closed Periods

No Noteholder may require the transfer of a Registered Note to be registered or an Exchangeable Bearer Note to be exchanged for a Registered Note (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 Senior Note, (ii) during the period of 15 days prior to any date on which Senior Notes may be redeemed by the Bank at its option pursuant to Condition 5(j) or (iii) after any such Senior Note has been drawn for redemption in whole or in part. An Exchangeable Bearer Note called for redemption may, however, be exchanged for a Registered Note in respect of which the Certificate is simultaneously surrendered not later than the relevant Record Date.

(f) Exercise of Call or Put Options or Partial Redemption in Respect of Registered Notes

In the case of an exercise of the Issuer Call Option or Noteholder Put Option in respect of, or a partial redemption of, a holding of Registered Notes represented by a single Certificate, a new 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 either an Issuer Call Option or a Noteholder Put Option resulting in Registered Notes of the same holding having different terms, separate Certificates shall be issued in respect of those Senior Notes of that holding that have the same terms. New Certificates shall only be issued against surrender of the existing Certificates to the Registrar or any Transfer Agent. In the case of a transfer of Registered Notes to a person who is already a holder of Registered Notes, a new Certificate representing the enlarged holding shall only be issued against surrender of the Certificate representing the existing holding.

3. Status of the Senior Notes

(a) The Senior Notes

The Senior Notes and the Receipts and Coupons relating to them will constitute deposit liabilities of the Bank for purposes of the *Bank Act* (Canada) and will rank pari passu with all other deposit liabilities of the Bank (except as otherwise prescribed by law and subject to the exercise of bank resolution powers), and without any preference amongst themselves. Senior Notes issued by a branch of the Bank will be obligations of the Bank and will be paid without the necessity of being presented for payment at such branch. Unless otherwise specified in the applicable Final Terms, the deposits to be evidenced by Senior Notes will be issued by the main branch of the Bank in Montréal, Québec, Canada.

The Senior Notes will not be deposits insured under the *Canada Deposit Insurance Corporation Act* (the “**CDIC Act**”).

(b) Bail-inable Notes

This Condition 3(b) will apply in respect of all Senior Notes issued by the Bank that are identified as Bail-inable Senior Notes in the applicable Final Terms (“**Bail-inable Notes**”). All Senior Notes that (i) have an original or amended term to maturity (including explicit or embedded options) greater than 400 days and that have been assigned a CUSIP or ISIN or similar identification number and (ii) are not otherwise excluded (e.g. structured notes (as such term is used under the Canadian bank recapitalization regime for banks designated by the Superintendent of Financial Institutions (Canada) (the “**Superintendent**”) as domestic systemically important banks (the “**Bail-in Regime**”)) under the Bail-in Regime, will be identified as Bail-inable Notes in the applicable Final Terms. Senior Notes that constitute structured notes (as such term is used under the Bail-in Regime) or are otherwise excluded under the Bail-in Regime will not be identified as Bail-inable Notes in the applicable Final Terms.

By its acquisition of an interest in Bail-inable Notes, each Noteholder (which, for the purposes of this Condition 3(b), includes each holder of a beneficial interest in such Bail-inable Notes) is deemed to:

- (i) agree to be bound, in respect of such Bail-inable Notes, by the CDIC Act, including the conversion of the Bail-inable Notes, in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of the Bail-inable Notes in consequence, and by the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to such Bail-inable Notes (a “**Bail-in Conversion**”);
- (ii) attorn to the jurisdiction of the courts in the Province of Québec with respect to the CDIC Act and the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes;
- (iii) have represented and warranted to the Bank that the Bank has not directly or indirectly provided financing to the Noteholder of the Bail-inable Notes for the express purpose of investing in Bail-inable Notes; and

- (iv) acknowledge and agree that the terms referred to in paragraphs (i) and (ii), above, are binding on such Noteholder despite any provisions in these Conditions, any other law that governs the Bail-inable Notes and any other agreement, arrangement or understanding between such Noteholder and the Bank with respect to such Bail-inable Notes.

The applicable Final Terms will indicate whether Senior Notes are Bail-inable Notes. All Bail-inable Notes will be subject to Bail-in Conversion.

Noteholders and beneficial owners of a Bail-inable Note will have no further rights in respect of a Bail-inable Note to the extent such Bail-inable Note is converted in a Bail-in Conversion, other than those provided under the Bail-in Regime, and by its acquisition of an interest in the Bail-inable Note, each Noteholder or beneficial owner of the Bail-inable Note is deemed to irrevocably consent to the converted portion of the principal amount of the Bail-inable Note and any accrued and unpaid interest thereon being deemed paid in full by the issuance of common shares of the Bank (or, if applicable, any of its affiliates) upon the occurrence of a Bail-in Conversion, which Bail-in Conversion shall occur without any further action on the part of that Noteholder or beneficial owner or the Paying Agents; provided that, for the avoidance of doubt, this consent shall not limit or otherwise affect any rights of that Noteholder or beneficial owner provided for under the Bail-in Regime.

Each Noteholder or beneficial owner of the Bail-inable Notes that acquires an interest in the Bail-inable Notes in the secondary market and any successors, assigns, heirs, executors, administrators, trustees in bankruptcy and legal representatives of any such Noteholder or beneficial owner shall be deemed to acknowledge, accept, agree to be bound by and consent to the same provisions specified herein to the same extent as the Noteholders or beneficial owners that acquire an interest in the Bail-inable Notes upon their initial issuance, including, without limitation, with respect to the terms of the Bail-inable Notes related to the Bail-in Regime.

4. Interest and Other Calculations

(a) Interest on Fixed Rate Notes

Each Fixed Rate Note bears interest on its outstanding Nominal Amount (or, if it is a Partly-Paid Note, the amount paid up) in respect of each Fixed Interest Period from (and including) the Interest Commencement Date specified in the applicable Final Terms at the rate(s) per annum (expressed as a percentage) equal to the Fixed Rate(s) of Interest so specified, such interest being payable in arrear on the Interest Payment Date(s) in each year up to (and excluding) the Maturity Date. The amount of interest payable shall be determined in accordance with Condition 4(j).

As used in these Terms and Conditions, “**Fixed Interest Period**” means the period from (and including) an Interest Payment Date or the Interest Commencement Date to (but excluding) the next (or first) Interest Payment Date.

If a Fixed Coupon Amount or a Broken Amount is specified in the applicable Final Terms, the amount of interest payable on each Interest Payment Date will amount to the Fixed Coupon Amount or, if applicable, the Broken Amount so specified and in the case of the Broken Amount, will be payable on the particular Interest Payment Date(s) specified in the applicable Final Terms.

(b) Interest on Fixed Rate Reset Notes

Each Fixed Rate Reset Note bears interest on its outstanding nominal amount:

- (i) from and including the Interest Commencement Date up to but excluding the First Reset Date at the Initial Rate of Interest;
- (ii) in the First Reset Period, at the First Reset Rate of Interest; and
- (iii) for each Subsequent Reset Period thereafter (if any), at the relevant Subsequent Reset Rate of Interest,

payable, subject as provided herein, in arrear on each Interest Payment Date. The amount of interest payable shall be determined in accordance with this Condition 4.

Save as otherwise provided herein, the provisions applicable to Fixed Rate Notes shall apply to Fixed Rate Reset Notes.

In this Condition 4(b):

“Anniversary Date(s)” means each date specified as such in the applicable Final Terms or Pricing Supplement;

“Benchmark Gilt” means, in respect of a Reset Period, such United Kingdom government security having a maturity date on or about the last day of such Reset Period as the Calculation Agent, with the advice of the Reset Reference Banks, may determine to be appropriate;

“Benchmark Gilt Rate” means, in respect of a Reset Period, the gross redemption yield (as calculated by the Calculation Agent in accordance with generally accepted market practice at such time) on a semi-annual compounding basis (converted to an annualised yield and rounded up (if necessary) to four decimal places) of the Benchmark Gilt in respect of that Reset Period, with the price of the Benchmark Gilt for this purpose being the arithmetic average (rounded up (if necessary) to the nearest 0.001 per cent. (0.0005 per cent being rounded upwards)) of the bid and offered prices of such Benchmark Gilt quoted by the Reset Reference Banks at 3.00 p.m. (London time) on the relevant Reset Determination Date on a dealing basis for settlement on the next following dealing day in London. If at least four quotations are provided, the Benchmark Gilt Rate will be the rounded arithmetic mean of the quotations provided, 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). If only two or three quotations are provided, the Benchmark Gilt Rate will be the rounded arithmetic mean of the quotations provided. If only one quotation is provided, the Benchmark Gilt Rate will be the rounded quotation provided. If no quotations are provided, the Benchmark Gilt Rate will be determined by the Calculation Agent in its sole discretion following consultation with the Issuer;

“dealing day” means a day, other than a Saturday or Sunday, on which the London Stock Exchange (or such other stock exchange on which the Benchmark Gilt is at the relevant time listed) is ordinarily open for the trading of securities;

“First Reset Date” means the date specified as such in the applicable Final Terms or Pricing Supplement;

“First Reset Period” means the period from and including the First Reset Date up to but excluding the Second Reset Date or, if no such Second Reset Date is specified in the applicable Final Terms or Pricing Supplement, the date fixed for redemption of the Notes (if any);

“First Reset Rate of Interest” means the rate of interest as determined by the Calculation Agent on the Reset Determination Date corresponding to the First Reset Period as the sum of the relevant Reset Rate plus the relevant Margin;

“Fixed Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Final Terms;

“Floating Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Final Terms;

“Floating Leg Rate Option” means the rate option specified as such in the applicable Final Terms;

“Initial Rate of Interest” means the initial rate of interest per annum specified in the applicable Final Terms or Pricing Supplement;

“Margin” means the margin (expressed as a percentage) in relation to the relevant Reset Period specified as such in the applicable Final Terms or Pricing Supplement;

“Mid-Swap Maturity” has the meaning specified in the applicable Final Terms;

“Mid-Swap Quotations” means the arithmetic mean of the bid and offered rates for the Specified Fixed Leg, calculated on the Fixed Leg Day Count Fraction, of a fixed-for-floating interest rate swap transaction in the Specified Currency which (i) has a term commencing on the relevant Reset Date which is equal to that of the relevant Reset Period; (ii) is in an amount that is representative of a single transaction in the relevant market at the relevant time with an acknowledged dealer of good credit in the relevant swap market; and (iii) has a floating leg, calculated on the Floating Leg Day Count Fraction, based on the Floating Leg Rate Option for the Mid-Swap Maturity;

“Mid-Swap Rate” means in respect of a Reset Period, (i) the applicable semi-annual or annualised (as specified in the applicable Final Terms or Pricing Supplement) mid-swap rate for swap transactions in the Specified Currency (with a maturity equal to that of the relevant Reset Period) as displayed on the Screen Page at 11.00 a.m. or any other Relevant Time specified in the applicable Final Terms or Pricing Supplement (in the principal financial centre of the Specified Currency) on the relevant Reset Determination Date (which rate, if the relevant Interest Payment Dates are other than semi-annual or annual Interest Payment Dates, shall be adjusted by and in the manner determined by, the Calculation Agent) or (ii) if such rate is not displayed on the Screen Page at such time and date, the relevant Reset Reference Bank Rate;

“Reference Bond” means for any Reset Period a government security or securities issued by the government of the state responsible for issuing the Specified Currency (which, if the Specified Currency is euro, shall be Germany) selected by the Calculation Agent in its discretion after consultation with the Issuer as having an actual or interpolated maturity comparable with the relevant Reset Period and that (in the opinion of the Calculation Agent, after consultation with the Issuer) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issuances of corporate debt securities denominated in the Specified Currency and of comparable maturity to the relevant Reset Period;

“Reference Bond Dealer” means each of five banks which are primary government securities dealers or market makers in pricing corporate bond issuances, as selected by the Calculation Agent in its discretion after consultation with the Issuer;

“Reference Bond Dealer Quotations” means, with respect to each Reference Bond Dealer and the Reset Determination Date, the arithmetic mean, as determined by the Calculation Agent, of the bid and offered prices for the Reference Bond (expressed in each case as a percentage of its nominal amount) as at approximately 11:00 a.m. (or any other Relevant Time as specified in the applicable Final Terms or Pricing Supplement) in the principal financial centre of the Specified Currency on the Reset Determination Date and quoted in writing to the Calculation Agent by such Reference Bond Dealer;

“Reference Bond Price” means, with respect to a Reset Determination Date, (a) the arithmetic mean of the Reference Bond Dealer Quotations for that Reset Determination Date, after excluding the highest and lowest such Reference Bond Dealer Quotations, or (b) if the Calculation Agent obtains fewer than four such Reference Bond Dealer Quotations, the arithmetic mean of all such quotations, or (c) if the Calculation Agent obtains only one Reference Bond Dealer Quotation or if the Calculation Agent obtains no Reference Bond Dealer Quotations, the Subsequent Reset Rate of Interest shall be that which was determined on the last preceding Reset Determination Date or, in the case of the first Reset determination Date, the First Reset Rate of Interest shall be the Initial Rate of Interest;

“Reference Bond Rate” means, in respect of a Reset Period, the annual yield to maturity or interpolated yield to maturity (on the relevant day count fraction) of the Reference Bond, assuming a price for such Reference Bond (expressed as a percentage of its nominal amount) equal to the Reference Bond Price;

“Reset Date” means each of the First Reset Date, the Second Reset Date and each of the Anniversary Dates (if any) as is specified in the applicable Final Terms or Pricing Supplement;

“Reset Determination Date” means, in respect of a Reset Period, (a) each date specified as such in the applicable Final Terms or Pricing Supplement or, if none is so specified, (b) (i) if the Specified Currency is Sterling or Renminbi, the first Business Day of such Reset Period, (ii) if the Specified Currency is euro, the day falling two TARGET2 Business Days prior to the first day of such Reset Period, (iii) if the Specified Currency is U.S. dollars, the day falling two U.S. Government Securities Business Days prior to the first day of such Reset Period (iv) for any other Specified Currency, the day falling two Business Days in the principal financial centre for such Specified Currency prior to the first day of such Reset Period;

“Reset Period” means the First Reset Period or a Subsequent Reset Period;

“Reset Rate” means (a) if ‘Mid-Swap Rate’ is specified in the applicable Final Terms or Pricing Supplement, the relevant Mid-Swap Rate; (b) if ‘Benchmark Gilt Rate’ is specified in the applicable Final Terms or Pricing Supplement, the relevant Benchmark Gilt Rate; or (c) if “Reference Bond Rate” is specified in the applicable Final Terms or Pricing Supplement, the relevant Reference Bond Rate;

“Reset Reference Bank Rate” means the percentage rate determined on the basis of the Mid-Swap Quotations provided by the Reset Reference Banks to the Calculation Agent at or around 11:00 a.m. (or any other Relevant Time specified in the applicable Final Terms or Pricing Supplement) in the principal financial centre of the Specified Currency (which in the case of Renminbi shall, for these purposes, be Hong Kong) on the relevant Reset Determination Date and, rounded, if necessary, to the nearest 0.001 per cent (0.0005 per cent. being rounded upwards). If at least four quotations are provided, the Reset Reference Bank Rate will be the rounded arithmetic mean of the quotations provided, 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). If only two or three quotations are provided, the Reset Reference Bank Rate will be the rounded arithmetic mean of the quotations provided. If only one quotation is provided, the Reset Reference Bank Rate will be the rounded quotation provided. If no quotations are provided, the Reset Reference Bank Rate will be determined by the Calculation Agent in its sole discretion following consultation with the Issuer;

“Reset Reference Banks” means (i) in the case of the calculation of a Reset Reference Bank Rate, five leading swap dealers in the principal interbank market relating to the Specified Currency selected by the Calculation Agent in its discretion after consultation with the Issuer or (ii) in the case of a Benchmark Gilt Rate, five brokers of gilts and/or gilt-edged market makers selected by the Calculation Agent in its discretion after consultation with the Issuer;

“Screen Page” means the screen page on Thomson Reuters or any other information service as is specified in the applicable Final Terms or Pricing Supplement, or such other screen page as may replace it on Thomson Reuters or any other information service or, as the case may be, on such other information service that may replace Thomson Reuters or any other information service, in each case, as may be nominated by the person providing or sponsoring the information appearing there for the purpose of displaying comparable rates;

“Second Reset Date” means the date specified as such in the applicable Final Terms or Pricing Supplement;

“Specified Fixed Leg” means any of the following as specified in the applicable Final Terms: (a) the annual fixed leg; (b) the semi-annual fixed leg or (c) the quarterly fixed leg;

“Subsequent Reset Period” means the period from and including the Second Reset Date to but excluding the next Reset Date, and each successive period from and including a Reset Date to but excluding the next succeeding Reset Date;

“Subsequent Reset Rate of Interest” means, in respect of any Subsequent Reset Period, the rate of interest determined by the Calculation Agent on the Reset Determination Date corresponding to such Subsequent Reset Period as the sum of the relevant Reset Rate plus the relevant Margin; and

“U.S. Government Securities Business Day” means any day except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(c) Business Day Convention

If any date referred to in these Conditions which is specified to be subject to adjustment in accordance with a Business Day Convention would otherwise fall on a day which is not a Business Day, then, if the Business Day Convention specified is (i) the Floating Rate Business Day Convention, such date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (A) such date shall be brought forward to the immediately preceding Business Day and (B) each subsequent such date shall be the last Business Day of the month in which such date would have fallen had it not been subject to adjustment, (ii) the Following Business Day Convention, such date shall be postponed to the next day which is a Business Day, (iii) the Modified Following Business Day Convention, such date shall be postponed to the next day which 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, (iv) the Preceding Business Day Convention, such date shall be brought forward to the immediately preceding Business Day, or (v) No Adjustment, such date shall not be adjusted in accordance with any Business Day Convention, provided that if ISDA Determination, "2021 ISDA Definitions" and "Unscheduled Holiday" are applicable in the applicable Final Terms or Pricing Supplement, then in the case where Modified Following Business Day Convention, Modified Business Day Convention, Preceding Business Day Convention, FRN Convention, Floating Rate Convention or Eurodollar Convention apply to a particular date and that date would otherwise fall on a day that is not a Business Day as a result of an Unscheduled Holiday (as defined in the 2021 ISDA Definitions but disregarding references to Valuation Business Day and Exercise Business Day and construing references to the Confirmation to mean the applicable Final Terms or Pricing Supplement) notwithstanding the provisions of (ii) to (iv), such day will instead fall on the first following day that is a Business Day.

(d) *Interest on Floating Rate Notes*

(i) Interest Payment Dates

Each Floating Rate Note bears interest on its outstanding Nominal Amount from (and including) the Interest Commencement Date specified in the applicable Final Terms at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrear on either: (A) the Specified Interest Payment Date(s) in each year specified in the applicable Final Terms; or (B) if no Specified Interest Payment Date(s) is/are specified in the applicable Final Terms, each date (each such date, together with each Specified Interest Payment Date, an "**Interest Payment Date**") which falls the number of months or other period specified as the Specified Period in the applicable Final Terms after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date. Such interest will be payable in respect of each Interest Period (which expression shall, in these Terms and Conditions, mean that period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date).

(ii) Rate of Interest

The Rate of Interest payable from time to time in respect of the Floating Rate Notes will be determined in the manner specified in the applicable Final Terms and the provisions below relating to either Screen Rate Determination or ISDA Determination shall apply, depending upon which is specified in the applicable Final Terms.

(A) Screen Rate Determination

(a) Where Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined (other than where SONIA, SOFR, €STR, CMS Rate or SARON is specified to be the applicable Benchmark), the Rate of Interest for each Interest Period will be determined (and adjusted, if required by Conditions 4(h) and subject to Condition 4(o)) 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:

- (x) if the Primary Source for the Floating Rate is a Screen Page, subject as provided below, the Rate of Interest shall be:

- (I) the Relevant Rate (where such Relevant Rate on such Screen Page is a composite quotation or is customarily supplied by one entity), or
- (II) the arithmetic mean of the Relevant Rates of the persons whose Relevant Rates appear on that Screen Page,

in each case appearing on such Screen Page at the Relevant Time on the Interest Determination Date;

(y) if the Primary Source for the Floating Rate is Reference Banks or if sub-paragraph (x)(I) applies and no Relevant Rate appears on the Screen Page at the Relevant Time on the Interest Determination Date or if sub-paragraph (x)(II) above applies and fewer than two Relevant Rates appear on the Page at the Relevant Time on the Interest Determination Date, subject as provided below, the Rate of Interest shall be the arithmetic mean of the Relevant Rates which each of the Reference Banks is quoting to major banks in the Relevant Financial Centre at the Relevant Time on the Interest Determination Date, as determined by the Calculation Agent; and

(z) if paragraph (y) above applies, and the Issuer determines that fewer than two Reference Banks are so quoting Relevant Rates, subject as provided below, the Rate of Interest shall be the arithmetic mean of the rates per annum (expressed as a percentage) which the Calculation Agent determines to be the rates (being the nearest equivalent to the Reference Rate) in respect of a Representative Amount of the Specified Currency which at least two out of five leading banks selected by the Issuer in the principal financial centre of the country of the Specified Currency or, if the Specified Currency is euro, in the Euro-zone as selected by the Issuer (the “**Principal Financial Centre**”) are quoting at or about the Relevant Time on the date on which such banks would customarily quote such rates for a period commencing on the Effective Date for a period equivalent to the Specified Duration to leading banks carrying on business in the Principal Financial Centre; except that, if fewer than two of such banks are so quoting to leading banks in the Principal Financial Centre, the Rate of Interest shall be the Rate of Interest determined on the previous Interest Determination Date (after readjustment for any difference between any Margin, Rate Multiplier or Maximum or Minimum Rate of Interest applicable to the preceding Interest Period and to the relevant Interest Period).

(b) (1) Where the Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**SONIA**” and the Calculation Method is specified as being “**Compounded Daily Rate**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(o), be Compounded Daily SONIA adjusted as required by Condition 4(h) all as determined by the Calculation Agent.

“Compounded Daily SONIA” means, with respect to 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) and will be calculated by the Calculation Agent on the relevant Interest Determination Date, as follows, and the resulting percentage will be rounded if necessary to the fourth decimal place, with 0.00005 per cent. being rounded upwards:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{Relevant SONIA}_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

where:

“d” is the number of calendar days in:

- (a) where Lag is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“d_o” is the number of London Banking Days in:

- (a) where Lag is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“i” is a series of whole numbers from one to d_o, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day in:

- (a) where Lag is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“London Banking Day” or **“LBD”** means any day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London, United Kingdom;

“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 Look-back Period” is as specified in the applicable Final Terms and in no case shall be less than five London Business Days;

“Observation Period” means the period from and including the date falling “p” London Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling “p” London Banking Days prior to the Interest Payment Date for such Interest Period;

“p” is the number of London Banking Days included in the Observation Look-back Period specified in the applicable Final Terms;

“Relevant SONIA_i” means, in respect of any London Banking Day “i”:

- (a) where “Lag” is specified as the Observation Method in the applicable Final Terms, SONIA_{i-pLBD}; or
- (b) where “Shift” is specified as the Observation Method in the applicable Final Terms, SONIA_{iLBD};

“SONIA_{iLBD}” means, in respect of any London Banking Day “i” the SONIA reference rate for such London Banking Day “i”;

“SONIA_{i-pLBD}” means, in respect of any London Banking Day “i” falling in the relevant Interest Period, the SONIA reference rate for the London Banking Day falling “p” London Banking Days prior to the relevant London Banking Day “i”.

“SONIA reference rate”, in respect of any London Banking Day, is 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 Screen Page or, if the Screen Page is unavailable, as otherwise published by such authorised distributors, in each case on the London Banking Day immediately following such London Banking Day; and

If, subject to Condition 4(o), in respect of any London Banking Day in the relevant Observation Period, the Calculation Agent determines that the SONIA reference rate is not available on the Screen Page or has not otherwise been published by the relevant authorised distributors, the SONIA reference rate shall be:

- (a) (i) the Bank of England’s Bank Rate (the “**Bank Rate**”) prevailing at 5:00 p.m. (or, if earlier, close of business) on the relevant London Banking Day; plus (ii) the mean of the spread of the SONIA reference rate to the Bank Rate over the previous five London Business Days on which a SONIA reference rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate; or
- (b) if the Bank Rate is not published by the Bank of England as set out in subparagraph (a) above on the relevant London Banking Day, the SONIA Reference Rate published on the Screen Page (or otherwise published by the relevant authorised distributors) for the immediately preceding London Banking Day on

which the SONIA Reference Rate was published on the Screen Page (or otherwise published by the relevant authorised distributors).

Notwithstanding the foregoing, and subject to Condition 4(o), in the event the Bank of England publishes guidance as to (i) how the SONIA rate is to be determined or (ii) any rate that is to replace the SONIA rate, the Calculation Agent shall, subject to receiving written instructions from the Issuer and to the extent that it is reasonably practicable, follow such guidance in order to determine the SONIA reference rate for purposes of Notes of the relevant Series for so long as the SONIA reference rate is not available or has not been published by the authorised distributors.

(2) Where the Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**SONIA**” and the Calculation Method is specified as being “**Compounded Index Rate**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(o) be Compounded Daily SONIA for the Interest Period determined by reference to the screen rate or index for Compounded Daily SONIA administered by the administrator of the SONIA 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 Index Determination Dates specified below, as further specified in the applicable Final Terms (the “**SONIA Compounded Index**”) and in accordance with the following formula, and the resulting percentage will be rounded if necessary to the fourth decimal place, with 0.00005 per cent. being rounded upwards, plus or minus (as indicated in the applicable Final Terms) the Margin, if any, and adjusted as required by Condition 4(h), all determined by the Calculation Agent:

Compounded Daily SONIA rate (Index) =

$$\left(\frac{\text{SONIA Compounded Index}_y}{\text{SONIA Compounded Index}_x} - 1 \right) \times \frac{365}{d}$$

where:

“**x**” denotes that the relevant SONIA Compounded Index is the 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;

“**y**” denotes that the relevant SONIA Compounded Index is the SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the Interest Payment Date for such Interest Period, or such other date as when the relevant payment of interest falls to be due (but which by definition or the operation of the relevant provisions is excluded from such Interest Period);

A day on which the SONIA Compounded Index is determined pursuant to paragraph “x” or “y” above is referred to as an “**Index Determination Date**”;

“**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 applicable Final Terms.

If the SONIA Compounded Index is not published or displayed by the administrator of the SONIA reference rate or other information service at the relevant time on any relevant Index Determination Date, the Compounded Daily SONIA rate (Index) for the applicable Interest Period for which SONIA Compounded Index is not available shall be “**Compounded Daily SONIA**” determined in accordance with Condition 4(d)(ii)(A)(b)(1) above as if Compounded Index Rate is not specified as being applicable in the applicable Final Terms. For these purposes, the “Calculation Method” shall be deemed to be “**Compounded Daily Rate**”, the Relevant Number specified in the applicable Final Terms shall be the “Observation Lookback Period” and “Observation Method” shall be deemed to be “Shift” as if Compounded Index Rate is not specified as being applicable and these alternative elections had been made.

(3) In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, but without prejudice to Condition 4(o), the Rate of Interest applicable to the Notes during such Interest Period will be the Rate of Interest last determined in relation to the Notes in respect of the last preceding Interest Period (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period).

If the relevant Series of Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Final Terms, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon, as provided in Condition 4(f).

- (c) (1) Where the Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**SOFR**” and the Calculation Method is specified as being “**Compounded SOFR**”, the Rate of Interest for each Interest Period will, as provided below and subject to Conditions 4(o) or 4(p), be Compounded SOFR adjusted as required by Condition 4(h) all determined by the Calculation Agent.

“**Compounded SOFR**” means, in relation to any Interest Period, the rate of return of a daily compound interest investment (with SOFR as the reference rate for the calculation of interest) and will be calculated by the Calculation Agent on the relevant Interest Determination Date in accordance with the following formula (and the resulting percentage

will be rounded, if necessary, to the nearest fifth decimal place, with 0.000005 being rounded upwards):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SOFR_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“**d**” is the number of calendar days in:

- (a) where Lag Convention is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Observation Shift Convention is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“**d₀**” is the number of U.S. Government Securities Business Days in:

- (a) where Lag Convention is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Observation Shift Convention is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“**i**” is a series of whole numbers from one to **d₀**, each representing the relevant U.S. Government Securities Business Day in chronological order from, and including, the first U.S. Government Securities Business Day in:

- (a) where Lag Convention is specified as the Observation Method in the applicable Final Terms, the relevant Interest Period; or
- (b) where Observation Shift Convention is specified as the Observation Method in the applicable Final Terms, the relevant Observation Period;

“**n_i**” for any U.S. Government Securities Business Day “**i**” is the number of calendar days from, and including, such U.S. Government Securities Business Day “**i**” to, but excluding, the following U.S. Government Securities Business Day “**i+1**”;

“**Secured Overnight Financing Rate**” or “**SOFR**” means, with respect to any U.S. Government Securities Business Day: (1) the Secured Overnight Financing Rate published for such U.S. Government Securities Business Day as such rate appears on the SOFR Administrator’s Website at 3:00 p.m. (New York time) on the immediately following U.S. Government Securities Business Day (the “**SOFR Determination Time**”); or (2) if the rate specified in (1) above does not so appear at the SOFR Determination Time:

- (i) if both a Benchmark Transition Event (as defined in Condition 4(p)) and its related Benchmark Replacement Date (as defined in Condition 4(p)) have not occurred, the Secured Overnight Financing Rate as published in respect of the first preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the SOFR Administrator’s Website; or

- (ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, then SOFR shall be determined to be the rate determined in accordance with Condition 4(p));

“**SOFR_i**” means the SOFR for:

- (i) where “Lag Convention” is specified as the Observation Method in the applicable Final Terms, the U.S. Government Securities Business Day falling “p” U.S. Government Securities Business Days prior to the relevant U.S. Government Securities Business Day “i”; and
- (ii) where “Observation Shift Convention” is specified as the Observation Method in the applicable Final Terms, the relevant U.S. Government Securities Business Day “i”.

(2) Where the Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**SOFR**” and the Calculation Method is specified as being “**SOFR Index**”, the Rate of Interest for each Interest Period will, as provided below and subject to Conditions 4(o) or 4(p), be SOFR Index, calculated in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest fifth decimal place, with 0.000005 being rounded upwards), adjusted as required by Condition 4(h) all as determined by the Calculation Agent.

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}} - 1 \right) \times \left(\frac{360}{d} \right)$$

where:

“**SOFR**” means the daily secured overnight rate as provided by the SOFR Administrator on the SOFR Administrator’s Website;

“**SOFR Index_{Start}**” is the SOFR Index value for the day which is “p” U.S. Government Securities Business Days preceding the first date of the relevant Interest Period;

“**SOFR Index_{End}**” is the SOFR Index value for the day which is “p” U.S. Government Securities Business Days preceding the Interest Payment Date relating to the Interest Period;

“**d**” is the number of calendar days from, and including, the SOFR Index_{Start} to, but excluding, the SOFR Index_{End} (the number of calendar days in the relevant Observation Period);

“**SOFR Index**” means, with respect to any U.S. Government Securities Business Day:

- (a) the SOFR Index as published by the SOFR Administrator as such index appears on the SOFR Administrator’s Website at 3:00pm (New York time) on such U.S.

Government Securities Business Day (the “**SOFR Index Determination Time**”); provided that,

(b) if a SOFR Index value does not so appear as specified in (a) above at the SOFR Index Determination Time, then:

(i) if a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, then SOFR Index shall be the rate determined pursuant to the “SOFR Index Unavailable” provisions (defined below); or

(ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred in respect of SOFR, then (unless Condition 4(p) is specified as not being applicable) SOFR Index shall be as determined pursuant to Condition 4(p) (or as otherwise set out in the applicable Final Terms);

For the definition of “**SOFR Index**”, “**SOFR**” means the daily secured overnight financing rate provided by the SOFR Administrator on the SOFR Administrator’s website.

“**SOFR Index Unavailable**” means if SOFR Index_{Start} or SOFR Index_{End} is not published on the associated Interest Determination Date and (i) to the extent Condition 4(p) is specified as being not applicable in the applicable Final Terms, a Benchmark Event has not occurred, or (ii) to the extent Condition 4(p) is specified as being applicable in the applicable Final Terms, a Benchmark Transition Event (as defined in Condition 4(p)) and its related Benchmark Replacement Date (as defined in Condition 4(p)) have not occurred with respect to SOFR, “**Compounded SOFR**” means, for the applicable Interest Period for which such index is not available, the rate of return on a daily compounded interest investment calculated by the Calculation Agent on the relevant Interest Determination Date in accordance with the formula for SOFR Averages, and the definitions required for such formula, published on the SOFR Administrator’s Website. For the purposes of this provision, references in the SOFR Averages compounding formula and related definitions to “calculation period” shall be replaced with “Observation Period” as defined in this Condition, and the words “that is, 30-, 90-, or 180- calendar days” shall be removed. If the SOFR_i does not so appear for any day, “i” in the Observation Period, SOFR_i shall be SOFR published in respect of the preceding U.S. Government Securities Business Day for which SOFR was published on the SOFR Administrator’s Website;

And, for the purposes of this Condition 4(d)(2), the following definitions shall also apply:

“**Observation Lookback Period**” is as specified in the applicable Final Terms;

“**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 the Interest Period to, but excluding, the date falling “p” U.S. Government Securities Business Days preceding the Interest Payment Date for the Interest Period, or such other period as may be specified in the Final Terms;

“**p**”, for any Observation Period, is the number of U.S. Government Securities Business Days specified in the applicable Final Terms;

“SOFR Administrator” means the Federal Reserve Bank of New York (or a successor administrator of SOFR);

“SOFR Administrator’s Website” means the website of the Federal Reserve Bank of New York, currently at <http://www.newyorkfed.org>, or any successor source; and

“U.S. Government Securities Business Day” means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(3) If the relevant Series of Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Final Terms, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon as provided in Condition 4(f).

(d) Where the Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**€STR**” and the Calculation Method is specified as being “**Compounded €STR**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(o), be Compounded Daily €STR adjusted as required by Condition 4(h) all as determined by the Calculation Agent.

“Compounded Daily €STR” means, with respect to 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) and will be calculated by the Calculation Agent on the Interest Determination Date as follows, and the resulting percentage will be rounded, if necessary, to the fourth decimal place, with each 0.00005 per cent. being rounded upwards:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{(\text{€STR}_{i-p\text{TBD}} \times n_i)}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“d” is the number of calendar days in the relevant Interest Period;

“d_o”, for any Interest Period, is the number of TARGET2 Business Days (as defined below) in the relevant Interest Period;

“€STR_{i-pTBD}”, for any day “i” in the relevant Interest Period, means the €STR Reference Rate for the TARGET2 Business Day falling “p” TARGET2 Business Days prior to the relevant TARGET2 Business Day “i”;

“**i**” is a series of whole numbers from one to d_0 , each representing the relevant TARGET2 Business Day in chronological order from, and including, the first TARGET2 Business Day in the relevant Interest Period;

“**n_i**” for any TARGET2 Business Day “**i**” is the number of calendar days from, and including, such TARGET2 Business Day “**i**” up to, but excluding, earlier of (i) the following TARGET2 Business Day or (ii) the last day of the relevant Interest Period or in respect of the final Interest Period the Maturity Date;

“**p**”, for any Interest Period, is the number of TARGET2 Business Days included in the Observation Look-back Period, as specified in the applicable Final Terms, which shall not be specified in the applicable Final Terms as less than five without the prior agreement of the Calculation Agent;

“**ECB Recommended Rate Index Cessation Event**” means the occurrence 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 ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide the ECB Recommended Rate; or

(b) a public statement or the publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide the ECB Recommended Rate;

“**ECB Recommended Rate Index Cessation Effective Date**” means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate would ordinarily have been provided and is no longer provided;

“**€STR Index Cessation Event**” means the occurrence of one or more of the following events:

(a) a public statement or publication of information by or on behalf of the administrator of €STR announcing that it has ceased or will cease to provide €STR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide €STR; or

(b) a public statement or the publication of information by the regulatory supervisor for the administrator of €STR, the central bank for the currency of €STR, an insolvency official with jurisdiction over the administrator of €STR, a resolution

authority with jurisdiction over the administrator of €STR or a court or an entity with similar insolvency or resolution authority over the administrator of €STR, which states that the administrator of €STR has ceased or will cease to provide €STR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide €STR;

“€STR Index Cessation Effective Date” means, in respect of an €STR Index Cessation Event, the first date on which €STR would ordinarily have been provided and is no longer provided;

“€STR Reference Rate” means in respect of any TARGET2 Business Day, a reference rate equal to the daily euro short-term rate (**“€STR”**) for such TARGET2 Business Day as provided by the European Central Bank, as administrator of such rate (or any successor administrator of such rate), on the website of the European Central Bank, currently at <http://www.ecb.europa.eu>, or any successor website officially designated by the European Central Bank (the **“ECB’s Website”**) (in each case, on or before 9:00 a.m. Central European Time on the TARGET2 Business Day immediately following such TARGET2 Business Day) (or any amended publication time as specified by the administrator of €STR in the €STR benchmark methodology);

“TARGET2 Business Day” or **“TBD”** means a day on which the TARGET2 System (as defined in Condition 4(m)) is open;

If the €STR Reference Rate does not appear on a TARGET2 Business Day as specified above, unless both an €STR Index Cessation Event and an €STR Index Cessation Effective Date (each as defined below) have occurred, the €STR Reference Rate shall be a rate equal to €STR in respect of the last TARGET2 Business Day for which such rate was published on the ECB’s Website.

If the €STR Reference Rate does not appear on a TARGET2 Business Day as specified above, and both an €STR Index Cessation Event and an €STR Index Cessation Effective Date have occurred, the rate for each TARGET2 Business Day occurring on or after such €STR Index Cessation Effective Date will be determined as if references to “€STR” were references to the rate (inclusive of any spreads or adjustments) that was recommended as the replacement for €STR by the European Central Bank (or any successor administrator of €STR) and/or by a committee officially endorsed or convened by (i) the European Central Bank (or any successor administrator of €STR) and/or (ii) the European Securities Markets Authority, in each case for the purpose of recommending a replacement for €STR (which rate may be produced by the European Central Bank or another administrator) (the **“ECB Recommended Rate”**), provided that, if no such rate has been recommended before the end of the first TARGET2 Business Day following the €STR Index Cessation Effective Date, then the rate for each TARGET2 Business Day occurring on or after such €STR Index Cessation Effective Date will be determined as if references to €STR were references to the Eurosystem Deposit Facility Rate, the rate on the deposit facility that banks may use to make overnight deposits with the Eurosystem, as published on the ECB’s Website (the **“EDFR”**) on such TARGET Business Day plus the arithmetic mean of the daily difference between the €STR Reference Rate and the EDFR over an observation period of 30 TARGET2 Business Days starting 30 TARGET2 Business Days

prior to the date on which the €STR Index Cessation Event occurs and ending on the TARGET2 Business Day immediately preceding the day on which the €STR Index Cessation Event occurs (the “**EDFR Spread**”); provided further that, if both an ECB Recommended Rate Index Cessation Event and an ECB Recommended Rate Index Cessation Effective Date subsequently occur, then the rate for each TARGET2 Business Day occurring on or after that ECB Recommended Rate Index Cessation Effective Date will be determined as if references to “€STR” were references to the EDFR on such TARGET2 Business Day plus the arithmetic mean of the daily difference between the ECB Recommended Rate and the EDFR over an observation period of 30 TARGET2 Business Days starting 30 TARGET2 Business Days prior to the date on which the €STR Index Cessation Event occurs and ending on the TARGET2 Business Day immediately preceding the date on which the ECB Recommended Rate Index Cessation Event occurs.

In case an €STR Index Cessation Event and an €STR Index Cessation Effective Date occur, the Issuer will promptly notify the Noteholders in accordance with Condition 13 and the Calculation Agent thereof and of the action taken according to the foregoing provisions.

In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, but without prejudice to Condition 4(o), the Rate of Interest applicable to the Notes during such Interest Period will be the Rate of Interest last determined in relation to the Notes in respect of the last preceding Interest Period (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period). If an €STR Index Cessation Event occurs, the Issuer will promptly notify the Calculation Agent of such occurrence.

If the relevant Series of Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Final Terms, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon as provided in Condition 4(f).

(e) (1) Where Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being “**CMS Rate**”, the Rate of Interest for each Interest Period will be, subject to Condition 4(o):

- (x) where “**CMS Reference Rate**” is specified as the Applicable CMS Formula in the applicable Final Terms, determined by the Calculation Agent by reference to the following formula:

CMS Rate + Margin

- (y) where “**Leveraged CMS Reference Rate**” is specified as the Applicable CMS Formula in the applicable Final Terms, determined by the Calculation Agent by reference to the following formulae:

Either:

- (I) where "**Leveraged CMS Reference Rate: Standard**" is specified in the applicable Final Terms:

$\text{Leverage} \times (\text{CMS Rate} + \text{Margin})$

- (II) where "**Leveraged CMS Reference Rate: Floor/Cap**" is specified in the applicable Final Terms:

$\text{Min} \{ \text{Max} [\text{Leverage} \times (\text{CMS Rate} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

- (z) where "**Steepener CMS Reference Rate**" is specified as the Applicable CMS Formula in the applicable Final Terms, determined by the Calculation Agent by reference to the following formulae:

Either:

- (I) where "**Steepener CMS Reference Rate: Unleveraged**" is specified in the applicable Final Terms:

$\text{Min} \{ \text{Max} [(\text{CMS Rate 1} - \text{CMS Rate 2} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

or

- (II) where "**Steepener CMS Reference Rate: Leveraged**" is specified in the applicable Final Terms:

$\text{Min} \{ \text{Max} [\text{Leverage} \times (\text{CMS Rate 1} - \text{CMS Rate 2} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

For the purposes of this sub-paragraph (e):

"**CMS Rate**" shall mean the applicable swap rate for swap transactions in the Reference Currency with a maturity of the Designated Maturity, expressed as a percentage, which appears on the Screen Page in respect of the CMS Rate as at the Relevant Time on the Interest Determination Date in question, all as determined by the Calculation Agent; and

"**Cap**", "**CMS Rate 1**", "**CMS Rate 2**", "**Designated Maturity**", "**Floor**", "**Leverage**", "**Margin**", and "**Reference Currency**" shall have the meanings given to those terms in the applicable Final Terms.

If the Screen Page is not available and where the Calculation Agent is not Citibank, N.A., London Branch, the applicable CMS Rate will be determined by the Calculation Agent in good faith and in a commercially reasonable manner.

If the Screen Page is not available and where the Calculation Agent is Citibank, N.A., London Branch, the Issuer (or an agent appointed by the Issuer) shall request each of the Reference Banks to provide the Issuer (or such agent appointed by the Issuer) with its quotation for the Relevant Swap Rate at approximately the Relevant Time on the Interest

Determination Date in question. If at least three of the Reference Banks provide the Issuer (or such agent appointed by the Issuer) with such quotation, the CMS Rate for such Interest Period shall be the arithmetic mean of such quotations, 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).

If on any Interest Determination Date fewer than three or none of the Reference Banks provides the Issuer (or an agent appointed by the Issuer) with such quotations as provided in the preceding paragraph, the CMS Rate shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin, Rate Multiplier, Minimum Rate of Interest and/or Maximum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, such Margin, Rate Multiplier, Minimum Rate of Interest and/or Maximum Rate of Interest relating to the relevant Interest Period, in place of that relating to that last preceding Interest Period).

For this purpose:

“Fixed Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Final Terms;

“Floating Rate Day Count Fraction” means the Day Count Fraction specified as such in the applicable Final Terms;

“Floating Leg Rate Option” means the rate option specified as such in the applicable Final Terms;

“Reference Banks” means (i) where the Reference Currency is euro, the principal office of five leading swap dealers in the euro inter-bank market, (ii) where the Reference Currency is Sterling, the principal London office of five leading swap dealers in the London inter-bank market, (iii) where the Reference Currency is U.S. dollars, the principal New York City office of five leading swap dealers in the New York City inter-bank market or (iv) in the case of any other Reference Currency, the principal Relevant Financial Centre office of five leading swap dealers in the Relevant Financial Centre inter-bank market, in each case selected by the Issuer.

“Relevant Swap Rate” means the mid-market Specified Frequency swap rate determined on the basis of the arithmetic mean of the bid and offered rates for the Specified Fixed Leg, calculated on a Fixed Leg Day Count Fraction, of a fixed-for-floating interest rate swap transaction in the Specified Currency with a term equal to the Designated Maturity commencing on the first day of the relevant Interest Period and in an amount that is representative for a single transaction in the relevant market at the relevant time with an acknowledged dealer of good credit in the swap market, where the floating leg, in each case calculated on the Floating Leg Day Count Fraction, is equivalent to the Floating Leg Rate Option with a designated maturity determined by the Calculation Agent by reference to standard market practice and/or the ISDA Definitions;

“Specified Fixed Leg” means any of the following as specified in the applicable Final Terms: (a) annual fixed leg; (b) semi-annual fixed leg; or (c) quarterly fixed leg;

“Specified Frequency” has the meaning given to it in the applicable Final Terms.

(f) Where Screen Rate Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Final Terms as being **“SARON”** and the Calculation Method is specified

as being “**SARON Compounded**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(q), be SARON Compounded adjusted as required by Condition 4(h) all as determined by the Calculation Agent.

“**SARON Compounded**” means, in respect of an Interest Period, the rate of return of a daily compound interest investment (with the daily overnight interest rate of the secured funding market for Swiss franc) as calculated by the Calculation Agent (or such other party responsible for the calculation of the Rate of Interest, as specified in the applicable Final Terms) on the relevant Interest Determination Date in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards):

$$\left[\prod_{i=1}^{d_b} \left(1 + \frac{SARON_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d_c}$$

where:

“ **d_b** ” means the number of Zurich Banking Days in the relevant Observation Period;

“ **d_c** ” means the number of calendar days in the relevant Observation Period;

“ **i** ” indexes a series of whole numbers from one to d_b , representing the Zurich Banking Days in the relevant Observation Period in chronological order from, and including, the first Zurich Banking Day in such Observation Period;

“ **n_i** ” means, in respect of any Zurich Banking Day i , the number of calendar days from, and including, the Zurich Banking Day i up to, but excluding, the first following Zurich Banking Day;

“**Observation Period**” means, in respect of an Interest Period, the period from, and including, the date falling “**p**” Zurich Banking Days prior to the first day of such Interest Period and ending on, but excluding, the date falling “**p**” Zurich Banking Days prior to (A) the Interest Payment Date for such Interest Period or (B) such earlier date on which such Notes become due and payable;

“**Observation Period Shift**” is as specified in the applicable Final Terms;

“**p**” means, for the relevant Interest Period, the number of Zurich Banking Days specified to be the Observation Period Shift in the applicable Final Terms;

“ **$SARON_i$** ” means, in respect of any Zurich Banking Day i , SARON for such Zurich Banking Day i ;

“**SARON**” means, in respect of any Zurich Banking Day, the Swiss Average Rate Overnight for such Zurich Banking Day published by the SARON Administrator on the SARON Administrator Website at the Relevant Time on such Zurich Banking Day;

Subject to Condition 4(q), if SARON does not so appear on the SARON Administrator Website or is not so published by the Relevant Time on such Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date (the latter

two terms as defined in Condition 4(q)) have not both occurred on or prior to such Zurich Banking Day, the Swiss Average Rate Overnight published by the SARON Administrator on the SARON Administrator Website for the first preceding Zurich Banking Day on which the Swiss Average Rate Overnight was published by the SARON Administrator on the SARON Administrator Website.

If the relevant Series of Notes become due and payable in accordance with Condition 9, the final determination of the Rate of Interest shall be calculated for the Interest Accrual Period to (but excluding) the date on which the Note becomes so due and payable, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon as provided in Condition 4(f).

For the purposes of this sub-paragraph (f):

"Relevant Time" means, in respect of any Zurich Banking Day, close of trading on SIX Swiss Exchange on such Zurich Banking Day, which is expected to be on or around 6 p.m. (Zurich time);

"SARON Administrator" means SIX Index AG or any successor administrator of SARON;

"SARON Administrator Website" means the website of the SARON Administrator, currently published on the "SIX Group's website";

"SIX Swiss Exchange" means SIX Swiss Exchange AG and any successor thereto; and

"Zurich Banking Day" means a day on which banks are open in the City of Zurich for the settlement of payments and of foreign exchange transactions.

(B) ISDA Determination

Where ISDA Determination is specified in the applicable Final Terms as being the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will be determined by the Calculation Agent as a rate equal to the relevant ISDA Rate plus or minus (as indicated in the applicable Final Terms) the Margin (if any). For purposes of this Condition 4(d)(ii)(B), **"ISDA Rate"** for an Interest Period means a rate equal to the Floating Rate that would be determined by the Calculation Agent under a Swap Transaction under the terms of an agreement:

- (i) if "2006 ISDA Definitions" is specified in the applicable Final Terms, the 2006 ISDA Definitions (as amended, supplemented and updated as at the Issue Date of the first Tranche of the Notes, published by the International Swaps and Derivatives Association, Inc. (**"ISDA"**)); or
- (ii) if "2021 ISDA Definitions" is specified in the applicable Final Terms, the latest version of the 2021 ISDA Interest Rate Derivatives Definitions as published by ISDA as at the Issue Date of the first Tranche of the Notes,

(the **"ISDA Definitions"**) and under which:

- (x) the Floating Rate Option is as specified in the applicable Final Terms,
- (y) the Designated Maturity (if applicable) is the period set out in the applicable Final Terms,

- (z) the relevant Reset Date is either (I) if the applicable Floating Rate Option is based on the EURIBOR (or any successor or replacement rate) for a currency, the first day of that Interest Period or (II) in any other case, as specified in the applicable Final Terms;
- (aa) if the Floating Rate Option is an Overnight Floating Rate Option and Compounding Method is specified to apply in the applicable Final Terms, the Overnight Rate Compounding Method will be one of the following, as specified in the applicable Final Terms:
 - (i) Compounding with Lookback;
 - (ii) Compounding with Observation Period Shift; or
 - (iii) Compounding with Lockout;
- (bb) if the Floating Rate Option is an Overnight Floating Rate Option and Averaging is specified to apply in the applicable Final Terms, the Overnight Averaging Method will be one of the following, as specified in the applicable Final Terms:
 - (i) Averaging with Lookback;
 - (ii) Averaging with Observation Period Shift; or
 - (iii) Averaging with Lockout;
- (cc) if the Floating Rate Option is a Compounded Index Floating Rate Option, the Index Method will be Compounded Index Method with Observation Period Shift as specified in the applicable Final Terms;
- (dd) if the 2021 ISDA Definitions apply, (i) any fallbacks that would otherwise be required to be determined in accordance with Section 8.6 (Generic Fallback Provisions) of the 2021 ISDA Definitions shall not be so determined, but shall instead be determined in accordance with Condition 4(h) and (ii) if Administrator/Benchmark Event is specified in the Floating Rate Matrix in respect of the relevant Floating Rate Option, Condition 4(h) shall apply in place of the provisions relating to Administrator/Benchmark Event and the Administrator/ Benchmark Fallback in the 2021 ISDA Definitions, and the 2021 ISDA Definitions shall be construed accordingly;
- (ee) if the 2021 ISDA Definitions apply, Period End Date/ Termination Date adjustment for Unscheduled Holiday (as defined in the 2021 ISDA Definitions) will apply if specified in the applicable Final Terms to be applicable;
- (ff) if the 2021 ISDA Definitions apply, Non-Representative (as defined in the 2021 ISDA Definitions) will apply if specified in the relevant Final Terms to be applicable; and

(gg) if the 2021 ISDA Definitions apply, Successor Benchmark and Successor Benchmark Effective Date (as defined in the 2021 ISDA Definitions) will be as specified in the applicable Final Terms.

Subject to Condition (dd) above, the ISDA Definitions contain provisions for determining the applicable Floating Rate (as defined below) (including Supplement 70 to the 2006 ISDA Definitions and Section 9 of the 2021 ISDA Definitions (Bespoke Triggers and Fallbacks)) in the event that the specified Floating Rate is not available.

For the purposes of this Condition 4(d)(ii)(B), **"Floating Rate"**, **"Floating Rate Option"**, **"Floating Rate Matrix"**, **"Designated Maturity"**, **"Rate Option"**, **"Reset Date"**, **"Overnight Floating Rate Option"**, **"Overnight Rate Compounding Method"**, **"Compounding with Lookback"**, **"Compounding with Observation Period Shift"**, **"Compounding with Lockout"**, **"Averaging with Lookback"**, **"Averaging with Observation Period Shift"**, **"Averaging with Lockout"**, **"Generic Fallback Provisions"**, **"Compounded Index Floating Rate Option"**, **"Index Method"** and **"Compounded Index Method with Observation Period Shift"** have the meanings given to those terms in the applicable ISDA Definitions.

With respect to Notes where ISDA Determination is specified in the applicable Final Terms as the manner in which the Rate of Interest is to be determined, the Issuer hereby agrees that it shall not name Citibank, N.A., London Branch as Calculation Agent in any Final Terms and/or any other transaction document for such Series of Notes.

(e) Calculation of the Range Accrual Factor

This Condition 4(e) is applicable to Fixed Rate Notes or Floating Rate Notes to which Range Accrual is specified to be applicable in the applicable Final Terms (**"Range Accrual Notes"**).

The "Range Accrual Factor" means in respect of an Interest Period, an amount calculated by the Calculation Agent in accordance with the following formula:

$$\frac{N1}{N2}$$

For the purpose of this Condition 4(e):

"Calculation Day" means, in respect of each Interest Period, each calendar day falling within such Interest Period;

"Cap" means, in respect of a Relevant Rate for any relevant Interest Period, the per annum rate specified in the applicable Final Terms;

"CMS" means the swap transaction in the Specified Currency with a maturity of the Specified Maturity;

"Common Valid Date" means each day that is a Business Day in each Relevant Financial Centre;

"First Reference Rate" means the Range Accrual Reference Rate so specified in the applicable Final Terms and determined in accordance with these Conditions;

"Floor" means, in respect of a Relevant Rate for any relevant Interest Period, the per annum rate specified in the applicable Final Terms;

"N1" means, in respect of any relevant Interest Period, the number of Calculation Days during such Interest Period for which, in respect of a Single Range Accrual Note, the Relevant Rate, and, in respect of a Dual Range Accrual Note, each applicable Relevant Rate is (a) if specified in the applicable Final Terms that "greater than or equal to" shall apply, greater than or equal to the applicable Floor for that Interest Period (as determined by the Calculation Agent); or (b) if specified in the applicable Final Terms that "greater than" shall apply, greater than the applicable Floor (as determined by the Calculation Agent); and (x) if specified in the applicable Final Terms that "less than or equal to" shall apply, less than or equal to the applicable Cap for that Interest Period (as determined by the Calculation Agent); or (y) if specified in the applicable Final Terms that "less than" shall apply, less than the applicable Cap (as determined by the Calculation Agent);

"N2" means, in respect of each Interest Period, the number of Calculation Days during such Interest Period, as determined by the Calculation Agent;

"Range Accrual Reference Rate" means (i) SONIA, (ii) SOFR, (iii) €STR, (iv) EURIBOR, (v) CMS, or (vi) SARON, as specified in the applicable Final Terms;

"Rate" means, in respect of a Range Accrual Reference Rate specified in the applicable Final Terms, either:

- (i) the offered quotation (if there is only one quotation on the Screen Page); or
- (ii) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations (if there are two or more quotations on the Screen Page),

(in each case expressed as a percentage rate per annum) for the Range Accrual Reference Rate for the Specified Maturity and Specified Currency which appears or appear, as the case may be, on the Screen Page on which such Range Accrual Reference Rate is for the time being displayed at the Relevant Time in the Relevant Financial Centre on such Calculation Day. If such rate does not appear on the Screen Page at the Relevant Time in the Relevant Financial Centre on such Calculation Day, the Calculation Agent will in its sole and absolute discretion, determine such rate (or a method for determining such rate) for such Calculation Day, taking into consideration all available information and acting in good faith and in a commercially reasonable manner;

provided that: (i) in respect of a Single Range Accrual Note (as specified in the applicable Final Terms), (A) subject to proviso (B) below, if any Calculation Day is not a Business Day in the Relevant Financial Centre, the rate for such Calculation Day shall be determined in respect of the immediately preceding Business Day in the Relevant Financial Centre; and (B) in respect of each Interest Period, the Relevant Rate in respect of each Calculation Day from, and including, the fifth Business Day in the Relevant Financial Centre or such other Business Day (such date being the **"Rate Cut Off Date"** for such Interest Period) prior to the Interest Payment Date falling immediately after the end of such Interest Period to, and including, the last Calculation Day of such Interest Period, shall be deemed to be the rate in respect of the Rate Cut Off Date; and (ii) in respect of a Single Range Accrual (as specified in the applicable Final Terms) where CMS Spread is specified to be applicable in the Final Terms and in respect of a Dual Range Accrual Note (as specified in the applicable Final Terms), (A) subject to proviso (B) below, if any Calculation Day is not a Common Valid Date, the rate in respect of a Reference Rate for such Calculation Day shall be determined in respect

of the immediately preceding Business Day in the Relevant Financial Centre for such Reference Rate; and (B) in respect of each Interest Period, the Relevant Rate in respect of each Calculation Day from, and including, the seventh Common Valid Date or such other Common Valid Date specified in the applicable Final Terms (such date being the "**Rate Cut Off Date**" for such Interest Period) prior to the Interest Payment Date falling immediately after the end of such Interest Period to, and including, the last Calculation Day of such Interest Period, shall be deemed to be the rate for such Reference Rate in respect of the Rate Cut Off Date.

"**Relevant Rate**" means either:

- (i) where Single Range Accrual Note is specified to be applicable in the Final Terms either:
 - (A) the Rate as determined in accordance with these Conditions; or
 - (B) where CMS Spread is specified to be applicable in the Final Terms, the Rate in respect of the First Reference Rate minus the Rate in respect of the Second Reference Rate, as determined in accordance with these Conditions; or
- (ii) where Dual Range Accrual Note is specified to be applicable in the Final Terms, each Rate determined in accordance with these Conditions provided that where CMS Spread is specified to be applicable in the Final Terms, the Relevant Rate will be calculated as the Rate in respect of the First Reference Rate minus the Rate in respect of the Second Reference Rate, as determined in accordance with these Conditions;

"**Second Reference Rate**" means the Range Accrual Reference Rate so specified in the applicable Final Terms and determined in accordance with the Conditions; and

"**Specified Currency**" means the currency in which the Notes are denominated unless otherwise specified in the applicable Final Terms in relation to Range Accrual items thereof.

(f) Accrual of Interest

Interest will cease to accrue on each Senior Note on the due date for redemption unless, upon due presentation, payment of principal is improperly withheld or refused, in which event interest will continue to accrue (as well after as before judgement) at the Rate of Interest in the manner provided in this Condition 4 to the Relevant Date (as defined in Condition 7).

(g) Interest on Zero Coupon Notes

Where a Senior Note, the Interest Basis of which is specified to be Zero Coupon, 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 Redemption Amount of such Senior Note. As from the Maturity Date, the Rate of Interest for any overdue principal of such a Senior Note shall be a rate per annum (expressed as a percentage) equal to the Amortisation Yield (as defined in Condition 5(i)).

(h) Margin, Maximum Rate of Interest, Minimum Rate of Interest, Instalment Amounts and Redemption Amounts, Rate Multipliers and Rounding

- (i) If any Margin (except for CMS linked Notes where the relevant formula in Condition 4(d)(ii)(A)(e) already takes the Margin into account) or Rate Multiplier is specified in the applicable Final Terms (either (x) generally, or (y) in relation to one or more Interest Periods), an adjustment shall be made to all Rates of Interest, in the case of (x), or the Rates of Interest for the specified Interest Periods, in the case of (y), calculated by adding

(if a positive number) or subtracting the absolute value (if a negative number) of such Margin or multiplying by such Rate Multiplier, subject always to the next paragraph.

- (ii) If any Maximum Rate of Interest or Minimum Rate of Interest, Instalment Amount, Early Redemption Amount or Final Redemption Amount is specified in the applicable Final Terms, then any Rate of Interest, Instalment Amount, Early Redemption Amount or Final Redemption Amount shall be subject to such maximum or minimum, as the case may be. Unless otherwise specified in the applicable Final Terms, the Minimum Rate of Interest shall be zero.
- (iii) For the purposes of any calculations required pursuant to these Conditions (unless otherwise specified), (x) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with halves being rounded up), (y) all figures will be rounded to seven significant figures (with halves being rounded up) and (z) all currency amounts which fall due and payable will 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, with respect to any currency other than euro, the lowest amount of such currency which is available as legal tender in the country of such currency and, with respect to euro means 0.01 euro.

(i) *Calculations*

The amount of interest payable per Calculation Amount in respect of any Senior Note for any period shall be equal to the product of the Rate of Interest (adjusted as required by Condition 4(h)), the Calculation Amount specified in the applicable Final Terms and the Day Count Fraction for such period (and subject to the application of the Range Accrual Factor, if applicable), 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 per Calculation Amount in respect of such Senior Note for such period shall equal such Interest Amount (or be calculated in accordance with such formula). Where any Interest Period comprises two or more Interest Periods, the amount of interest payable per Calculation Amount in respect of such Interest Period will be the sum of the amounts of interest payable in respect of each of those Interest Periods.

(j) *Determination and Publication of Rates of Interest, Interest Amounts, Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts and Instalment Amounts*

As soon as practicable after the Relevant Time on each Interest Determination Date, Reset Determination Date or such other time on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quote or make any determination or calculation, it will determine such rates and calculate the amount of interest payable (the “**Interest Amount**”) in respect of each Specified Denomination of the Senior Notes for the relevant Interest Period (or, if determining the First Reset Rate of Interest or a Subsequent Reset Rate of Interest, the Interest Amount for each Interest Period falling within the relevant Reset Period), calculate the Final Redemption Amount, Early Redemption Amount, Optional Redemption Amounts or Instalment Amount, obtain such quote or make such determination or calculation, as the case may be, and cause the Rate of Interest and the Interest Amounts for each Interest Period and the relevant Interest Payment Date and, if required to be calculated, the Final Redemption Amount, Early Redemption Amount, Optional Redemption Amount or any Instalment Amount to be notified to the Fiscal Agent, the Registrar (if applicable), the Bank, each of the Paying Agents, the Noteholders, any other Calculation Agent appointed in respect of the Senior Notes which is to make a further calculation upon receipt of such information and, if the Senior Notes are listed on a stock exchange and the rules of such exchange so requires, such exchange 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, the fourth Business Day after such determination (or in the case of Senior Notes where the Benchmark is specified in the applicable Final Terms as being SONIA, the second London Banking Day after such determination). The Interest Amounts and the Interest Payment Date so provided 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 Senior Notes become due and payable under Condition 9, the accrued interest and the Rate of Interest payable in respect of the Senior Notes shall, save in the case of Compounded Daily SONIA for the purposes of Condition 4(d)(ii)(b), nevertheless continue to be calculated as previously in accordance with this Condition but no notification of the Rate of Interest or the Interest Amount so calculated need be made. The determination of any rate or amount, the obtaining of each quote and the making of each determination or calculation by the Calculation Agent shall (in the absence of manifest error) be final and binding upon all parties.

(k) Linear Interpolation

Where Linear Interpolation is specified as being applicable in respect of an Interest Period in the applicable Final Terms, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight line linear interpolation by reference to two rates based on the relevant Benchmark (where Screen Rate Determination is specified as applicable in the applicable Final Terms) or the relevant Floating Rate Option (where ISDA Determination is specified as applicable in the applicable Final Terms), one of which shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period and the other of which rates are available next longer than the length of the relevant Interest Period provided however that if there is no rate available for the period of time next shorter or, as the case may be, next longer, then the Calculation Agent shall determine such rate at such time and by reference to such sources as it determines appropriate.

“Designated Maturity” means, in relation to Screen Rate Determination, the period of time designated as the Specified Duration.

(l) Exempt Notes

The rate or amount of interest in respect of Exempt Notes which are not also Fixed Rate Notes or Floating Rate Notes shall be determined in the manner specified in the applicable Pricing Supplement, provided that where such Exempt Notes are Index Linked Interest Notes, the provisions of Condition 5(c) and other related provisions of Condition 5 shall, save to the extent amended in the applicable Pricing Supplement, apply as if the references therein to Floating Rate Notes were references to Index Linked Interest 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 such Exempt Note and otherwise as specified in the applicable Pricing Supplement.

(m) Definitions

In these Conditions, unless the context otherwise requires, the following defined terms shall have the meanings set out below:

“Benchmark” means either the Euro-zone interbank offered rate (**“EURIBOR”**), SONIA, SOFR, €STR, Constant Maturity Swap Rate (**“CMS Rate”**), SARON or such other reference rate specified in the applicable Final Terms.

“Business Day” means:

- (i) in the case of a Specified Currency other than euro or Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the principal financial centre for that currency and each other place (if any) specified in the applicable Final Terms as an Additional Business Centre and if TARGET2 is specified as an Additional Business Centre, a TARGET2 Business Day;
- (ii) in the case of euro, a day (other than a Saturday or Sunday) on which the TARGET2 System is open (a **“TARGET2 Business Day”**) and on which commercial banks are open for business in each place (if any) specified in the applicable Final Terms as an Additional Business Centre; and/or
- (iii) in the case of Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for business and settlement of Renminbi payments in each Relevant Renminbi Settlement Centre (as defined below) and each other place (if any) specified in the applicable Final Terms as an Additional Business Centre.

“Calculation Agent” means the Agent or such other entity as may be specified in the applicable Final Terms as the Calculation Agent (provided that the Agent will not be appointed as Calculation Agent for: (i) Fixed Rate Reset Notes; (ii) Notes where the Reference Rate is SARON; (iii) or where ISDA Determination is applicable).

“Day Count Fraction” means, in respect of the calculation of an amount of interest on any Senior Note for any period of time (from and including the first day of such period to but excluding the last) not comprising a complete year (whether or not constituting an Interest Period, the **“Calculation Period”**):

- (i) If **“Actual/365”** or **“Actual/Actual (ISDA)”** is specified in the applicable Final Terms, the actual number of days in the Calculation Period divided by 365 (or, if any portion of that 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);
- (ii) if **“Actual/365 (Fixed)”** is specified in the applicable Final Terms, the actual number of days in the Calculation Period divided by 365;
- (iii) if **“Actual/365 (Sterling)”** is specified in the applicable Final Terms, the actual number of days in the Calculation Period divided by 365 or, in the case the last day of the Calculation Period falls in a leap year, 366;
- (iv) if **“Actual/360”** is specified in the applicable Final Terms, the actual number of days in the Calculation Period divided by 360;
- (v) if **“30/360”**, **“360/360”** or **“Bond Basis”** is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“M₂” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“D₁” is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D₁ will be 30; and

“D₂” 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 D₁ is greater than 29, in which case D₂ will be 30;

- (vi) if “**30E/360**” or “**Eurobond Basis**” is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“M₂” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“D₁” is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D₁ will be 30; and

“D₂” 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 D₂ will be 30;

- (vii) if “**30E/360 (ISDA)**” is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“**M₂**” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“**D₁**” 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 D₁ will be 30; and

“**D₂**” 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 D₂ will be 30; and

- (viii) if “**Actual/Actual (ICMA)**” is specified in the applicable Final Terms,
- (A) where the Calculation Period is equal to or shorter than the Determination Period during which the Calculation Period ends, the number of days in such Calculation Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in the applicable Final Terms) that would occur in one calendar year; or
 - (B) in the case of Senior Notes where the Calculation Period is longer than the Determination Period during which the Calculation Period ends, the sum of:
 - (1) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates (as specified in the applicable Final Terms) that would occur in one calendar year; and
 - (2) the number of days in such Calculation Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year.

“**Determination Period**” means the period from (and including) a Determination Date to but excluding the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date).

“**Euro-zone**” means the region comprised of member states of the European Union that adopt or have adopted the single currency in accordance with the Treaty establishing the European Community, as amended.

“**Effective Date**” means, with respect to any Floating Rate to be determined on an Interest Determination Date, the date specified as such in the applicable Final Terms or, if none is so specified, the first day of the Interest Period to which such Interest Determination Date relates.

“**euro**” means the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the functioning of the European Union, as amended.

“**Interest Amount**” means the amount of interest payable per Calculation Amount calculated in accordance with Condition 4(i) or as specified in the applicable Final Terms and in the case of Fixed Rate Notes, if so specified in the applicable Final Terms, shall mean Fixed Coupon Amount(s) or the Broken Amount(s).

“Interest Commencement Date” means the date of issue of the Senior Notes (the **“Issue Date”**) or such other date as may be specified in the applicable Final Terms.

“Interest Determination Date” means, with respect to a Rate of Interest and Interest Period, the date specified as such in the Final Terms or, if none is so specified, (i) the first day of such Interest Period if the Specified Currency is Sterling or (ii) the day falling two TARGET2 Business Days prior to the first day of such Interest Period if the Specified Currency is euro.

“Interest Period” means (i) the period beginning on, and including, the Interest Commencement Date and ending on, but excluding, the first Interest Payment Date and each successive period beginning on, and including, an Interest Payment Date and ending on, but excluding, the next succeeding Interest Payment Date; and (ii) such other period (if any) in respect of which interest is to be calculated being the period from (and including) the first day of such period to (but excluding) the day on which the relevant payment of interest falls due (which, in the case of the scheduled final or early redemption of any Notes, shall be the date for redemption, and in other cases where the relevant Notes become due and payable in accordance with Condition 9, shall be the date on which such Notes become due and payable).

“Nominal Amount” means the Nominal Amount specified in the applicable Final Terms.

“Rate of Interest” means the rate of interest payable from time to time in respect of the Senior Notes and which is either specified, or calculated in accordance with the provisions hereof.

“Reference Banks” means the institutions specified as such in the applicable Final Terms or, if none, four major banks (which are unaffiliated with the Issuer) selected by the Issuer in the interbank market (or, if appropriate, money market) which are most closely connected with the Benchmark (which, if EURIBOR or €STR is the relevant Benchmark, shall be the interbank market of the Euro-zone).

“Relevant Financial Centre” means, with respect to any Floating Rate to be determined in accordance with a Screen Rate Determination on an Interest Determination Date, the financial centre as may be specified in the applicable Final Terms or, if none is so specified, the financial centre with which the Benchmark is most closely connected (which, in the case of EURIBOR and €STR, shall be the Euro-zone) or, if none is so connected, London.

“Relevant Rate” means the Benchmark for a Representative Amount of the Specified Currency for a period (if applicable or appropriate to the Benchmark) equal to the Specified Duration commencing on the Effective Date determined in accordance with the Primary Source specified in the applicable Final Terms.

“Relevant Time” means, with respect to any Interest Determination Date, the local time in the Relevant Financial Centre specified in the applicable Final Terms 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 the Euro-zone as a Relevant Financial Centre, Central European time).

“Representative Amount” means, with respect to any Floating Rate to be determined on an Interest Determination Date, the amount specified in the applicable Final Terms or, if none is specified, an amount that is representative for a single transaction in the relevant market at the time.

“Screen Page” means such page, section, caption, column or other part of a particular information service (including, but not limited to, the Reuters Money 3000 Service (**“Reuters”**)) as may be specified herein for the purpose of providing a Relevant Rate or Benchmark, 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 specified by the person or organisation providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to that Relevant Rate or Benchmark.

“Specified Currency” means the currency specified as such in the applicable Final Terms or, if none is specified, the currency in which the Senior Notes are denominated.

“Specified Denomination” means the denomination of a Senior Note as may be agreed between the Bank and the relevant Dealer(s) and as indicated in the applicable Final Terms.

“Specified Duration” means, with respect to any Floating Rate to be determined in accordance with a Screen Rate Determination on an Interest Determination Date, the duration specified in the applicable Final Terms or, if none is specified, a period of time equal to the relative Interest Period, ignoring any adjustment pursuant to Condition 4(b).

“TARGET2 System” means the Trans-European Automated Real-Time Gross Settlement Express Transfer System (or any successor thereto).

(n) Calculation Agent and Reference Banks

The Bank will procure that there shall at all times be four Reference Banks (or such other number as may be required) with offices in the Relevant Financial Centre and one or more Calculation Agents if provision is made for them in the Conditions applicable to the Senior Notes and for so long as any Senior Notes are outstanding. If any Reference Bank (acting through its relevant office) is unable or unwilling to continue to act as a Reference Bank, then the Bank will appoint another Reference Bank with an office in the Relevant Financial Centre to act as such in its place. Where more than one Calculation Agent is appointed in respect of the Senior Notes, references in these Conditions to the Calculation Agent shall be construed as each Calculation Agent performing its duties under the Conditions. If the Calculation Agent is unable or unwilling to act as such or if the Calculation Agent fails duly to establish the Rate of Interest for any Interest Period or to calculate the Interest Amounts, Instalment Amount or the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount (as the case may be) or to comply with any other requirements, the Bank will appoint the London office of a leading bank engaged in the interbank market that is most closely connected with the calculation or determination to be made by the Calculation Agent to act as such in its place. The Calculation Agent may not resign its duties without a successor having been appointed as aforesaid.

In the case of Index Linked Notes or Dual Currency Notes, if the Rate of Interest or amount of interest is to be determined by reference to an index and/or a formula or, as the case may be, an exchange rate, the Bank hereby agrees that it shall not name Citibank, N.A., London Branch as Calculation Agent in any Final Terms and/or any other transaction document for such Series of Notes.

(o) Benchmark Discontinuation

Unless Benchmark Discontinuation is specified as being not applicable in the applicable Final Terms or (x) the Original Reference Rate specified in the Final Terms is SOFR and Condition 4(p) is specified as applicable or (y) the Original Reference Rate specified in the Final Terms is SARON Compounded Rate and Condition 4(q) is specified as applicable, this Condition 4(o) or Condition 4(q), as the case may be, shall apply to the Senior Notes.

For greater certainty, this Condition 4(o) also applies to Condition 4(d)(ii)(B) to the extent that the ISDA Definitions do not provide for a successor rate or any successor rate also requires Benchmark Amendments or, in the case where the 2021 ISDA Definitions apply, where Section 8.6 (Generic Fallback Provisions) of the 2021 ISDA Definitions would otherwise apply.

(i) Independent Adviser

If a Benchmark Event occurs in relation to an Original Reference Rate when any Rate of Interest (or any component part(s) thereof) remains to be determined by reference to such Original Reference Rate, then the Bank shall use its reasonable endeavours to appoint and consult with an Independent Adviser (at the Bank's expense), as soon as reasonably practicable, with a view to the Bank determining a Successor Rate, or if there is no Successor Rate, an Alternative Rate (in accordance with Condition 4(o)(ii)) and, in either case, an Adjustment Spread if any (in accordance with Condition 4(o)(iii)) and any Benchmark Amendments (in accordance with Condition 4(o)(iv)).

An Independent Adviser appointed pursuant to this Condition 4(o) shall act in good faith and a commercially reasonable manner as an expert and (in the absence of bad faith, gross negligence or fraud) shall have no liability whatsoever to the Bank, the Fiscal Agent, the Paying Agents, the Calculation Agent, the Noteholders or the Couponholders for any determination made by it or for any advice given to the Bank in connection with any determination made by the Bank, pursuant to this Condition 4(o).

If the Bank is unable to appoint an Independent Adviser or unable to make the determination set out in Condition 4(o) (i), (ii), (iii) and (iv) in consultation with an Independent Adviser, the Bank may make such determinations itself, acting in good faith and in a commercially reasonable manner, and having such regard as it shall think fit to the foregoing provisions, any relevant and applicable market precedents as well as any published guidance from relevant associations involved in the establishment of market standards and/or protocols in the international debt capital markets, and subject always to any Minimum Rate of Interest and/or Maximum Rate of Interest specified in the applicable Final Terms.

(ii) Successor Rate or Alternative Rate

If the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, determines that:

- (A) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 4(o)(iii)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part(s) thereof) for all future payments of interest on the Senior Notes (subject to the operation of this Condition 4(o)); or
- (B) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 4(o)(iii)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part(s) thereof) for all future payments of interest on the Senior Notes (subject to the operation of this Condition 4(o)).

(iii) Adjustment Spread

If the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, determines (i) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) and (ii) the quantum of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall be applied to the Successor Rate or the Alternative Rate (as the case may be).

(iv) Benchmark Amendments

If any Successor Rate or Alternative Rate and, in either case, the applicable Adjustment Spread is determined in accordance with this Condition 4(o) and the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these Conditions and/or the Agency Agreement are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and/or (in either case) the applicable Adjustment Spread (such amendments, the “**Benchmark Amendments**”) and (ii) the terms of the Benchmark Amendments, then the Bank shall, subject to giving notice thereof in accordance with Condition 4(o)(v), vary these Conditions and/or the Agency Agreement to give effect to such Benchmark Amendments with effect from the date specified in such notice.

No consent of Noteholders shall be required in connection with effecting the relevant Successor Rate or Alternative Rate (as may be applicable) and/or any Benchmark Amendments, or varying these Conditions and/or the Agency Agreement to give effect to such changes pursuant to this Condition 4(o), including for the execution of any documents thereto or the taking of any steps by the Bank or any parties to any relevant documents (if required).

In connection with any such variation in accordance with this Condition 4(o)(iv), the Bank shall comply with the rules of any stock exchange on which the Senior Notes are for the time being listed or admitted to trading.

(v) Notices, etc.

Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 4(o) will be notified promptly by the Bank to the Fiscal Agent and the Calculation Agent and, in accordance with Condition 13, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Successor Rate or Alternative Rate (as may be applicable), the Adjustment Spread, and/or the Benchmark Amendments, if any.

No later than one Business Day following the date of notifying the Fiscal Agent of the same, the Bank shall deliver to the Fiscal Agent a certificate signed by two authorised signatories of the Bank:

- (A) confirming (i) that a Benchmark Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate and, (iii) where applicable, any Adjustment Spread and/or the specific terms of any Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 4(o); and
- (B) certifying that the Benchmark Amendments are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and/or (in either case) the applicable Adjustment Spread.

The Fiscal Agent shall display such certificate at its offices for inspection by the Noteholders at all reasonable times during normal business hours.

The Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any)) be binding on the Bank, the Fiscal Agent, the Calculation Agent, the Paying Agents and the Noteholders.

(vi) Survival of Original Reference Rate

Without prejudice to the obligations of the Bank under Condition 4(o) (i), (ii), (iii) and (iv), the Original Reference Rate and the fallback provisions provided for in Condition 4(b), Condition 4(d)(ii)(A) or Condition 4(d)(ii)(B) will continue to apply unless and until the Calculation Agent has been notified of the Successor Rate or the Alternative Rate (as the case may be), and any Adjustment Spread (if applicable) and Benchmark Amendments, in accordance with Condition 4(o)(v).

(vii) Fallbacks

If, following the occurrence of a Benchmark Event and in relation to the determination of the Rate of Interest on the immediately following Interest Determination Date or Reset Determination Date, as the case may be, no Successor Rate or Alternative Rate (as the case may be) is determined pursuant to this Condition 4(o), the Original Reference Rate and the fallback provisions provided for in Condition 4(b), Condition 4(d)(ii)(A) or Condition 4(d)(ii)(B) will continue to apply for the purposes of determining such Rate of Interest on such Interest Determination Date or Reset Determination Date, as the case may be.

For the avoidance of doubt, the foregoing paragraph shall apply to the determination of the Rate of Interest on the relevant Interest Determination Date or Reset Determination Date, as the case may be only, and the Rate of Interest applicable to any subsequent Interest Period(s) or Reset Periods, as the case may be is subject to the subsequent operation of, and to adjustment as provided in, this Condition 4(o).

(viii) Definitions:

As used in this Condition 4(o):

“Adjustment Spread” means either (a) a spread (which may be positive or negative or zero), or (b) the formula or methodology for calculating a spread, in either case, which the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, determines is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as the case may be) to Noteholders and Couponholders as a result of the replacement of the Original Reference Rate with the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

- (A) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or
- (B) if no such formal recommendation has been made in relation to, replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body, the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Original Reference Rate; or
- (C) if the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, that no such spread is customarily applied in international debt capital markets under (B) above, the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, is recognised or acknowledged as being

the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); or

- (D) if the Bank determines that no such spread is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate under (C) above, the Bank, in its discretion, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, determines to be appropriate.

“Alternative Rate” means an alternative to the benchmark or screen rate which the Bank determines in accordance with Condition 4(o)(ii) has replaced the Original Reference Rate in customary market usage in the international debt capital markets for the purposes of determining rates of interest (or the relevant component part(s) thereof) for the same interest period and in the same Specified Currency as the Senior Notes.

“Benchmark Amendments” has the meaning given to it in Condition 4(o)(iv).

“Benchmark Event” means:

- (A) the Original Reference Rate ceasing to be published for a period of at least five Business Days or ceasing to exist; or
- (B) the making of a public statement by the administrator of the Original Reference Rate that it has ceased or that it will cease publishing the Original Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or
- (C) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or
- (D) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate will be prohibited from being used either generally or in respect of the Senior Notes; or
- (E) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate is no longer representative of its relevant underlying market; or
- (F) it has become unlawful for any Paying Agent, the Calculation Agent or the Bank to calculate any payments due to be made to any Noteholder using the Original Reference Rate (including, without limitation, under the Benchmarks Regulation (EU) 2016/1011 (as amended from time to time), if applicable),

provided that the Benchmark Event shall be deemed to occur (a) in the case of sub-paragraphs (B) and (C) above, on the date of the cessation of publication of the Original Reference Rate or the discontinuation of the Original Reference Rate, as the case may be, (b) in the case of sub-paragraph (D) above, on the date of the prohibition of use of the Original Reference Rate and (c) in the case of sub-paragraph (E) above, on the date with effect from which the Original Reference Rate will no longer be (or will be deemed by the relevant supervisor to no longer be) representative of its relevant underlying market and which is specified in the relevant public statement, and, in each case, not the date of the relevant public statement.

“Independent Adviser” means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Bank under Condition 4(o)(i).

“Original Reference Rate” means either (i) the benchmark and screen rate (as applicable) originally specified for the purposes of determining the Rate of Interest (or any component part(s) thereof, including without limitation, any component mid-swap floating rate leg) on the Senior Notes or (ii) any Successor Rate or Alternative Rate which replaces the Original Reference Rate pursuant to the operation of this Condition 4(o).

“Relevant Nominating Body” means, in respect of a benchmark and screen rate (as applicable):

- (A) the central bank for the currency to which the benchmark and screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark and screen rate (as applicable); or
- (B) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (i) the central bank for the currency to which the benchmark and screen rate (as applicable) relates, (ii) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark and screen rate (as applicable), (iii) a group of the aforementioned central banks or other supervisory authorities or (iv) the Financial Stability Board or any part thereof.

“Successor Rate” means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body.

(p) Benchmark Replacement Provisions – Compounded SOFR

This Condition 4(p) applies to all Senior Notes with Original Reference Rate used to calculate a Rate of Interest or a component thereof where the Original Reference Rate specified in the Final Terms is Compounded SOFR and Condition 4(p) is specified as applicable in the Final Terms.

a) Effect of a Benchmark Transition Event.

Benchmark Replacement. If the Issuer or its designee 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 Benchmark on any date, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the Notes in respect of such determination on such date and all determinations on all subsequent dates.

Benchmark Replacement Conforming Changes. In connection with the implementation of a Benchmark Replacement, the Issuer or its designee will have the right to make Benchmark Replacement Conforming Changes from time to time.

Decisions and Determinations. Any determination, decision or election that may be made by the Issuer or its designee in consultation with the Issuer pursuant to the Benchmark Replacement Provisions described herein, including any determination with respect to tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

- will be conclusive and binding absent manifest error;
- if made by the Issuer, will be made in its sole discretion;

- if made by the Issuer's designee, will be made after consultation with the Issuer, and the designee will not make any such determination, decision or election to which the Issuer objects; and
- notwithstanding anything to the contrary in the Notes, shall become effective without consent from the holders of the Notes or any other party.

If a designee of the Issuer does not make any determination, decision or election that it is required to make pursuant to the Benchmark Replacement Provisions, then the Issuer will make that determination, decision or election on the same basis as described above. The designee shall have no liability for not making any such determination, decision or election.

b) Certain Defined Terms.

As used herein for Notes with an Original Reference Rate of SOFR Compounded Rate:

"Benchmark" means, initially, Compounded SOFR, as such term is defined above; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

- (a) the sum of: (a) an alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (b) the Benchmark Replacement Adjustment;
- (b) the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment; and
- (c) the sum of: (a) the alternate rate of interest that has been selected by the Issuer as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate notes at such time and (b) the Benchmark Replacement Adjustment.

"Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Issuer or its designee 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; and
- (c) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer 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 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 the timing and

frequency of determining rates and making payments of interest, the rounding of amounts or tenors, and other administrative matters) that the Issuer or its designee decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer or its designee decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer or its designee determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines is reasonably practicable).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark (including the daily published component used in the calculations thereof):

- (a) in the case of clause (a) or (b) of the definition of "Benchmark Transition Event," the later of (1) the date of the public statement or publication of information referenced therein and (2) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or

- (b) in the case of clause (c) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

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.

For the avoidance of doubt, for purposes of the definitions of Benchmark Replacement Date and Benchmark Transition Event, references to Benchmark also include any reference rate underlying such Benchmark.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark (including the daily published component used in the calculations thereof):

- (a) a public statement or publication of information by or on behalf of the administrator of the Benchmark (or such component) announcing that such administrator has ceased or will cease to provide the Benchmark (or such component), 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 (or such component);

- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component), the central bank for the currency of the Benchmark (or such component), an insolvency official with jurisdiction over the administrator for the Benchmark (or such component), a resolution authority with jurisdiction over the administrator for the Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark (or such component) 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 (or such component); or

- (c) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

"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.

"ISDA Definitions" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

"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 ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.

"ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

"Reference Time" with respect to any determination of the Benchmark means (1) if the Benchmark is Compounded SOFR, the SOFR Determination Time or the SOFR Index Determination Time, as applicable, and (2) if the Benchmark is not Compounded SOFR, the time determined by the Issuer or its designee 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.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

c) Notices, etc.

The occurrence of a Benchmark Transition Event and its related Benchmark Replacement Date, any Benchmark Replacement, any Benchmark Replacement Adjustment and any Benchmark Replacement Conforming Changes determined under this Condition 4(p) will be notified promptly by the Issuer to the Fiscal Agent and the Calculation Agent and, in accordance with Condition 13, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Replacement, the Benchmark Replacement Adjustment and/or the Benchmark Replacement Conforming Changes, if any.

No later than one Business Day following the date of notifying the Fiscal Agent of the same, the Issuer shall deliver to the Fiscal Agent a certificate signed by two authorised signatories of the Issuer:

(1) confirming (i) that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, (ii) the Benchmark Replacement and, (iii) where applicable, any Benchmark Replacement Adjustment and/or Benchmark Replacement Conforming Changes, in each case as determined in accordance with the provisions of this Condition 4(p); and

(2) certifying that any Benchmark Replacement Adjustment and/or Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of such Benchmark Replacement.

The Fiscal Agent shall make available such certificate at its offices for inspection by the Noteholders, upon reasonable request, at all reasonable times during normal business hours.

The Benchmark Replacement and the Benchmark Replacement Adjustment and/or Benchmark Replacement Confirming Changes (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Benchmark Replacement and the Benchmark Replacement Adjustment (if any) and the Benchmark Replacement Confirming Changes (if any)) be binding on the Issuer, the Fiscal Agent, the Calculation Agent, the Paying Agents and the Noteholders.

In no event shall the Calculation Agent be responsible for choosing any substitute for any Original Reference Rate, or for making any adjustments to any Benchmark Replacement, any Benchmark Replacement Adjustment and/or any Benchmark Replacement Confirming Changes thereon, the Business Day Convention, Interest Determination Dates, Reset Determination Date or any other relevant methodology for calculating any such Benchmark Replacement, Benchmark Replacement Adjustment or Benchmark Replacement Confirming Changes, or for determining whether any Benchmark Transition Event and its related Benchmark Replacement Date have occurred, even in circumstances where the Issuer has not made such determinations. In connection with the foregoing, the Calculation Agent will be entitled to conclusively rely on any determinations made by the Issuer or its designee in compliance with this Condition 4(p) and will have no liability in connection with the foregoing or for such actions taken at the direction of the Issuer. At no time shall the Calculation Agent have any responsibility in connection therewith.

(q) Benchmark Replacement Provisions – SARON Compounded

This Condition 4(q) applies to all Senior Notes with an Original Reference Rate used to calculate a Rate of Interest or a component thereof where the Original Reference Rate specified in the Final Terms is SARON and Condition 4(q) is specified as applicable in the Final Terms.

(a) Replacement Rate

If SARON does not so appear on the SARON Administrator Website or is not so published by the Relevant Time on such Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date have both occurred on or prior to such Zurich Banking Day:

- (i) the rate resulting from calculating SARON for such Zurich Banking Day in accordance with the foregoing provisions as if the reference to SARON in such definition were a reference to the Recommended Replacement Rate, giving effect to the Recommended Adjustment Spread, if any; or
- (ii) if there is no Recommended Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the policy rate of the Swiss National Bank (the “**SNB Policy Rate**”) for such Zurich Banking Day, giving effect to the SNB Adjustment Spread, if any.

Any substitution of the SARON rate by the Recommended Replacement Rate or the SNB Policy Rate as specified above will remain effective for the remaining term to maturity of such Notes.

Notwithstanding the above, if the provisions of this paragraph (a) fail to provide a means of determining the Rate of Interest, Condition 4(o) shall apply.

(b) SARON Benchmark Amendments

If the Issuer (i) is required to use a Recommended Replacement Rate or the SNB Policy Rate pursuant to the definition of “SARON” for purposes of determining SARON for any Zurich Banking Day, and (ii) determines that any changes to the definitions of Business Day Convention, Day Count Fraction, Interest Determination Date, Interest Payment Date, Interest Period, Observation Period, Relevant Time, SARON,

SARON Administrator, SARON Administrator Website or Zurich Business Day or any other amendments to the Conditions and/or the Agency Agreement (collectively, the “**SARON Benchmark Amendments**”) are necessary in order to use such Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may be, for such purposes, then the Issuer shall, subject to giving notice thereof as specified below, vary these Conditions and/or the Agency Agreement to give effect to such SARON Benchmark Amendments with effect from the date specified in such notice.

No consent or approval of Noteholders shall be required in connection with effecting the Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may, and/or any SARON Benchmark Amendments, or varying these Conditions and/or the Agency Agreement to give effect to such changes pursuant to these provisions, including the execution of any documents or the taking of any steps by the Issuer or any parties to any relevant documents (if required).

In connection with any such variation in accordance with these provisions, the Issuer shall comply with the rules of any stock exchange on which the relevant Notes are for the time being listed or admitted to trading.

(c) Notices, etc

(i) The occurrence of a SARON Index Cessation Event and SARON Index Cessation Effective Date any Replacement Rate, Recommended Adjustment Spread or SNB Adjustment Spread, and the specific terms of any SARON Benchmark Amendments, determined under these provisions will be notified promptly by the Issuer to the Fiscal Agent and the Calculation Agent and, in accordance with Condition 13 (Notices), the Noteholders. Such notice shall be irrevocable and shall specify the effective date(s) for such and for the Replacement Rate, Recommended Adjustment Spread or SNB Adjustment Spread, Benchmark Amendments, if any.

(ii) No later than one Business Day following the date of notifying the Fiscal Agent of the same, the Issuer shall deliver to the Fiscal Agent a certificate signed by two authorised signatories of the Issuer:

(a) confirming (i) that a SARON Index Cessation Event and SARON Index Cessation Effective Date have occurred, (ii) Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may, and/or the specific terms of any SARON Benchmark Amendments, in each case as determined in accordance with these provisions; and

(b) certifying that SARON Benchmark Amendments are necessary to ensure the proper operation of such Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may be.

The Fiscal Agent shall make available such certificate at its offices for inspection by the Noteholders, upon reasonable request, at all reasonable times during normal business hours. The Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may, specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Recommended Replacement Rate (and any Recommended Adjustment Spread) or the SNB Policy Rate (and any SNB Adjustment Spread), as the case may, and the SARON Benchmark Amendments (if any)) be binding on the Issuer, the Fiscal Agent (or such other party responsible for the calculation of the Rate of Interest, as specified in the applicable Final Terms), the Paying Agents and the Noteholders.

(d) Survival of Original Reference Rate

Without prejudice to the obligations of the Bank under this Condition 4(q), the Original Reference Rate and the fallback provision in Condition 4 (d)(ii)(A)(f) will continue to apply unless and until the Calculation Agent has been notified of the Replacement Rate and any Recommended Adjustment Spread or SNB Adjustment Spread (if applicable) and the SARON benchmark Amendments, in accordance with Condition 4(q)(b).

(e) Fallbacks

If, following the occurrence of a SARON Index Cessation Event and a SARON Index Cessation Event Effective Date and in relation to the determination of the Rate of Interest on the immediately following Interest Determination Date or Reset Determination Date, as the case may be, no Replacement Rate is determined pursuant to this Condition 4(q), the Original Reference Rate and the fallback provisions provided for in Condition 4 (d)(ii)(A)(f) will continue to apply for the purposes of determining such Rate of Interest on such Interest Determination Date or Reset Determination Date, as the case may be

For the avoidance of doubt, the foregoing paragraph shall apply to the determination of the Rate of Interest on the relevant Interest Determination Date or Reset Determination Date, as the case may be only, and the Rate of Interest applicable to any subsequent Interest Periods(s) or Reset Periods, as the case may be is subject to the subsequent operation of, and to adjustment as provided in, this Condition 4(q).

(f) Definitions

As used in this Condition 4 (q):

“Recommended Replacement Rate” means the rate that has been recommended as the replacement for SARON by any working group or committee in Switzerland organized in the same or a similar manner as the National Working Group on Swiss Franc Reference Rates that was founded in 2013 for purposes of, among other things, considering proposals to reform reference interest rates in Switzerland (any such working group or committee, the **“Recommending Body”**);

“Recommended Adjustment Spread” means, with respect to any Recommended Replacement Rate, the spread (which may be positive, negative or zero), or formula or methodology for calculating such a spread,

(a) that the Recommending Body has recommended be applied to such Recommended Replacement Rate in the case of fixed income securities with respect to which such Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for the purposes of determining the applicable rate of interest thereon; or

(b) if the Recommending Body has not recommended such a spread, formula or methodology as described in (a) above, to be applied to such Recommended Replacement Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Noteholders as a result of the replacement of the Swiss Average Rate Overnight with such Recommended Replacement Rate for purposes of determining SARON, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, and be consistent with industry-accepted practices for fixed income securities with respect to which such Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for purposes of determining the applicable rate of interest thereon;

“SARON Administrator” has the meaning specified in Condition 4(f);

“SARON Administrator Website” has the meaning specified in Condition 4(f);

“SARON Index Cessation Event” means the occurrence of one or more of the following events:

(a) a public statement or publication of information by or on behalf of the Saron Administrator, or by any competent authority, announcing or confirming that the Saron Administrator has ceased or will cease to provide the Swiss Average Rate Overnight permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Swiss Average Rate Overnight; or

(b) a public statement or publication of information by the Saron Administrator or any competent authority announcing that (x) the Swiss Average Rate Overnight is no longer representative or will as of a certain date no longer be representative, or (y) the Swiss Average Rate Overnight may no longer be used after a certain date, which statement, in the case of subclause (y), is applicable to (but not necessarily limited to) fixed income securities and derivatives.

“Saron Index Cessation Effective Date” means, in respect of a Saron Index Cessation Event, the earliest of:

(a) (in the case of a Saron Index Cessation Event described in clause (a) of the definition thereof) the date on which the Saron Administrator of the Swiss Average Rate Overnight ceases to provide Saron;

(b) (in the case of a Saron Index Cessation Event described in clause (b)(x) of the definition thereof) the latest of:

(i) the date of such statement or publication;

(ii) the date, if any, specified in such statement or publication as the date on which Saron will no longer be representative; and

(iii) if a Saron Cessation Event described in clause (b)(y) of the definition of Saron Index Cessation Event has occurred on or prior to either or both dates specified in subclauses (i) and (ii) of this clause (b), the date as of which Saron may no longer be used; and

(c) (in the case of a Saron Index Cessation Event described in clause (b)(y) of the definition thereof) the date as of which Saron may no longer be used.

“SNB Adjustment Spread” means, with respect to the SNB Policy Rate, the spread to be applied to the SNB Policy Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Noteholders as a result of the replacement of Saron with the SNB Policy Rate for purposes of determining Saron, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, taking into account the historical median between the Saron and the SNB Policy Rate during the two year period ending on the date on which the Saron Index Cessation Event occurred (or, if more than one Saron Index Cessation Event has occurred, the date on which the first of such events occurred); and

“Zurich Banking Day” has the meaning specified in Condition 4(f).

5. Redemption, Purchase and Options

(a) *Final Redemption*

Unless previously redeemed or purchased and cancelled as provided below or its maturity is extended pursuant to any Bank's or Noteholders' option in accordance with Condition 5(h) or (i), each Senior Note will be redeemed at its Final Redemption Amount (which, unless otherwise specified in the Pricing Supplement, shall be at least 100 per cent. of its nominal amount) on the Maturity Date specified on each Senior Note.

(b) *Redemption for Taxation Reasons*

The Senior Notes may be redeemed at the option of the Bank in whole, but not in part, on any Interest Payment Date (if the Senior Note is a Floating Rate Note) or at any time (if the Senior Note is not a Floating Rate Note), on giving not less than 30 days nor more than 60 days notice to the Noteholders in accordance with Condition 13 (which notice shall be irrevocable), at their Early Redemption Amount (which, unless otherwise specified in a Pricing Supplement, shall be 100 per cent. of their Nominal Amount), (together with interest accrued to the date fixed for redemption), if (i) the Bank has or will become obliged to pay additional amounts as provided or referred to in Condition 7 as a result of any change in, or amendment to, the laws or regulations of Canada or any province thereof or in the case of Senior Notes issued by a branch of the Bank outside Canada, of the country in which such branch is located or any political subdivision or any authority or agency 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 Bank 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 Bank would be obliged to pay such additional amounts were a payment in respect of the Senior Notes then due and provided further that in respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's total loss absorbing capacity ("**TLAC**") requirements such redemption will be subject to the prior approval of the Superintendent. Prior to the publication of any notice of redemption pursuant to this paragraph, the Bank shall deliver to the Fiscal Agent a certificate signed by two senior officers of the Bank stating that the Bank is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Bank so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Bank has or will become obliged to pay such additional amounts as a result of such change or amendment.

(c) *Redemption due to TLAC Disqualification Event:*

This Condition 5(c) applies to Bail-inable Notes only.

Where a TLAC Disqualification Event Call is specified as being applicable in the applicable Final Terms relating to a Series of Bail-inable Notes, the Bank may, at its option, on not less than the minimum period of notice and not more than the maximum period of notice specified in the applicable Final Terms and in accordance with Condition 13, redeem all but not less than all of the outstanding Senior Notes of the Series within 90 days after a TLAC Disqualification Event (as defined below) at the Early Redemption Amount, plus any accrued but unpaid interest to (but excluding) the date fixed for redemption. Such redemption will be subject to the prior approval of the Superintendent.

A "**TLAC Disqualification Event**" means the Office of the Superintendent of Financial Institutions ("**OSFI**") has advised the Bank in writing that the Series of Bail-inable Notes will no longer be recognised in full as TLAC under the guideline for TLAC for banks in Canada in effect from time to time, as interpreted by the Superintendent, provided that a TLAC Disqualification Event shall not occur where the exclusion of the Series of Bail-inable Notes from the Bank's TLAC requirements is due to the remaining term to maturity of

such Series of Bail-inable Notes being less than any period prescribed by any relevant TLAC eligibility criteria applicable as of the Issue Date of the first Tranche of such Series of Bail-inable Notes.

(d) Early redemption for Illegality

Where Early Redemption for Illegality is specified as being applicable in the applicable Final Terms, in the event that the Bank determines in good faith that the performance of the Bank's obligations under such Notes or any arrangement made to hedge the Bank's obligations under such Notes have or will become unlawful, illegal or otherwise prohibited in whole or in part as a result of compliance with any applicable present or future law, rule, regulation, judgment, order or directive of any governmental, administrative, legislative or judicial authority or power, or in the interpretation thereof, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Final Terms to Noteholders in accordance with Condition 13 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

(e) Early redemption for a Disruption Event

Where Early Redemption for a Disruption Event is specified as being applicable in the applicable Final Terms, in the event of a Disruption Event, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Final Terms to Noteholders in accordance with Condition 13 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

As used in this Condition 5(e):

"Disruption Event" means a Hedging Disruption or an Increased Cost of Hedging.

"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 any of the underlying reference rates, or other price risk of the Issuer issuing and performing its obligations with respect to the Notes, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

"Hedging Entity" means (a) the Issuer or (b) any affiliate or any entity (or entities) acting on behalf of the Issuer that is engaged in any underlying or hedging transactions related to the underlying reference rates in respect of the Issuer's obligations under the Notes.

"Increased Cost of Hedging" means that the Hedging Entity would incur a materially increased (as compared with circumstances existing on 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) it deems necessary to hedge the price risk of the relevant securities or other risk of the Issuer issuing and performing its obligations with respect to the Notes, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s), provided that any such materially increased amount that is incurred solely due to the deterioration of the creditworthiness of the Issuer and/or the Hedging Entity shall not be deemed an Increased Cost of Hedging.

“Trade Date” has the meaning given to it in the applicable Final Terms.

(f) Early redemption for Special Circumstance

Where Early Redemption for Special Circumstance is specified as being applicable in the applicable Final Terms, in the event of a Special Circumstance, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Final Terms to Noteholders in accordance with Condition 13 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank’s TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

As used in this Condition 5(f):

“Special Circumstance” means an event where, in the opinion of the Issuer acting reasonably and in good faith, an amendment or a change is made to a taxation act or regulation, to taxation practices, policies or administration, to the interpretation of a taxation act or regulation or taxation practice, policy or administration; or an event occurs, now or in future, caused by circumstances beyond the control of the Issuer making it illegal or disadvantageous, from a legislative or regulatory point-of-view, or disadvantageous, from a financial point-of-view, for the Issuer to allow the Notes to remain outstanding.

For the avoidance of doubt, a “Special Circumstance” shall **not** include any event or circumstance covered by Condition 5(b) and Condition 7, for which Condition 5(b) and Condition 7 shall continue to apply accordingly.

(g) Early Redemption for Administrator/Benchmark Event

Where Early Redemption for an Administrator/Benchmark Event is specified as being applicable in the applicable Final Terms, in the event of an Administrator/Benchmark Event, the Bank may (at its option and sole and absolute discretion):

- (i) instruct the Calculation Agent to make such adjustment(s) to the terms of the Senior Notes as it may determine appropriate in its sole and absolute discretion to account for the relevant event or circumstance and, without limitation, such adjustment(s) may include selecting a successor benchmark(s) and making related adjustment(s) to the terms of the Senior Notes including where applicable to reflect any increased costs of the Bank and/or any Hedging Entity providing exposure to the successor benchmark(s) and, in the case of more than one successor benchmark, making provision for allocation of exposure as between the successor benchmarks; or
- (ii) having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Pricing Supplement to Noteholders in accordance with Condition 12 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount and no further interest (if applicable) will be payable since the immediately preceding Interest Payment Date or, if none, the Issue Date. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank’s TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

For the avoidance of doubt, the above is additional, and without prejudice, to any other terms of the Senior Notes. In the event that under any such terms any other consequences could apply in relation to an event or occurrence the subject of an Administrator/Benchmark Event, the Bank shall determine which terms shall apply in its sole and absolute discretion.

The Issuer shall give notice as soon as practicable to Noteholders in accordance with Condition 12 of any adjustment(s) made pursuant to paragraph (i) above, provided that any failure to give, or non-receipt of, such notice shall not affect the validity of such adjustment(s).

For the purposes of this Condition:

"Administrator/Benchmark Event" means, in relation to any Benchmark, the occurrence of a Benchmark Modification or Cessation Event, a Non-Approval Event, a Rejection Event, a Suspension/Withdrawal Event or a Non-Representative Event, all as determined by the Calculation Agent.

"Benchmark" means any figure, level, rate or value by reference to which any amount payable or deliverable under the Notes, or the value of the Notes, is determined in whole or in part, including, without limitation, any benchmark as defined in the BMR, all as determined by the Calculation Agent.

"Benchmark Modification or Cessation Event" means, in respect of the Benchmark, any of the following has occurred or will occur:

- (i) any material change in such Benchmark;
- (ii) the permanent or indefinite cancellation or cessation in the provision of such Benchmark; or
- (iii) a regulator or other official sector entity prohibits the use of such Benchmark.

"BMR" means the EU Benchmark Regulation (Regulation (EU) 2016/1011) or any United Kingdom "on-shored" version thereof where applicable, in each case as amended from time to time.

"Non-Approval Event" means, in respect of the Benchmark:

- (i) any authorisation, registration, recognition, endorsement, equivalence decision or approval in respect of the Benchmark or the administrator or sponsor of the Benchmark has not been or will not be obtained;
- (ii) the Benchmark or the administrator or sponsor of the Benchmark has not been or will not be included in an official register; or
- (iii) the Benchmark or the administrator or sponsor of the Benchmark does not or will not fulfil any legal or regulatory requirement applicable to the Notes, the Issuer, the Calculation Agent or the Benchmark,

in each case, as is or will be required under any applicable law or regulation in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

"Non-Representative Event" means, in respect of the Benchmark, an official announcement by the supervisor of the administrator and/or sponsor of the Benchmark that the Benchmark is no longer or, as of a specified future date will no longer be, representative of any relevant underlying market(s).

"Rejection Event" means, in respect of the Benchmark, the relevant competent authority or other relevant official body rejects or refuses or will reject or refuse any application for authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register which, in each case, is or will be required in relation to the Notes, the Benchmark or the administrator or sponsor of the Benchmark under any applicable law or regulation for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

"Suspension/Withdrawal Event" means, in respect of the Benchmark:

- (i) the relevant competent authority or other relevant official body suspends or withdraws or will suspend or withdraw any authorisation, registration, recognition, endorsement, equivalence decision or approval in relation to the Benchmark or the administrator or sponsor of the Benchmark

which is or will be required under any applicable law or regulation in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes; or

- (ii) the Benchmark or the administrator or sponsor of the Benchmark is or will be removed from any official register where inclusion in such register is or will be required under any applicable law in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

(h) *Purchases*

The Bank and any of its subsidiaries in the ordinary course of their dealing in securities may at any time purchase Senior Notes (provided that all unmatured Receipts (if any) and Coupons and unexchanged Talons appertaining thereto are attached or surrendered therewith) in the open market or otherwise at any price provided that in respect of Bail-inable Notes where the purchase would lead to a breach of the Bank's TLAC requirements, such purchase will be subject to the prior approval of the Superintendent.

(i) *Early Redemption of Zero Coupon Notes*

- (i) The Early Redemption Amount payable in respect of any Senior Note which does not bear interest prior to the Maturity Date pursuant to Condition 5(b) or 5(c) or upon it becoming due and payable as provided in Condition 9 shall be the Amortised Face Amount (calculated as provided below) of such Senior Note.
- (ii) Subject to the provisions of sub-paragraph (iii) below, the Amortised Face Amount of any such Senior Note shall be the scheduled Final Redemption Amount of such Senior Note on the Maturity Date discounted at a rate per annum (expressed as a percentage) equal to the Amortisation Yield applied in a compounded or non-compounded basis as specified in the applicable Final Terms (which, if none is shown in the applicable Final Terms, shall be such rate (compounded annually) as would produce an Amortised Face Amount equal to the issue price of the Senior Notes if they were discounted back to their issue price on the Issue Date). 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 specified in the applicable Final Terms.
- (iii) If the Early Redemption Amount payable in respect of any such Senior Note upon its redemption pursuant to Condition 5(b) or 5(c) or upon it becoming due and payable as provided in Condition 9 is not paid when due, the Early Redemption Amount due and payable in respect of such Senior Note shall be the Amortised Face Amount of such Senior Note as defined in sub-paragraph (ii) above, except that such sub-paragraph shall have effect as though the reference therein to the date on which the Senior Note becomes due and payable were replaced by a reference to the Relevant Date. The calculation of the Amortised Face Amount in accordance with this sub-paragraph will continue to be made (as well after as before judgement), until the Relevant Date unless the Relevant 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 Senior Note on the Maturity Date together with any interest which may accrue in accordance with Condition 4(f).

(j) *Redemption at the Option of the Bank ("**Issuer Call Option**") and Exercise of Bank's Options*

If an Issuer Call Option is specified in the applicable Final Terms, the Bank may, on giving not less than 10 nor more than 30 days' irrevocable notice to the Noteholders (or such other notice period as may be specified herein) in accordance with Condition 13 redeem, or exercise any Bank's option (as may be described herein) in relation to, all or, if so specified in the applicable Final Terms, some of the Senior Notes

on any Optional Redemption Date. Any such redemption of Senior Notes shall be at their Optional Redemption Amount together with interest accrued to the date fixed for redemption, provided that in respect of Bail-inable Notes where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

All Senior Notes in respect of which any such notice is given shall be redeemed, or the Bank's option shall be exercised, on the date specified in such notice in accordance with this Condition 5.

If so provided herein, the Bank shall redeem a specified number of the Senior Notes on the date or dates so provided. Any such redemption of Senior Notes shall be at their Optional Redemption Amount together with interest accrued to the date fixed for redemption which may, if so specified herein, be payable in instalments or otherwise. Notice of such redemption shall be irrevocably given to the Noteholders in accordance with Condition 13.

In the case of a partial redemption or a partial exercise of the Bank's option, the notice to Noteholders shall also contain the serial numbers of the Senior Notes to be redeemed or in respect of which such option has been exercised, which shall have been drawn in such place as the Fiscal Agent may approve and in such manner as it deems appropriate, subject to compliance with any applicable laws and stock exchange requirements. The Bank shall ensure that the Luxembourg Stock Exchange (in the event that the Senior Notes are listed on the Luxembourg Stock Exchange) is promptly informed of any redemption under this Condition 5(j).

Any such redemption or exercise must relate to Senior Notes of a Nominal Amount at least equal to the Minimum Redemption Amount to be redeemed specified herein and no greater than the Maximum Redemption Amount to be redeemed specified herein.

*(k) Redemption at the Option of Noteholders ("**Noteholder Put Option**") and Exercise of Noteholders' Options*

This Condition 5(k) is not applicable to Bail-inable Notes.

If a Noteholder Put Option is specified in the applicable Final Terms, the Bank shall, at the option of the holder of any such Senior Note upon the holder giving not less than 15 nor more than 30 days notice (or such other notice period as may be specified herein), redeem such Senior Note on the Optional Redemption Date(s) so provided at its Optional Redemption Amount together with interest accrued to the date fixed for redemption.

To exercise such option or any other Noteholders' option which may be set out herein, the holder must deposit such Senior Note (together with all unmatured Receipts and Coupons and unexchanged Talons) with any Paying Agent (in the case of Bearer Notes) or the Certificate representing such Senior Note(s) with the Registrar or any Transfer Agent (in the case of Registered Notes) at its specified office, together with a duly completed option exercise notice ("**Exercise Notice**") in the form obtainable from any Paying Agent, the Registrar or any Transfer Agent (as applicable) within the Noteholders' Option Period. No Senior Note or Certificate so deposited and option exercised may be withdrawn (except as provided in the Agency Agreement) without the prior consent of the Bank.

(l) Cancellation

All Senior Notes purchased by or on behalf of the Bank or any of its subsidiaries may be surrendered for cancellation, in the case of Bearer Notes, by surrendering each such Senior Note together with all unmatured Receipts and Coupons and all unexchanged Talons to the Fiscal Agent and, in the case of Registered Notes, by surrendering the Certificate representing such Senior Notes to the Registrar and, in each case, if so surrendered, will, together with all Senior Notes redeemed by the Bank, be cancelled forthwith (together with all unmatured Receipts and Coupons and unexchanged Talons attached thereto or

surrendered therewith). Any Senior Notes so surrendered for cancellation may not be reissued or resold and the obligations of the Bank in respect of any such Senior Notes shall be discharged.

(m) Early Redemption Amount of Senior Notes other than Zero Coupon Notes

The Early Redemption Amount payable in respect of any Senior Note (other than the Senior Notes described in (e) above), upon redemption of such Senior Note pursuant to Condition 5(b) or 5(c) or upon it becoming due and payable as provided in Condition 9, shall be the Final Redemption Amount unless another amount is specified in the applicable Final Terms.

(n) Specific Redemption provisions applicable to certain types of Exempt Notes

The Final Redemption Amount, any Optional Redemption Amount and the Early Redemption Amount in respect of Index Linked Redemption Notes and Dual Currency Redemption Notes may be specified in, or determined in the manner specified in, the applicable Pricing Supplement. For the purposes of Condition 5(b), Index Linked Interest Notes and Dual Currency Instalment Notes may be redeemed only on an Interest Payment Date.

Unless previously redeemed or purchased and cancelled as provided in this Condition 5 or the relevant Instalment Date (being one of the dates so specified herein) is extended pursuant to any Bank's or Noteholder's option in accordance with Condition 5(j) or (k), each Senior Note which provides for Instalment Dates and Instalment Amounts will be partially redeemed on each Instalment Date at the Instalment Amount specified in the applicable Final Terms. The outstanding Nominal Amount of each such Senior Note shall be reduced by the Instalment Amount (or, if such Instalment Amount is calculated by reference to a proportion of the Nominal Amount of such Senior Note, such proportion) for all purposes with effect from the related Instalment Date, unless payment of the Instalment Amount is improperly withheld or refused on presentation of the related Receipt, in which case, such amount shall remain outstanding until the Relevant Date relating to such Instalment Amount. In the case of early redemption, the Early Redemption Amount will be determined in the manner specified in the applicable Pricing Supplement.

Partly-Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition 5 and the provisions specified in the applicable Pricing Supplement.

(o) Redemption Irrevocable

A notice of redemption under this Condition 5 shall be irrevocable provided that Bail-inable Notes continue to be subject to a Bail-in Conversion prior to their repayment in full.

6. Payments and Talons

(a) Bearer Notes

Payments of principal and interest in respect of Bearer Notes will, subject as mentioned below, be made against presentation and surrender of the relevant Senior Notes (in the case of payments of principal and, in the case of interest, as specified in Condition 6(f)(vi)) or Coupons (in the case of interest, save as specified in Condition 6(f)(ii)), as the case may be, at the specified office of any Paying Agent outside the United States by a cheque payable in the currency in which such payment is due drawn on, or, at the option of the holder, by transfer to an account denominated in that currency with, a bank in the principal financial centre of that currency; provided that in the case of euro, the transfer may be to, or the cheque drawn on, a euro account (or any other account to which euro may be credited or transferred).

Notwithstanding the preceding paragraph, payments of amounts in Renminbi will be made by credit to a Renminbi account maintained by or on behalf of the payee with a commercial bank in any Relevant Renminbi Settlement Centre (as defined below) in accordance with applicable law, rules, regulations and

guidelines issued from time to time (including all applicable laws and regulations with respect to settlement in Renminbi in the Relevant Renminbi Settlement Centre).

(b) Registered Notes

- (i) Payments of principal in respect of Registered Notes will be made against presentation and surrender of the relevant Certificates at the specified office of any of the Transfer Agents or of the Registrar and in the manner provided in paragraph (ii) below.
- (ii) Interest on Registered Notes will be paid to the person shown on the Register at the close of business (i) in the case of a Global Note, the business day (being for this purpose a day on which Euroclear and Clearstream, Luxembourg are open for business) prior to the due date for payment thereof and (ii) in the case of a Definitive Note, on the fifteenth day before the due date for payment thereof (the “**Record Date**”). Payments of interest on each Registered Note will be made in the currency in which such payments are due by cheque drawn on a bank in the principal financial centre of the country of the currency concerned and mailed to the holder (or to the first named of joint holders) of such Senior Note at its address appearing in the Register maintained by the Registrar. Upon application by the holder to the specified office of the Registrar or any Transfer Agent before the Record Date and subject as provided in Condition 6(a), such payment of interest may be made by transfer to an account in the Specified Currency maintained by the payee with a bank in the principal financial centre of the country of that currency.

(c) Payments in the United States

Notwithstanding the foregoing, if any Bearer Notes are denominated in U.S. dollars, payments in respect thereof may be made at the specified office of any Paying Agent in New York City in the same manner as aforesaid if (i) the Bank shall have appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment of the amounts on the Senior Notes in the manner provided above when due, (ii) payment in full of such amounts at all such offices is illegal or effectively precluded by exchange controls or other similar restrictions on payment or receipt of such amounts and (iii) such payment is then permitted by United States law, without involving, in the opinion of the Bank, any adverse tax consequence to the Bank.

(d) Payments subject to fiscal or other laws

Payments will be subject in all cases to (i) any fiscal or other laws and regulations applicable thereto in the place of payment but without prejudice to the provisions of Condition 9, (ii) the FATCA Withholding Tax Rules (as defined in Condition 7); and (iii) any withholding or deduction pursuant to Section 871(m) of the Code (“**871(m) Withholding**”). In addition, in determining the amount of 871(m) Withholding imposed with respect to any amounts to be paid on the Notes, the Issuer or any withholding agent shall be entitled to withhold on any “dividend equivalent” (as defined for purposes of Section 871(m) of the Code) at the highest rate applicable to such payments regardless of any exemption from, or reduction in, such withholding otherwise available under applicable law.

(e) Appointment of Agents

The Fiscal Agent, the Paying Agents, the Registrar, Transfer Agents and the Calculation Agent initially appointed by the Bank and their respective specified offices are listed below. The Fiscal Agent, the Paying Agents, the Registrar, Transfer Agents and the Calculation Agent act solely as agents of the Bank and do not assume any obligation or relationship of agency or trust for or with any Noteholder or Couponholder. The Bank reserves the right at any time to vary or terminate the appointment of the Fiscal Agent, any other Paying Agent, the Registrar or any Transfer Agent and to appoint additional or other Paying Agents or

Transfer Agents, provided that the Bank will at all times maintain (i) a Fiscal Agent, (ii) a Registrar in relation to Registered Notes, (iii) a Transfer Agent in relation to Registered Notes, (iv) a Calculation Agent where the Conditions so require one, (v) a Paying Agent and, in relation to Registered Notes which are listed on the Official List, a Transfer Agent having a specified office in a European city which, so long as the Senior Notes are listed on the Official List, shall be Luxembourg, and (vi) such other agents as may be required by the rules of any other stock exchange on which the Senior Notes may be listed or as may be agreed between the Bank and the relevant Dealer(s).

In addition, the Bank shall forthwith appoint a Paying Agent in New York City in respect of any Senior Notes denominated in U.S. dollars in the circumstances described in Condition 6(c).

Notice of any such change or any change of any specified office will promptly be given to the Noteholders in accordance with Condition 13.

(f) Unmatured Coupons and unexchanged Talons

- (i) Unless the Senior Notes provide that the relative Coupons are to become void upon the due date for redemption of those Senior Notes, Bearer Notes should be surrendered for payment together with all unmatured Coupons (if any) appertaining thereto, failing which an amount equal to the face value of each missing unmatured Coupon (or, in the case of payment not being made in full, that proportion of the amount of such missing unmatured Coupon which the sum of principal so paid bears to the total principal due) will be deducted from the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount due for payment. Any amount so deducted will be paid in the manner mentioned above against surrender of such missing Coupon within a period of 3 years from the Relevant Date for the payment of such principal (whether or not such Coupon has become void pursuant to Condition 8).
- (ii) If the relative Senior Notes so provide, upon the due date for redemption of any Bearer Note, unmatured Coupons relating to such Senior Note (whether or not attached) shall become void and no payment shall be made in respect of them.
- (iii) Upon the due date for redemption of any Bearer Note, any unexchanged Talon relating to such Senior Note (whether or not attached) shall become void and no Coupon shall be delivered in respect of such Talon.
- (iv) Where any Bearer Note which provides that the relative Coupons are to become void upon the due date for redemption of those Senior Notes is presented for redemption without all unmatured Coupons and any unexchanged Talon relating to it, and where any Bearer Note is presented for redemption without any unexchanged Talon relating to it, redemption shall be made only against the provisions of such indemnity as the Bank may require.
- (v) If the due date for redemption of any Senior Note is not a due date for payment of interest, interest accrued from the preceding due date for payment of interest or the Interest Commencement Date, as the case may be, shall only be payable against presentation (and surrender if appropriate) of the relevant Bearer Note or Certificate representing it, as the case may be. Interest accrued on a Senior Note which only bears interest after its Maturity Date shall be payable on redemption of such Senior Note against presentation of the relevant Senior Note or Certificate representing it, as the case may be.

(g) Talons

On or after the Interest Payment Date for the final Coupon forming part of a Coupon sheet issued in respect of any Bearer Note, the Talon forming part of such Coupon sheet may be surrendered at the specified office

of the Fiscal Agent in exchange for a further Coupon sheet (and if necessary another Talon for a further Coupon sheet) (but excluding any Coupons which may have become void pursuant to Condition 8).

(h) Non-business days

If any date for payment in respect of any Senior Note, Receipt or Coupon is not a business day, the holder shall not be entitled to payment until the next following business day and shall not be entitled to any interest or other sum in respect of such postponed payment. In this paragraph, “**business day**” means a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the relevant place of presentation, and in such jurisdictions as shall be specified as “Financial Centres” in the Final Terms and if TARGET2 is specified as a Financial Centre, a TARGET2 Business Day, and:

- (i) in the case of a payment in a Specified Currency other than euro or Renminbi, where payment is to be made by transfer to an account maintained with a bank in the Specified Currency, on which foreign exchange transactions may be carried on in the Specified Currency in the principal financial centre of the country of such currency;
- (ii) in the case of a payment in euro, which is a TARGET2 Business Day (as defined in the definition of “Business Day” in Condition 4(m)); or
- (iii) in the case of a payment in Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for business for settlement of Renminbi payments in each Relevant Renminbi Settlement Centre (as defined below).

(i) Specific provisions in relation to payments in respect of certain types of Exempt Notes

In the case of Exempt Notes that are Bearer Notes and provide for Instalment Amounts, payments of principal and interest will be made in the manner provided in Condition 6(a), (c) and (d) against presentation and surrender of the relevant Receipt (in the case of Instalment Amounts other than on the due date for redemption and provided the relevant Receipt is presented for payment together with its relative Exempt Note), Exempt Notes (in the case of all other payments of principal and, in the case of Interest, as specified in Condition 6(f)(vi)) or Coupons (in the case of interest payments, save as specified in Condition 6(f)(ii)). Upon the due date for redemption of any Bearer Note which is redeemable instalments, all Receipts relating to such Exempt Notes having an Instalment Date falling on or after such due date (whether or not attached) shall become void and no payment shall be made in respect of them.

In the case of Exempt Notes that are Registered Notes and which provide for Instalment Amounts, payments shall be made in accordance with Condition 6(b) and (d) with all references to principal being deemed to include Instalment Amounts other than the final Instalment Amount and all references to interest being deemed to include all Instalment Amounts other than the final Instalment Amount.

(j) RMB Notes

Notwithstanding any other provision in these Conditions, if Inconvertibility, Non-Transferability or Illiquidity occurs or if Renminbi is otherwise not available to the Issuer as a result of circumstances beyond its control and such unavailability has been confirmed by a Renminbi Dealer, acting in good faith and in a commercially reasonable manner, following which the Issuer is unable to satisfy payments of principal or interest (in whole or in part) in respect of RMB Notes, the Issuer on giving not less than five nor more than 30 days’ irrevocable notice to the Holders prior to the due date for payment, may settle any such payment (in whole or in part) in U.S. dollars on the due date at the U.S. dollars Equivalent of any such Renminbi denominated amount.

In such event, payments of the U.S. dollars Equivalent of the relevant principal or interest in respect of the Senior Notes shall be made by transfer to the U.S. dollars account of the Relevant Account Holders for the benefit of the Noteholders. For the avoidance of doubt, no such payment of the U.S. dollars Equivalent shall by itself constitute a default in payment within the meaning of Condition 9.

All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition 6(j) by the RMB Rate Calculation Agent, will (in the absence of manifest error) be binding on the Issuer, the Paying Agent and all Noteholders and (in the absence of manifest error) no liability to the Issuer, the Paying Agent and all Noteholders shall attach to the RMB Rate Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

For the purposes of these Conditions:

“Calculation Agent” means the Agent or such other entity specified in the applicable Final Terms as the Calculation Agent;

“Governmental Authority” means 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 each Relevant Renminbi Settlement Centre.

“Hong Kong” means the Hong Kong Special Administrative Region of the People's Republic of China.

“Illiquidity” means that the general Renminbi exchange market in each Relevant Renminbi Settlement Centre becomes illiquid, other than as a result of an event of Inconvertibility or Non-Transferability, as determined by the Issuer in good faith and in a commercially reasonable manner following consultation with two Renminbi Dealers.

“Inconvertibility” means the occurrence of any event that makes it impossible for the Issuer to convert any amount due in respect of RMB Notes in the general Renminbi exchange market in each Relevant Renminbi Settlement Centre, other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental Authority (unless such law, rule or regulation is enacted after the Issue Date and it is impossible for the Issuer, due to an event beyond its control, to comply with such law, rule or regulation).

“Non-Transferability” means the occurrence in each Relevant Renminbi Settlement Centre of any event that makes it impossible for the Issuer to transfer Renminbi (A) between accounts inside a Relevant Renminbi Settlement Centre, (B) from an account inside a Relevant Renminbi Settlement Centre to an account outside such Relevant Renminbi Settlement Centre, or (C) from an account outside a Relevant Renminbi Settlement Centre to an account inside such Relevant Renminbi Settlement Centre; in each case other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental Authority (unless such law, rule or regulation is enacted after the Issue Date and it is impossible for the Issuer, due to an event beyond its control, to comply with such law, rule or regulation).

“Relevant Renminbi Settlement Centre” means each of the jurisdiction(s) specified as such in the applicable Final Terms or if no Relevant Renminbi Settlement Centre is specified in the applicable Final Terms, the Relevant Renminbi Settlement Centre shall mean Hong Kong only.

“Renminbi Dealer” means an independent foreign exchange dealer of international repute active in the Renminbi exchange market in any Relevant Renminbi Settlement Centre reasonably selected by the Issuer.

“RMB Rate Calculation Agent” means the agent appointed from time to time by the Issuer for the determination of the RMB Spot Rate or identified as such in the applicable Final Terms.

“RMB Rate Calculation Business Day” means a day (other than a Saturday or Sunday) on which commercial banks are open for general business (including dealings in foreign exchange) in each Relevant Renminbi Settlement Centre and in New York City.

“RMB Rate Calculation Date” means the day which is two RMB Rate Calculation Business Days before the due date for payment of the relevant Renminbi amount under the Conditions.

“RMB Spot Rate” for a RMB Rate Calculation Date means the spot CNY/U.S. dollars exchange rate for the purchase of U.S. dollars with RMB in the over-the-counter RMB exchange market in the Relevant Renminbi Settlement Centre in which the RMB Rate Calculation Agent is located for settlement on the relevant due date for payment, as determined by the RMB Rate Calculation Agent at or around 11.00 a.m. (local time of the Relevant Renminbi Settlement Centre) on such RMB Rate Calculation Date, on a deliverable basis by reference to Reuters Screen Page TRADCNY3 or if no such rate is available on a non deliverable basis by reference to Reuters Screen Rate TRADNDF. If neither rate is available, the RMB Rate Calculation Agent will determine the RMB Spot Rate at or around 11.00 a.m. (local time of the Relevant Renminbi Settlement Centre) on the RMB Rate Calculation Date as the most recently available CNY/U.S. dollar official fixing rate for settlement on the relevant due date for payment reported by the PRC, which is reported on the Reuters Screen Page CNY=SAEC. Reference to a page on the Reuters Screen means the display page so designated on the Reuter Monitor Money Rates Service (or any successor service) or such other page as may replace that page for the purpose of displaying a comparable currency exchange rate.

“U.S. dollars Equivalent” means the Relevant Renminbi amount converted into U.S. dollars using the RMB Spot Rate for the relevant RMB Rate Calculation Date, as calculated by the RMB Rate Calculation Agent.

7. Taxation

All payments of principal and interest in respect of the Senior Notes, the Receipts and the Coupons by or on behalf of the Bank will be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of Canada, any province or territory or political subdivision thereof or any authority or agency therein or thereof having power to tax, or in the case of Senior Notes issued by a branch of the Bank located outside Canada, the country in which such branch is located or any political subdivision thereof or any authority or agency therein or thereof having power to tax, unless the withholding or deduction of such taxes, duties, assessments or governmental charges is required by law, regulation or the administration thereof. In that event, the Bank will pay such additional amounts as may be necessary in order that the net amounts

received by the Noteholders and the Couponholders after such withholding or deduction shall equal the respective amounts of principal and interest, if any, which would have been received in respect of the Senior Notes, Receipts or (as the case may be) Coupons, in the absence of such withholding or deduction; except that no additional amounts shall be payable with respect to any payment in respect of any Senior Note, Receipt or Coupon:

- (a) to, or to a third party on behalf of, a holder who is liable to such taxes, duties, assessments or governmental charges in respect of such Senior Note, Receipt or Coupon by reason of his having some connection with Canada or the country in which such branch is located otherwise than the mere holding of such Senior Note, Receipt or Coupon;
- (b) to, or to a third party on behalf of, a holder in respect of whom such tax, duty, assessment or governmental charge is required to be withheld or deducted by reason of the holder being a person with whom the Bank is not dealing at arm's length (within the meaning of the *Income Tax Act* (Canada));
- (c) presented for payment more than 30 days after the Relevant Date except to the extent that the holder thereof would have been entitled to such additional amount on presenting the same for payment on the thirtieth such day, assuming that day to have been a Business Day (as defined in Condition 6(h));
- (d) to, or to a third party on behalf of, a Noteholder or Couponholder who is, or who does not deal at arm's length with a person who is a "specified shareholder" (as defined in subsection 18(5) of the *Income Tax Act* (Canada)) of the Bank;
- (e) to, or to a third party on behalf of, a holder who is liable for such taxes, duties, assessments or other governmental charges by reason of such holder's failure to comply with any certification, identification, documentation or other reporting requirement concerning the nationality, residence, identity or connection with Canada or the country in which such branch is located of such holder, if (i) compliance is required by law or administration thereof as a precondition to, exemption from, or reduction in the rate of, the tax, duty, assessment or other governmental charge and (ii) the Issuer has given holders at least 30 days' notice that holders will be required to provide such certification, identification, documentation or other requirement;
- (f) for or on account of any withholding tax or deduction imposed or collected pursuant to Sections 1471 through 1474 of the United States Internal Revenue Code of 1986, as amended (the "**Code**") (or any amended or successor version), any current or future regulations thereunder or official interpretations thereof, any agreement described in Section 1471(b)(1) of the Code, any intergovernmental agreement entered into between the United States and any other country in connection with the implementation of the foregoing, and any fiscal or regulatory legislation, rules or official practices adopted pursuant to any such intergovernmental agreement (the "**FATCA Withholding Tax Rules**"); or
- (g) for or on account of any withholding tax or deduction imposed or collected pursuant to Section 871(m) of the Code.

As used in these Conditions, "**Relevant Date**" in respect of any Senior Note, Receipt or Coupon means the date on which payment in respect thereof 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 on which notice is duly given to the Noteholders in accordance with Condition 13 that, upon further presentation of the Senior Note (or relative Certificate), Receipt or Coupon being made in

accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such presentation. References in these Conditions to (i) “**principal**” shall be deemed to include any premium payable in respect of the Senior Notes, all Instalment Amounts, Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts, Amortised Face Amounts and all other amounts in the nature of principal payable pursuant to Condition 5 or any supplement to it, (ii) “**interest**” shall be deemed to include all Interest Amounts and all other amounts payable pursuant to Condition 4 or any supplement to it and (iii) “**principal**” and/or “**interest**” shall be deemed to include any additional amounts which may be payable under this Condition 7.

8. Prescription

Claims against the Bank for payment in respect of the Senior Notes (other than Senior Notes governed by English law), and related Receipts and Coupons shall be prescribed and become void unless made within 3 years from the date on which such Senior Notes, Receipts and Coupons first became redeemable or due and payable.

Claims against the Bank for payment in respect of Senior Notes governed by English law, and related Receipts and Coupons shall be prescribed and become void unless made within 10 years (in the case of principal) and five years (in the case of interest) from the date on which the relevant Senior Notes, Receipts and Coupons (as applicable) first became redeemable or due and payable.

9. Events of Default

If any of the following events (each, an “**Event of Default**”) occurs and is continuing, the holder of any Senior Note may give written notice to the Fiscal Agent at its specified office that such Senior Note is immediately repayable, whereupon the Early Redemption Amount (which unless otherwise provided in a Pricing Supplement is 100 per cent. of its Nominal Amount) of such Senior Note together with accrued interest to the date of payment shall become immediately due and payable:

- (a) default is made for more than 30 Business Days (as defined in Condition 4) in the payment on the due date of interest or principal in respect of any of the Senior Notes; or
- (b) the Bank shall become insolvent or bankrupt or subject to the provisions of the *Winding-up and Restructuring Act* (Canada) or any statute hereafter enacted in substitution therefor, as such Act, or substituted Act, may be amended from time to time, or if the Bank goes into liquidation, either voluntary or under an order of a court of competent jurisdiction, passes a resolution for the winding-up, liquidation or dissolution of the Bank, is ordered wound-up or otherwise acknowledges its insolvency.

Noteholders may only exercise rights under this Condition 9 in respect of Bail-inable Notes where an order has not been made pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank. Notwithstanding the exercise of any rights by Noteholders under this Condition 9 in respect of Bail-inable Notes, Bail-inable Notes will continue to be subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares under subsection 39.2(2.3) of the CDIC Act prior to their repayment in full. A conversion of Bail-inable Notes into common shares under subsection 39.2(2.3) of the CDIC Act will not be an Event of Default. By its acquisition of the Bail-inable Notes, each holder (including each holder of a beneficial interest in any Bail-inable Note), to the extent permitted by law, waives any and all claims, in law and/or in equity, against the Fiscal Agent (in each case solely in its capacity as Fiscal Agent), for, agrees not to initiate a suit against the Fiscal Agent in respect of, and agrees that the Fiscal Agent shall not be liable for, any action that the Fiscal Agent takes, or abstains from taking, in either

case in accordance with the conversion of Bail-inable Notes into common shares under subsection 39.2(2.3) of the CDIC Act.

10. Meeting and Consents of Noteholders and Modifications

(a) Meetings and Consents of Noteholders

The Agency Agreement contains provisions for convening meetings of Noteholders (including at a physical location or by means of an electronic platform (such as a conference call or videoconference) or a combination of such methods) to consider any matter affecting their interest, including modification by Extraordinary Resolution of the Senior Notes (including these Conditions insofar as the same may apply to such Senior Notes). The quorum for any meeting convened to consider an Extraordinary Resolution shall be one or more persons holding or representing a clear majority in nominal amount of the Senior Notes for the time being outstanding, or at any adjourned meeting one or more persons holding or representing Noteholders whatever the nominal amount of the Senior Notes so represented, unless the business of such meeting includes consideration of proposals, *inter alia*, to (i) amend the dates of maturity or redemption of the Senior Notes, any Instalment Date or any date for payment of interest thereon or Interest Amounts on the Senior Notes, (ii) reduce or cancel the Nominal Amount or any Instalment Amount of, or any premium payable on redemption of, the Senior Notes, (iii) reduce the rate or rates of interest in respect of the Senior Notes or vary the method or basis of calculating the Interest Amount in the respect thereof, (iv) if a Minimum Rate of Interest and/or a Maximum Rate of Interest is shown herein, reduce any such Minimum Rate of Interest and/or Maximum Rate of Interest, (v) change any method of calculating the Early Redemption Amount, Final Redemption Amount or Optional Redemption Amount, or in the case of Zero Coupon Notes, vary the method of calculating the Amortised Face Amount in respect thereof, (vi) change the currency or currencies of payment or denomination of the Senior Notes, (vii) modify the provisions concerning the quorum required at any meeting of Noteholders or the majority required to pass the Extraordinary Resolution or (viii) modify or eliminate any of matters (i) through (vii) inclusive above, in which case the necessary quorum shall be one or more persons holding or representing not less than seventy-five per cent., or at any adjourned meeting, not less than twenty-five per cent., in nominal amount of the Senior Notes for the time being outstanding.

The consent or approval of the Noteholders shall not be required in the case of amendments to the Conditions pursuant to Condition 4(o) to vary the method or basis of calculating the rate or rates or amount of interest or the basis for calculating any Interest Amount in respect of the Senior Notes or for any other variation of these Conditions and/or the Agency Agreement required to be made in the circumstances described in Condition 4(o), where the Issuer has delivered to the Fiscal Agent a certificate pursuant to Condition 4(o)(v).

The term “**Extraordinary Resolution**” is defined in the Agency Agreement to mean (a) a resolution passed at a duly convened meeting of the holders of Senior Notes by a majority consisting of not less than three-fourths of the votes cast thereon, (b) a resolution in writing signed by the holders of not less than three-fourths in nominal amount of the Senior Notes outstanding, or (c) consents given by electronic consents through the relevant clearing systems by or on behalf of Noteholders of not less than three-fourths in nominal amount of the Senior Notes outstanding, the whole in accordance with the procedures set out in the Agency Agreement. An Extraordinary Resolution duly passed shall be binding on all Noteholders (whether present or not at the meeting or whether or not they participated in such written resolution or consented electronically) and on all relevant Couponholders.

(b) *Modifications*

The Bank shall only permit, without consent of the Noteholders or Couponholders:

- (i) any modification of, or any waiver or authorisation of any breach or proposed breach of or any failure to comply with, the Agency Agreement, if to do so could not reasonably be expected to be prejudicial to the interests of the Noteholders; or
- (ii) any modification of the Conditions, Notes or Coupons which is of a formal, minor or technical nature or is made to correct a manifest error or to comply with mandatory provisions of the law.

(c) *Bail-inable Notes*

Notwithstanding anything in this Condition 10, where any amendment, modification or other variance that can be made to Bail-inable Notes may affect their recognition by the Superintendent as TLAC, that amendment, modification or variance will require the prior approval of the Superintendent.

11. Replacement of Senior Notes, Certificates, Receipts, Coupons and Talons

If a Senior Note, Certificate, Receipt, Coupon or Talon is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws and stock exchange regulations, at the specified office of the Fiscal Agent (in the case of the Bearer Notes, Receipts, Coupons or Talons) and the Registrar (in the case of Certificates) or such other Paying Agent or Transfer Agent, as the case may be, as may from time to time be designated by the Bank for the purpose and notice of whose designation is given to Noteholders in accordance with Condition 13, 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 Senior Note, Certificate, Receipt, Coupon or Talon is subsequently presented for payment or, as the case may be, for exchange for further Coupons, there will be paid to the Bank on demand the amount payable by the Bank in respect of such Senior Notes, Certificates, Receipts, Coupons or further Coupons) and otherwise as the Bank may require. Mutilated or defaced Senior Notes, Certificates, Receipts, Coupons or Talons must be surrendered before replacements will be issued.

12. Further Issues

The Bank may from time to time without the consent of the Noteholders or Couponholders create and issue further notes having the same terms and conditions as the Senior Notes and so that the same shall be consolidated and form a single series with such Senior Notes, and references in these Conditions to “**Senior Notes**” shall be construed accordingly.

13. Notices

Notices to the holders of Registered Notes will 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 Sunday) after the date of mailing. Notices to the holders of Registered Notes which are listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market of the Luxembourg Stock Exchange (so long as such Senior Notes are listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market of the Luxembourg Stock Exchange and the rules of the Luxembourg Stock Exchange so require) will also be 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 at www.bourse.lu. Notices to the holders of Bearer Notes will be valid if (i) published in an English language daily newspaper of general circulation in Europe (which is expected to be the Financial Times) and (ii) in the case of any Bearer Notes which are listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market of the Luxembourg Stock Exchange (so long as such Senior Notes are listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market of the Luxembourg Stock Exchange and the rules of the Luxembourg Stock Exchange so require), 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 at www.bourse.lu. The Bank shall also ensure that notices are duly published in compliance with the requirements of the rules of each stock exchange on which the Senior Notes are listed, including publication on the website of the relevant stock exchange or relevant authority if required by those rules. Any notice so given will be deemed to have been validly given on the date of first such publication (or, if required to be published in more than one newspaper, on the first date on which publication shall have been made in all the required newspapers) or, as the case may be, on the first Business Day after the date of such delivery to Clearstream, Luxembourg and/or Euroclear and/or such other relevant clearing system.

Couponholders shall be deemed for all purposes to have notice of the contents of any notice to the holders of Bearer Notes in accordance with this Condition 13.

14. Branch of Account

For the purposes of the *Bank Act* (Canada) the branch of the Bank specified in the applicable Final Terms shall be the branch of account (the “**Branch of Account**”) for the deposits evidenced by this Senior Note.

This Senior Note will be paid without the necessity of first being presented for payment at the Branch of Account.

If the Branch of Account is not in Canada, the Bank may change the Branch of Account for the deposits evidenced by this Senior Note, upon not less than seven days’ prior notice to its Holder given in accordance with Condition 13 and upon and subject to the following terms and conditions:

- (a) if this Senior Note is denominated in yen, the Branch of Account shall not be in Japan;
- (b) the Bank shall indemnify and hold harmless the Noteholders of the Senior Notes and Coupons relating thereto against any tax, duty, assessment or governmental charge which is imposed or levied upon such Holder as a consequence of such change, and shall pay the reasonable costs and expenses of the Fiscal Agent in connection with such change;
- (c) notwithstanding (b) above, no change of the Branch of Account may be made unless immediately after giving effect to such change (i) no Event of Default, and no event which, after the giving of notice or lapse of time or both, would become an Event of Default shall have occurred and be continuing and (ii) payments of principal and interest on Senior Notes of this Series and Coupons relating thereto to Holders thereof (other than Excluded Holders, as hereinafter defined) shall not, in the opinion of external counsel to the Bank, be subject to any taxes, as hereinafter defined, to which they would not have been subject had such change not taken place. For the purposes of this section, an “**Excluded Holder**” means a holder of a Senior Note of this Series or Coupon relating thereto who is subject to taxes by reason of his having some connection with the Relevant Jurisdiction other than the mere holding of a Senior Note of this Series or Coupon as a non resident of such Relevant Jurisdiction. “**Relevant Jurisdiction**” means and includes Canada, its provinces or territories and the jurisdiction in which the new Branch of Account is located, and “**taxes**” means and includes any tax, duty, assessment or other governmental charge imposed or levied in

respect of the payment of the principal of the Senior Notes of this Series or interest thereon for or on behalf of a Relevant Jurisdiction or any authority therein or thereof having power to tax; and

- (d) in the case of Bail-inable Notes, if the change is to another Branch of Account outside of Canada, prior approval of the Superintendent shall be required.

15. Currency Indemnity

Any amount received or recovered in a currency other than the currency in which payment under the relevant Senior Note, Coupon or Receipt is due (whether as a result of, or of the enforcement of, a judgment or order of a court of any jurisdiction, in the winding-up or dissolution of the Bank or otherwise) by any Noteholder or Couponholder in respect of any sum expressed to be due to it from the Bank shall only constitute a discharge to the Bank to the extent of the amount in the currency of payment under the relevant Senior Note, Coupon or Receipt which such Noteholder or Couponholder is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If the amount received or recovered is less than the amount expressed to be due to the recipient under any Senior Note, Coupon or Receipt, the Bank shall indemnify such Noteholder or Couponholder against any loss sustained by it as a result. In any event, the Bank shall indemnify such Noteholder or Couponholder against the cost of making any such purchase. For the purposes of this Condition 15, it will be sufficient for the Noteholder or Couponholder, as the case may be, to demonstrate that it would have suffered a loss had an actual purchase been made. These indemnities constitute a separate and independent obligation from the Bank's other obligations, shall give rise to a separate and independent cause of action, shall apply irrespective of any indulgence granted by any Noteholder or Couponholder and shall continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Senior Note, Coupon or Receipt or any other judgment or order.

16. Waiver of set-off and netting rights

No Noteholder or beneficial owner of an interest in the Bail-inable Notes may exercise, or direct the exercise, claim or plead any right of set-off, netting, compensation or retention in respect of any amount owed to it by the Bank arising under, or in connection with, the Bail-inable Notes, and each Noteholder or beneficial owner of an interest in the Bail-inable Notes shall, by virtue of its acquisition of any Bail-inable Note (or an interest therein), be deemed to have irrevocably and unconditionally waived all such rights of set-off, netting, compensation or retention. Notwithstanding the foregoing, if any amounts due and payable to any Noteholder or beneficial owner of an interest in the Bail-inable Notes by the Bank in respect of, or arising under, the Bail-inable Notes are purportedly discharged by set-off, netting, compensation or retention, without limitation to any other rights and remedies of the Bank under applicable law, such Noteholder or beneficial owner of an interest shall be deemed to receive an amount equal to the amount of such discharge and, until such time as payment of such amount is made, shall hold such amount in trust for the Bank and, accordingly, any such discharge shall be deemed not to have taken place and such set-off, netting, compensation or retention shall be ineffective.

17. Contracts (Rights of Third Parties) Act 1999

No person shall have any rights to enforce any Condition of any Senior Notes governed by English law 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.

18. Governing Law; Submission to Jurisdiction

(a) *Governing Law*

Unless English law is specified as being Applicable in the applicable Final Terms, the Senior Notes, the Receipts, the Coupons, and the Talons are governed by, and shall be construed in accordance with, the laws of the Province of Québec and the federal laws of Canada applicable therein.

Where English law is specified as being Applicable in the applicable Final Terms, the relevant Senior Notes, the related Receipts, Coupons and Talons, and the Deed of Covenant, and any non-contractual obligations arising out of or in connection with them, shall be governed by, and shall be construed in accordance with, English law, except as provided in Condition 3(b) and the last paragraph of this Condition 18(a).

The Agency Agreement is governed by, and shall be construed in accordance with, the laws of the Province of Québec and the federal laws of Canada applicable therein.

Notwithstanding anything in these Conditions or the applicable Final Terms, Condition 3(b) and the first paragraph under the heading "*Jurisdiction*" below in respect of Bail-inable Notes, shall be governed by, and shall be construed in accordance with the laws of the Province of Québec and the federal laws of Canada applicable therein.

(b) *Jurisdiction*

For the avoidance of doubt, by its acquisition of an interest in any Bail-inable Notes, each Noteholder or beneficial owner of any Bail-inable Notes is deemed to attorn to the jurisdiction of the courts in the Province of Québec with respect to the CDIC Act and the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes.

Subject to Condition 3(b), the last paragraph of Condition 18(a) above and the preceding paragraph, if English law is specified as being the governing law for the relevant Senior Notes, and related Receipts, Coupons and Talons, the Issuer irrevocably agrees that the English courts have jurisdiction to settle any dispute arising out of or in connection with any such Senior Notes, Receipts, Coupons or Talons, including any dispute as to their existence, validity, interpretation, performance, breach or termination or the consequences of their nullity and any dispute relating to any non-contractual obligations arising out of or in connection with any such Senior Notes, Receipts, Coupons and/or Talons (a "**Dispute**") and accordingly submits to the jurisdiction of the courts of England and Wales. The Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary.

The paragraph above is for the benefit of the relevant holders only. As a result, subject to the last paragraph of Condition 18(a) above and the first paragraph of this Condition 18(b), nothing in this Condition 18 prevents any relevant holder from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction. To the extent allowed by law, such relevant holders may take concurrent Proceedings in any number of jurisdictions.

The Issuer irrevocably agrees that service of process in any such proceedings in England in relation to any Dispute shall be deemed completed on delivery to its branch at 11th Floor, 70 St. Mary Axe, London EC3A 8BE, England. If for any reason such branch ceases to be able to act as such or no longer has an address in London, the Issuer irrevocably agrees to appoint another person as its agent for service of process in

England in respect of any Dispute and shall immediately notify holders of such appointment in accordance with Condition 13. Nothing shall affect the right to serve process in any manner permitted by law.

TERMS AND CONDITIONS OF THE GERMAN REGISTERED NOTES

*The following is the text of the terms and conditions (the “**Conditions**”, and each a “**Condition**”) which, subject to completion and amendment and as supplemented or varied in accordance with the provisions of the applicable Pricing Supplement, will be applicable to the German Registered Notes (for the purpose of these Conditions, also the “**Senior Notes**”) and, subject further to simplification by deletion of non-applicable provisions, will be endorsed on, or attached to, each Senior Note. References in the Conditions to “**Senior Notes**” are to the Senior Notes of one Series only, not to all Senior Notes which may be issued under the Programme. References to the “**applicable Pricing Supplement**” are, unless otherwise stated, to Part A of the Pricing Supplement (or the relevant provision thereof). Capitalised terms not defined in the Conditions but which are defined in the applicable Pricing Supplement will have the meanings given to them in such Pricing Supplement and “herein” or “hereof” when used in the Conditions shall include a reference to such Pricing Supplement where appropriate. The applicable Pricing Supplement in relation to any Series of Senior Notes may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with the following Conditions, replace or modify the following Conditions for the purposes of such Senior Notes. In respect of any Senior Notes, references herein to these Terms and Conditions are to these terms and conditions as supplemented or modified or (to the extent thereof) replaced by the applicable Pricing Supplement.*

The Senior Notes are issued pursuant to an amended and restated Agency Agreement dated 15 June 2022 among National Bank of Canada (the “**Bank**” or the “**Issuer**”), Citibank, N.A., London Branch, and the other parties thereto, (as amended, supplemented or restated from time to time, the “**Agency Agreement**”). Under the Agency Agreement, Citibank, N.A., London Branch will act in its capacities as fiscal, issuing and paying agent and calculation agent (the “**Fiscal Agent**”, which expression shall include any successor to Citibank, N.A., London Branch in its capacity as such) and Citibank Europe plc will act in its capacity as registrar (the “**Registrar**”, which expression shall include any successor to Citibank Europe plc in its capacity as such and any additional registrars appointed in accordance with the Agency Agreement either with respect of the Programme or with respect to a particular Series), and National Bank of Canada, London branch, and Banque Internationale à Luxembourg, société anonyme will act as paying agents (together with the Fiscal Agent and any additional or other paying agents in respect of the Senior Notes from time to time appointed, the “**Paying Agents**”). The initial calculation agent (the “**Calculation Agent**”) (if any) is specified in the applicable Pricing Supplement. Copies of the Agency Agreement are available for inspection at the specified offices of each of the Paying Agents.

German Registered Notes, as they do not qualify as securities pursuant to Article 2 no. 1 of the German Securities Prospectus Act (*Wertpapierprospektgesetz*), have been included herein as additional information only and for the purpose of describing the Programme. Therefore, with respect to German Registered Notes, this document can neither be construed as a prospectus in accordance with the Prospectus Regulation (as amended or superseded) nor as a prospectus for German Registered Notes under German national laws. Pursuant to Section 2 para. 1 No. 3.c) of the German Capital Investment Act (*Vermögensanlagengesetz*), German Registered Notes will only be offered at a minimum price of at least €200,000 per German Registered Note per investor and provided such investor meets the criteria laid down in Section I (1) (a), (d) (e) or (f) of Annex II to MiFID II.

1. Form and Title

This registered note (*Namensschuldverschreibung*) (the “**Registered Note**”) is issued by National Bank of Canada, with its registered seat in Montréal, Québec, Canada (the “**Issuer**”), in the Nominal Amount on [●] (the “**Issue Date**”).

This Registered Note is issued at a price of [●] per cent. of the Nominal Amount (the “**Issue Price**”).

This Registered Note shall bear the manual or facsimile signature of two duly authorised signatories of the Issuer and shall manually be authenticated by or on behalf of the Registrar.

This Registered Note is represented by a certificate (*Urkunde*) in definitive form (the “**Certificate**”), registered in the name of the holder.

The Bank shall procure that the Registrar keep a register or registers in which the Noteholder and any person to whom all or part of the Registered Note has been transferred in whole or in part are registered which may be an internal register (the “**Register**”). In these Conditions “**Noteholder**” or “**holder**” means the person in whose name the Registered Note is registered. Any reference herein to “Noteholder” or “holder” in plural form shall constitute a reference to “Noteholder” or “holder” in singular form and vice versa.

On the Issue Date, the Noteholder shall be entered in the Register by the Registrar as the holder of the Registered Note in the Nominal Amount. The Noteholder shall be entitled to receive payments in respect of the Registered Note only upon the due registration in the Register.

Except as ordered by a court of competent jurisdiction or as required by law, the holder of any Senior Note shall be deemed to be and may be treated as the absolute owner of such Senior Note for the purpose of receiving payment thereof or on account thereof and for all other purposes, whether or not such Senior Note shall be overdue and notwithstanding any notice of ownership, theft or loss thereof or any writing thereon made by anyone.

2. Transfers, Deliveries and Exchanges of Registered Notes

(a) Transfer of Registered Notes

The rights of the Noteholder arising from this Registered Note and title to the Certificate itself may be transferred in whole or in part upon assignment of the relevant rights under this Registered Note by the then current Noteholder (the “**Transferor**”) to any bank, insurance company, pension funds, investment company, credit institution or other financial institution (the “**Transferee**”) and the surrender of the Certificate, together with the “**Assignment Agreement**” (substantially in the form of the Schedule annexed to these Terms and Conditions) attached to it duly completed and executed, at the specified office of the Registrar and the entry of the new Noteholder with the Register by the Registrar. The date stated in the duly completed and executed Assignment Agreement as the date, on which the economic effects of the assignments shall occur, shall be the “**Transfer Date**” to be entered into the Register by the Registrar.

Any transfer of part only of this Registered Note is permitted only for a minimum principal amount of €1,000,000 or multiples thereof.

In the case of a transfer of this Registered Note in whole and provided the requirements specified above have been met, a new Certificate with respect to the new Registered Note will be issued and delivered to the Transferee upon request. In the case of a transfer of a part only of this Registered Note and provided the requirements specified above have been met, new Certificates in respect of the balance transferred and the balance not transferred (as the case may be) will be issued and delivered to the Transferor and to the Transferee respectively upon request.

The Transferor will promptly notify the Issuer and the Registrar of any transfer and the Transfer Date in a facsimile letter (substantially in the form of the Annex to the Form of Assignment Agreement set out in the Schedule annexed to these Terms and Conditions).

Any reference herein to "**Registered Note**" or "**this Registered Note**" includes, unless the context otherwise requires, any Certificate issued in relation to this Registered Note (including any new Certificate issued upon any transfer of this Registered Note or part hereof).

(b) Delivery of New Certificates

Each new Certificate to be issued upon transfer of this Registered Note (in whole or in part) will, within seven business days (being, for the purposes of this subsection, a day, other than a Saturday or Sunday, on which commercial banks are open for business in the place of the specified office of the Registrar) of surrender of the Certificate and the duly completed and executed Assignment Agreement, be available for collection at the specified office of the Registrar or, at the request of the Noteholder making such surrender and as specified in the relevant Assignment Agreement, be mailed at the risk of the Noteholder entitled to the new Certificate to such address as may be specified in the Annex of the Assignment Agreement.

(c) Exchange Free of Charge

Transfer of Registered Notes will be effected without charge by or on behalf of the Registrar, but on payment (or the giving of such indemnity as the Registrar may require in respect thereof) of any tax or other governmental charges which may be imposed in relation to it.

(d) Closed Periods

No Noteholder may require the transfer of a Registered Note 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 Senior Note, (ii) during the period of 15 days prior to any date on which the Registered Note may be redeemed by the Bank at its option pursuant to Condition 5(j) or (iii) after any such Senior Note has been drawn for redemption in whole or in part.

(e) Exercise of Call or Put Options or Partial Redemption in Respect of Registered Notes

In the case of an exercise of the Issuer Call Option or Noteholder Put Option in respect of, or a partial redemption of, a holding of Registered Notes represented by a single Certificate, a new 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 either an Issuer Call Option or a Noteholder Put Option resulting in Registered Notes of the same holding having different terms, separate Certificates shall be issued in respect of those Senior Notes of that holding that have the same terms. New Certificates shall only be issued against surrender of the existing Certificates to the Registrar. In the case of a transfer of Registered Notes to a person who is already a holder of Registered Notes, a new Certificate representing the enlarged holding shall only be issued against surrender of the Certificate representing the existing holding.

3. Status of the Senior Notes

(a) The Senior Notes

The Senior Notes will constitute deposit liabilities of the Bank for purposes of the *Bank Act* (Canada) and will rank *pari passu* with all other deposit liabilities of the Bank (except as otherwise prescribed by law and subject to the exercise of bank resolution powers), and without any preference amongst themselves. Senior Notes issued by a branch of the Bank will be obligations of the Bank and will be paid without the necessity of being presented for payment at such branch. Unless otherwise specified in the applicable Pricing Supplement, the deposits to be evidenced by Senior Notes will be issued by the main branch of the Bank in Montréal, Québec, Canada.

The Senior Notes will not be deposits insured under the *Canada Deposit Insurance Corporation Act* (the “**CDIC Act**”).

(b) Bail-inable Notes

This Condition 3(b) will apply in respect of all Senior Notes issued by the Bank that are identified as Bail-inable Senior Notes in the applicable Pricing Supplement (“**Bail-inable Notes**”). All Senior Notes that (i) have an original or amended term to maturity (including explicit or embedded options) greater than 400 days and that have been assigned a CUSIP or ISIN or similar identification number and (ii) are not otherwise excluded (e.g. structured notes (as such term is used under the Canadian bank recapitalization regime for banks designated by the Superintendent of Financial Institutions (Canada) (the “**Superintendent**”) as domestic systemically important banks (the “**Bail-in Regime**”)) under the Bail-in Regime, will be identified as Bail-inable Notes in the applicable Pricing Supplement. Senior Notes that constitute structured notes (as such term is used under the Bail-in Regime) or are otherwise excluded under the Bail-in Regime will not be identified as Bail-inable Notes in the applicable Pricing Supplement.

By its acquisition of an interest in Bail-inable Notes, each Noteholder (which, for the purposes of this Condition 3(b), includes each holder of a beneficial interest in such Bail-inable Notes) is deemed to:

- (i) agree to be bound, in respect of such Bail-inable Notes, by the CDIC Act, including the conversion of the Bail-inable Notes, in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of the Bail-inable Notes in consequence, and by the application of the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to such Bail-inable Notes (a “**Bail-in Conversion**”);
- (ii) attest to the jurisdiction of the courts in the Province of Québec with respect to the CDIC Act and the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes;
- (iii) have represented and warranted to the Bank that the Bank has not directly or indirectly provided financing to the Noteholder of the Bail-inable Notes for the express purpose of investing in Bail-inable Notes; and
- (iv) acknowledge and agree that the terms referred to in paragraphs (i) and (ii), above, are binding on such Noteholder despite any provisions of these Conditions, any other law that governs the Bail-inable Notes and any other agreement, arrangement or understanding between such Noteholder and the Bank with respect to such Bail-inable Notes.

The applicable Pricing Supplement will indicate whether Senior Notes are Bail-inable Notes. All Bail-inable Notes will be subject to Bail-in Conversion.

Noteholders and beneficial owners of a Bail-inable Note will have no further rights in respect of a Bail-inable Note to the extent such Bail-inable Note is converted in a Bail-in Conversion, other than those provided under the Bail-in Regime, and by its acquisition of an interest in the Bail-inable Note, each Noteholder or beneficial owner of the Bail-inable Note is deemed to irrevocably consent to the converted portion of the principal amount of the Bail-inable Note and any accrued and unpaid interest thereon being deemed paid in full by the issuance of common shares of the Bank (or, if applicable, any of its affiliates) upon the occurrence of a Bail-in Conversion, which Bail-in Conversion shall occur without any further action on the

part of that Noteholder or beneficial owner or the Paying Agents; provided that, for the avoidance of doubt, this consent shall not limit or otherwise affect any rights of that Noteholder or beneficial owner provided for under the Bail-in Regime.

Each Noteholder or beneficial owner of the Bail-inable Notes that acquires an interest in the Bail-inable Notes in the secondary market and any successors, assigns, heirs, executors, administrators, trustees in bankruptcy and legal representatives of any such Noteholder or beneficial owner shall be deemed to acknowledge, accept, agree to be bound by and consent to the same provisions specified herein to the same extent as the Noteholders or beneficial owners that acquire an interest in the Bail-inable Notes upon their initial issuance, including, without limitation, with respect to the terms of the Bail-inable Notes related to the Bail-in Regime.

4. Interest and Other Calculations

(a) Interest on Fixed Rate Notes

Each Fixed Rate Note bears interest on its outstanding Nominal Amount (or, if it is a Partly-Paid Note, the amount paid up) in respect of each Fixed Interest Period from (and including) the Interest Commencement Date specified in the applicable Pricing Supplement at the rate(s) per annum (expressed as a percentage) equal to the Fixed Rate(s) of Interest so specified, such interest being payable in arrear on the Interest Payment Date(s) in each year up to (and excluding) the Maturity Date. The amount of interest payable shall be determined in accordance with Condition 4(l).

If a Fixed Coupon Amount or a Broken Amount is specified in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date will amount to the Fixed Coupon Amount or, if applicable, the Broken Amount so specified and in the case of the Broken Amount, will be payable on the particular Interest Payment Date(s) specified in the applicable Pricing Supplement.

(b) Interest on Fixed Rate Reset Notes

Each Fixed Rate Reset Note bears interest on its outstanding nominal amount:

- (i) from and including the Interest Commencement Date up to but excluding the First Reset Date at the Initial Rate of Interest;
- (ii) in the First Reset Period, at the First Reset Rate of Interest; and
- (iii) for each Subsequent Reset Period thereafter (if any), at the relevant Subsequent Reset Rate of Interest,

payable, subject as provided herein, in arrear on each Interest Payment Date. The amount of interest payable shall be determined in accordance with this Condition 4.

Save as otherwise provided herein, the provisions applicable to Fixed Rate Notes shall apply to Fixed Rate Reset Notes.

In this Condition 4(b):

“Anniversary Date(s)” means each date specified as such in the applicable Pricing Supplement;

“Benchmark Gilt” means, in respect of a Reset Period, such United Kingdom government security having a maturity date on or about the last day of such Reset Period as the Calculation Agent, with the advice of the Reset Reference Banks, may determine (acting in good faith and in a commercially reasonable manner) to be appropriate;

“Benchmark Gilt Rate” means, in respect of a Reset Period, the gross redemption yield (as calculated by the Calculation Agent in accordance with generally accepted market practice at such time) on a semi-annual compounding basis (converted to an annualised yield and rounded up (if necessary) to four decimal places) of the Benchmark Gilt in respect of that Reset Period, with the price of the Benchmark Gilt for this purpose being the arithmetic average (rounded up (if necessary) to the nearest 0.001 per cent. (0.0005 per cent being rounded upwards)) of the bid and offered prices of such Benchmark Gilt quoted by the Reset Reference Banks at 3.00 p.m. (London time) on the relevant Reset Determination Date on a dealing basis for settlement on the next following dealing day in London. If at least four quotations are provided, the Benchmark Gilt Rate will be the rounded arithmetic mean of the quotations provided, 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). If only two or three quotations are provided, the Benchmark Gilt Rate will be the rounded arithmetic mean of the quotations provided. If only one quotation is provided, the Benchmark Gilt Rate will be the rounded quotation provided. If no quotations are provided, the Subsequent Reset Rate of Interest shall be that which was determined on the last preceding Reset Determination Date or, in the case of the first Reset Determination Date, the First Reset Rate of Interest shall be the Initial Rate of Interest;

“dealing day” means a day, other than a Saturday or Sunday, on which the London Stock Exchange (or such other stock exchange on which the Benchmark Gilt is at the relevant time listed) is ordinarily open for the trading of securities;

“First Reset Date” means the date specified as such in the applicable Pricing Supplement;

“First Reset Period” means the period from and including the First Reset Date up to but excluding the Second Reset Date or, if no such Second Reset Date is specified in the applicable Pricing Supplement, the date fixed for redemption of the Notes (if any);

“First Reset Rate of Interest” means the rate of interest as determined by the Calculation Agent on the Reset Determination Date corresponding to the First Reset Period as the sum of the relevant Reset Rate plus the relevant Margin;

“Fixed Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Pricing Supplement;

“Floating Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Pricing Supplement;

“Floating Leg Rate Option” means the benchmark rate specified as such in the applicable Pricing Supplement;

“Initial Rate of Interest” means the initial rate of interest per annum specified in the applicable Pricing Supplement;

“Margin” means the margin (expressed as a percentage) in relation to the relevant Reset Period specified as such in the applicable Pricing Supplement;

“Mid-Swap Maturity” has the meaning specified in the applicable Pricing Supplement;

“Mid-Swap Quotations” means the arithmetic mean of the bid and offered rates for the Specified Fixed Leg, calculated on the Fixed Leg Day Count Fraction, of a fixed-for-floating interest rate swap transaction in the Specified Currency which (i) has a term commencing on the relevant Reset Date which is equal to that of the relevant Reset Period; (ii) is in an amount that is representative of a single transaction in the relevant market at the relevant time with an acknowledged dealer of good credit in the relevant swap market; and (iii) has a floating leg, calculated on the Floating Leg Day Count Fraction, based on the Floating Leg Rate Option for the Mid-Swap Maturity;

“Mid-Swap Rate” means in respect of a Reset Period, (i) the applicable semi-annual or annualised (as specified in the applicable Pricing Supplement) mid-swap rate for swap transactions in the Specified Currency (with a maturity equal to that of the relevant Reset Period) as displayed on the Screen Page at 11.00 a.m. or any other Relevant Time specified in the applicable Pricing Supplement (in the principal financial centre of the Specified Currency) on the relevant Reset Determination Date (which rate, if the relevant Interest Payment Dates are other than semi-annual or annual Interest Payment Dates, shall be adjusted by and in the manner determined by, the Calculation Agent) or (ii) if such rate is not displayed on the Screen Page at such time and date, the relevant Reset Reference Bank Rate;

“Reference Bond” means for any Reset Period a government security or securities issued by the government of the state responsible for issuing the Specified Currency (which, if the Specified Currency is euro, shall be Germany) selected by the Calculation Agent (acting in good faith and in a commercially reasonable manner) after consultation with the Issuer as having an actual or interpolated maturity comparable with the relevant Reset Period and that (in the opinion of the Calculation Agent (acting in good faith and in a commercially reasonable manner), after consultation with the Issuer) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issuances of corporate debt securities denominated in the Specified Currency and of comparable maturity to the relevant Reset Period;

“Reference Bond Dealer” means each of five banks which are primary government securities dealers or market makers in pricing corporate bond issuances, as selected by the Calculation Agent (acting in good faith and in a commercially reasonable manner) after consultation with the Issuer;

“Reference Bond Dealer Quotations” means, with respect to each Reference Bond Dealer and the Reset Determination Date, the arithmetic mean, as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner), of the bid and offered prices for the Reference Bond (expressed in each case as a percentage of its nominal amount) as at approximately 11:00 a.m. (or any other Relevant Time as specified in the applicable Pricing Supplement) in the principal financial centre of the Specified Currency on the Reset Determination Date and quoted in writing to the Calculation Agent by such Reference Bond Dealer;

“Reference Bond Price” means, with respect to a Reset Determination Date, (a) the arithmetic mean of the Reference Bond Dealer Quotations for that Reset Determination Date, after excluding the highest and

lowest such Reference Bond Dealer Quotations, or (b) if the Calculation Agent obtains fewer than four such Reference Bond Dealer Quotations, the arithmetic mean of all such quotations, or (c) if the Calculation Agent obtains only one Reference Bond Dealer Quotation or if the Calculation Agent obtains no Reference Bond Dealer Quotations, the Subsequent Reset Rate of Interest shall be that which was determined on the last preceding Reset Determination Date or, in the case of the first Reset determination Date, the First Reset Rate of Interest shall be the Initial Rate of Interest;

“Reference Bond Rate” means, in respect of a Reset Period, the annual yield to maturity or interpolated yield to maturity (on the relevant day count fraction) of the Reference Bond, assuming a price for such Reference Bond (expressed as a percentage of its nominal amount) equal to the Reference Bond Price;

“Reset Date” means each of the First Reset Date, the Second Reset Date and each of the Anniversary Dates (if any) as is specified in the applicable Pricing Supplement;

“Reset Determination Date” means, in respect of a Reset Period, (a) each date specified as such in the applicable Pricing Supplement or, if none is so specified, (b) (i) if the Specified Currency is Sterling or Renminbi, the first Business Day of such Reset Period, (ii) if the Specified Currency is euro, the day falling two TARGET2 Business Days prior to the first day of such Reset Period, (iii) if the Specified Currency is U.S. dollars, the day falling two U.S. Government Securities Business Days prior to the first day of such Reset Period (iv) for any other Specified Currency, the day falling two Business Days in the principal financial centre for such Specified Currency prior to the first day of such Reset Period;

“Reset Period” means the First Reset Period or a Subsequent Reset Period;

“Reset Rate” means (a) if ‘Mid-Swap Rate’ is specified in the applicable Pricing Supplement, the relevant Mid-Swap Rate; (b) if ‘Benchmark Gilt Rate’ is specified in the applicable Pricing Supplement, the relevant Benchmark Gilt Rate; or (c) if “Reference Bond Rate” is specified in the applicable Pricing Supplement, the relevant Reference Bond Rate;

“Reset Reference Bank Rate” means the percentage rate determined on the basis of the Mid-Swap Quotations provided by the Reset Reference Banks to the Calculation Agent at or around 11:00 a.m. (or any other Relevant Time specified in the applicable Pricing Supplement) in the principal financial centre of the Specified Currency (which in the case of Renminbi shall, for these purposes, be Hong Kong) on the relevant Reset Determination Date and, rounded, if necessary, to the nearest 0.001 per cent (0.0005 per cent. being rounded upwards). If at least four quotations are provided, the Reset Reference Bank Rate will be the rounded arithmetic mean of the quotations provided, 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). If only two or three quotations are provided, the Reset Reference Bank Rate will be the rounded arithmetic mean of the quotations provided. If only one quotation is provided, the Reset Reference Bank Rate will be the rounded quotation provided. If no quotations are provided, the Subsequent Reset Rate of Interest shall be that which was determined on the last preceding Reset Determination Date or, in the case of the first Reset Determination Date, the First Reset Rate of Interest shall be the Initial Rate of Interest;

“Reset Reference Banks” means (i) in the case of the calculation of a Reset Reference Bank Rate, five leading swap dealers in the principal interbank market relating to the Specified Currency selected by the Calculation Agent (acting in good faith and in a commercially reasonable manner); or (ii) in the case of a Benchmark Gilt Rate, five brokers of gilts and/or gilt-edged market makers selected by the Calculation Agent (acting in good faith and in a commercially reasonable manner);

“Screen Page” means the screen page on Thomson Reuters or any other information service as is specified in the applicable Pricing Supplement, or such other screen page as may replace it on Thomson Reuters or any other information service or, as the case may be, on such other information service that may replace Thomson Reuters or any other information service, in each case, as may be nominated by the person providing or sponsoring the information appearing there for the purpose of displaying comparable rates;

“Second Reset Date” means the date specified as such in the applicable Pricing Supplement;

“Specified Fixed Leg” means any of the following as specified in the applicable Pricing Supplement: (a) the annual fixed leg; (b) the semi-annual fixed leg or (c) the quarterly fixed leg;

“Subsequent Reset Period” means the period from and including the Second Reset Date to but excluding the next Reset Date, and each successive period from and including a Reset Date to but excluding the next succeeding Reset Date;

“Subsequent Reset Rate of Interest” means, in respect of any Subsequent Reset Period, the rate of interest determined by the Calculation Agent on the Reset Determination Date corresponding to such Subsequent Reset Period as the sum of the relevant Reset Rate plus the relevant Margin; and

“U.S. Government Securities Business Day” means any day except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(c) Business Day Convention

If any date referred to in these Conditions which is specified to be subject to adjustment in accordance with a Business Day Convention would otherwise fall on a day which is not a Business Day, then, if the Business Day Convention specified is (i) the Floating Rate Business Day Convention, such date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (A) such date shall be brought forward to the immediately preceding Business Day and (B) each subsequent such date shall be the last Business Day of the month in which such date would have fallen had it not been subject to adjustment, (ii) the Following Business Day Convention, such date shall be postponed to the next day which is a Business Day, (iii) the Modified Following Business Day Convention, such date shall be postponed to the next day which 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, (iv) the Preceding Business Day Convention, such date shall be brought forward to the immediately preceding Business Day, or (v) No Adjustment, such date shall not be adjusted in accordance with any Business Day Convention, provided that if ISDA Determination, "2021 ISDA Definitions" and "Unscheduled Holiday" are applicable in the applicable Pricing Supplement, then in the case where Modified Following Business Day Convention, Modified Business Day Convention, Preceding Business Day Convention, FRN Convention, Floating Rate Convention or Eurodollar Convention apply to a particular date and that date would otherwise fall on a day that is not a Business Day as a result of an Unscheduled Holiday (as defined in the 2021 ISDA Definitions but disregarding references to Valuation Business Day and Exercise Business Day and construing references to the Confirmation to mean the applicable Pricing Supplement) notwithstanding the provisions of (ii) to (iv), such day will instead fall on the first following day that is a Business Day.

(d) Interest on Floating Rate Notes and Index-Linked Interest Notes

(i) Interest Payment Dates

Each Floating Rate Note and Index-Linked Interest Note bears interest on its outstanding Nominal Amount (or, if it is a Partly-Paid Note, the amount paid up) from (and including) the Interest Commencement Date specified in the applicable Pricing Supplement at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrear on either: (A) the Specified Interest Payment Date(s) in each year specified in the applicable Pricing Supplement; or (B) if no Specified Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each such date, together with each Specified Interest Payment Date, an “**Interest Payment Date**”) which falls the number of months or other period specified as the Specified Period in the applicable Pricing Supplement after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date. Such interest will be payable in respect of each Interest Period (which expression shall, in these Terms and Conditions, mean that period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date).

(ii) Rate of Interest

The Rate of Interest payable from time to time in respect of the Floating Rate Notes will be determined in the manner specified in the applicable Pricing Supplement and the provisions below relating to either Screen Rate Determination or ISDA Determination shall apply, depending upon which is specified in the applicable Pricing Supplement.

(A) Screen Rate Determination

(a) Where Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined (other than where SONIA, SOFR, €STR or CMS Rate is specified to be the applicable Benchmark), the Rate of Interest for each Interest Period will be determined (and adjusted, if required by Conditions 4(k) and subject to Condition 4(q)) 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:

(x) if the Primary Source for the Floating Rate is a Screen Page, subject as provided below, the Rate of Interest shall be:

- (I) the Relevant Rate (where such Relevant Rate on such Screen Page is a composite quotation or is customarily supplied by one entity), or
- (II) the arithmetic mean of the Relevant Rates of the persons whose Relevant Rates appear on that Screen Page,

in each case appearing on such Screen Page at the Relevant Time on the Interest Determination Date;

(y) if the Primary Source for the Floating Rate is Reference Banks or if sub-paragraph (x)(I) applies and no Relevant Rate appears on the Screen Page at the Relevant Time on the Interest Determination Date or if sub-paragraph (x)(II) above applies

and fewer than two Relevant Rates appear on the Page at the Relevant Time on the Interest Determination Date, subject as provided below, the Rate of Interest shall be the arithmetic mean of the Relevant Rates which each of the Reference Banks is quoting to major banks in the Relevant Financial Centre at the Relevant Time on the Interest Determination Date, as calculated by the Calculation Agent; and

- (z) if paragraph (y) above applies, and the Issuer determines (acting in good faith and in a commercially reasonable manner) that fewer than two Reference Banks are so quoting Relevant Rates, subject as provided below, the Rate of Interest shall be the arithmetic mean of the rates per annum (expressed as a percentage) which the Calculation Agent determines to be the rates (being the nearest equivalent to the Reference Rate) in respect of a Representative Amount of the Specified Currency which at least two out of five leading banks selected by the Issuer (acting in good faith and in a commercially reasonable manner) in the principal financial centre of the country of the Specified Currency or, if the Specified Currency is euro, in the Euro-zone as selected by the Issuer (acting in good faith and in a commercially reasonable manner) (the “**Principal Financial Centre**”) are quoting at or about the Relevant Time on the date on which such banks would customarily quote such rates for a period commencing on the Effective Date for a period equivalent to the Specified Duration to leading banks carrying on business in the Principal Financial Centre; except that, if fewer than two such banks are so quoting to leading banks in the Principal Financial Centre, the Rate of Interest shall be the Rate of Interest determined on the previous Interest Determination Date (after readjustment for any difference between any Margin, Rate Multiplier or Maximum or Minimum Rate of Interest applicable to the preceding Interest Period and to the relevant Interest Period).

- (b) (1) Where the Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**SONIA**” and the Calculation Method is specified as being “**Compounded Daily Rate**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(q), be Compounded Daily SONIA adjusted as required by Condition 4(k), all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

“**Compounded Daily SONIA**” means, with respect to 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) and will be calculated by the Calculation Agent on the relevant Interest Determination Date, as follows, and the resulting percentage will be rounded if necessary to the fourth decimal place, with 0.00005 per cent. being rounded upwards:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{\text{Relevant SONIA}_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

where:

“**d**” is the number of calendar days in:

- (a) where Lag is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**d₀**” is the number of London Banking Days in:

- (a) where Lag is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**i**” is a series of whole numbers from one to **d₀**, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day in:

- (a) where Lag is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or
- (b) where Shift is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**London Banking Day**” or “**LBD**” means any day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London, United Kingdom;

“**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 Look-back Period**” is as specified in the applicable Pricing Supplement and in no case shall be less than five London Business Days;

“**Observation Period**” means the period from and including the date falling “**p**” London Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling “**p**” London Banking Days prior to the Interest Payment Date for such Interest Period;

“**p**” is the number of London Banking Days included in the Observation Look-back Period, as specified in the applicable Pricing Supplement;

“**Relevant SONIA_i**” means, in respect of any London Banking Day “**i**”:

- (a) where “Lag” is specified as the Observation Method in the applicable Pricing Supplement, $SONIA_{i-pLBD}$; or
- (b) where “Shift” is specified as the Observation Method in the applicable Pricing Supplement, $SONIA_{iLBD}$;

“**SONIA_{iLBD}**” means, in respect of any London Banking Day “i” the SONIA reference rate for such London Banking Day “i”;

“**SONIA_{i-pLBD}**” means, in respect of any London Banking Day “i” falling in the relevant Interest Period, the SONIA reference rate for the London Banking Day falling “p” London Banking Days prior to the relevant London Banking Day “i”; and

“**SONIA reference rate**”, in respect of any London Banking Day, is 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 Screen Page or, if the Screen Page is unavailable, as otherwise published by such authorised distributors, in each case on the London Banking Day immediately following such London Banking Day.

If, subject to Condition 4(q), in respect of any London Banking Day in the relevant Observation Period, the Calculation Agent determines that the SONIA reference rate is not available on the Screen Page or has not otherwise been published by the relevant authorised distributors, the SONIA reference rate shall be:

- (a) (i) the Bank of England’s Bank Rate (the “**Bank Rate**”) prevailing at 5:00 p.m. (or, if earlier, close of business) on the relevant London Banking Day; plus (ii) the mean of the spread of the SONIA reference rate to the Bank Rate over the previous five London Business Days on which a SONIA reference rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate; or
- (b) if the Bank Rate is not published by the Bank of England as set out in subparagraph (a) above on the relevant London Banking Day, the SONIA Reference Rate published on the Screen Page (or otherwise published by the relevant authorised distributors) for the immediately preceding London Banking Day on which the SONIA Reference Rate was published on the Screen Page (or otherwise published by the relevant authorised distributors).

Notwithstanding the foregoing, and subject to Condition 4(q), in the event the Bank of England publishes guidance as to (i) how the SONIA rate is to be determined or (ii) any rate that is to replace the SONIA rate, the Calculation Agent (acting in good faith and in a commercially reasonable manner) shall, subject to receiving written instructions from the Issuer and to the extent that it is reasonably practicable, follow such guidance in order to determine the SONIA reference rate for purposes of Notes of the relevant Series for so long as the SONIA reference rate is not available or has not been published by the authorised distributors.

(2) Where the Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**SONIA**” and the Calculation Method is specified as being “Compounded Index Rate”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(q) be Compounded Daily SONIA for the Interest Period determined by reference to the screen rate or index for Compounded Daily SONIA administered by the administrator of the SONIA 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 Index Determination Dates specified below, as further specified in the applicable Pricing Supplement (the “**SONIA Compounded Index**”) and in accordance with the following formula, and the resulting percentage will be rounded if necessary to the fourth decimal place, with 0.00005 per cent. being rounded upwards, plus or minus (as indicated in the applicable Pricing Supplement) the Margin, if any, and adjusted as required by Condition 4(k), all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

Compounded Daily SONIA rate (Index) =

$$\left(\frac{\text{SONIA Compounded Index}_y}{\text{SONIA Compounded Index}_x} - 1 \right) \times \frac{365}{d}$$

where:

“**x**” denotes that the relevant SONIA Compounded Index is the 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.

“**y**” denotes that the relevant SONIA Compounded Index is the SONIA Compounded Index determined in relation to the day falling the Relevant Number of London Banking Days prior to the Interest Payment Date for such Interest Period, or such other date as when the relevant payment of interest falls to be due (but which by definition or the operation of the relevant provisions is excluded from such Interest Period).

A day on which the SONIA Compounded Index is determined pursuant to paragraph “x” or “y” above is referred to as an “**Index Determination Date**”.

“**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 applicable Pricing Supplement.

If the SONIA Compounded Index is not published or displayed by the administrator of the SONIA reference rate or other information service at the relevant time on any relevant Index Determination Date, the Compounded Daily SONIA rate (Index) for the applicable Interest Period for which SONIA Compounded Index is not available shall be “**Compounded Daily SONIA**” determined in accordance with Condition 4(d)(ii)(A)(b)(1)

above as if Compounded Index Rate is not specified as being applicable in the applicable Pricing Supplement. For these purposes, the “Calculation Method” shall be deemed to be “**Compounded Daily Rate**”, the Relevant Number specified in the applicable Pricing Supplement shall be the “Observation Lookback Period” and “Observation Method” shall be deemed to be “Shift” as if Compounded Index Rate is not specified as being applicable and these alternative elections had been made.

(3) In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, but without prejudice to Condition 4(q), the Rate of Interest applicable to the Notes during such Interest Period will be the Rate of Interest last determined in relation to the Notes in respect of the last preceding Interest Period (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period).

If the relevant Series of Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Pricing Supplement, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon, subject to the conditions set out in Condition 4(g).

- (c) (1) Where the Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**SOFR**” and the Calculation Method is specified as being “**Compounded SOFR**”, the Rate of Interest for each Interest Period will, as provided below and subject to Conditions 4(q) or 4(r), be Compounded SOFR adjusted as required by Condition 4(k), all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

“**Compounded SOFR**” means, in relation to any Interest Period, the rate of return of a daily compound interest investment (with SOFR as the reference rate for the calculation of interest) and will be calculated by the Calculation Agent on the relevant Interest Determination Date in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest fifth decimal place, with 0.000005 being rounded upwards):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SOFR_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“**d**” is the number of calendar days in:

(a) where Lag Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or

(b) where Observation Shift Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**d_o**” is the number of U.S. Government Securities Business Days in:

(a) where Lag Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or

(b) where Observation Shift Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**i**” is a series of whole numbers from one to **d_o**, each representing the relevant U.S. Government Securities Business Day, in chronological order from, and including, the first U.S. Government Securities Business Day in:

(a) where Lag Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Interest Period; or

(b) where Observation Shift Convention is specified as the Observation Method in the applicable Pricing Supplement, the relevant Observation Period;

“**n_i**” for any U.S. Government Securities Business Day “**i**” is the number of calendar days from, and including, such U.S. Government Securities Business Day “**i**” to, but excluding, the following U.S. Government Securities Business Day “**i+1**”;

“**Secured Overnight Financing Rate**” or “**SOFR**” means, with respect to any U.S. Government Securities Business Day: (1) the Secured Overnight Financing Rate published for such U.S. Government Securities Business Day as such rate appears on the SOFR Administrator’s Website at 3:00 p.m. (New York time) on the immediately following U.S. Government Securities Business Day (the “**SOFR Determination Time**”); or (2) if the rate specified in (1) above does not so appear at the SOFR Determination Time:

(i) if both a Benchmark Transition Event (as defined in Condition 4(r)) and its related Benchmark Replacement Date (as defined in 4(r)) have not occurred, the Secured Overnight Financing Rate as published in respect of the first preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the SOFR Administrator’s Website; or

(ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, then SOFR shall be the rate determined in accordance with Condition 4(r);

“**SOFR_i**” means the SOFR for:

(i) where “Lag Convention” is specified as the Observation Method in the applicable Pricing Supplement, the U.S. Government Securities Business Day falling “p” U.S. Government Securities Business Days prior to the relevant U.S. Government Securities Business Day “i”; and

(ii) where “Observation Shift Convention” is specified as the Observation Method in the applicable Pricing Supplement, the relevant U.S. Government Securities Business Day “i”.

(2) Where the Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**SOFR**” and the Calculation Method is specified as being “**SOFR Index**”, the Rate of Interest for each Interest Period will, as provided below and subject to Conditions 4(q) or 4(r), be SOFR Index, calculated in accordance with the following formula (and the resulting percentage will be rounded, if necessary, to the nearest fifth decimal place, with 0.000005 being rounded upwards), adjusted as required by Condition 4(h), all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}} - 1 \right) \times \left(\frac{360}{d} \right)$$

where:

“**SOFR**” means the daily secured overnight rate as provided by the SOFR Administrator on the SOFR Administrator’s Website.

“**SOFR Index**_{Start}” is the SOFR Index value for the day which is “p” U.S. Government Securities Business Days preceding the first date of the relevant Interest Period.

“**SOFR Index**_{End}” is the SOFR Index value for the day which is “p” U.S. Government Securities Business Days preceding the Interest Payment Date relating to the Interest Period.

“**d**” is the number of calendar days from, and including, SOFR Index_{Start} to, but excluding, SOFR Index_{End}.

“**SOFR Index**” means, with respect to any U.S. Government Securities Business Day:

- (a) the SOFR Index as published by the SOFR Administrator as such index appears on the SOFR Administrator’s Website at 3:00pm (New York time) on such U.S. Government Securities Business Day (the “**SOFR Index Determination Time**”); provided that,
- (b) if a SOFR Index does not so appear at the SOFR Index Determination Time, then:
 - (i) if a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, then Compounded SOFR shall be the

rate determined pursuant to the “**SOFR Index Unavailable**” provisions (defined below); or

(ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred in respect of SOFR, then (unless Condition 4(r) is specified as not being applicable) Compounded SOFR shall be as determined pursuant to Condition 4(r) (or as otherwise set out in the applicable Pricing Supplement);

For the definition of “**SOFR Index**”, “**SOFR**” means the daily secured overnight financing rate provided by the SOFR Administrator on the SOFR Administrator’s website.

“**SOFR Index Unavailable**” means if SOFR Index_{Start} or SOFR Index_{End} is not published on the associated Interest Determination Date and (i) to the extent Condition 4(r) is specified as being not applicable in the applicable Pricing Supplement, a Benchmark Event has not occurred, or (ii) to the extent Condition 4(r) is specified as being applicable in the applicable Pricing Supplement, a Benchmark Transition Event (as defined in Condition 4(r)) and its related Benchmark Replacement Date (as defined in Condition 4(r)) have not occurred with respect to SOFR. “**SOFR Index**” means, for the applicable Interest Period for which such index is not available “Compounded SOFR” determined in accordance with Condition 4(d)(1) above as if SOFR Index is not specified as being applicable in the applicable Pricing Supplement. For these purposes, the Observation Lookback Period shall be the same as already specified in the applicable Pricing Supplement and “Observation Method” shall be deemed to be “Observation Shift Convention” as if “SOFR Index” is not specified as being applicable and these alternative elections had been made.

And, for the purposes of this Condition 4(d)(2), the following definitions shall also apply:

“**Observation Lookback Period**” is as specified in the applicable Pricing Supplement;

“**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 the Interest Period to, but excluding, the date falling “p” U.S. Government Securities Business Days preceding the Interest Payment Date for the Interest Period, or such other period as may be specified in the Pricing Supplement;

“**p**”, for any Observation Period, is the number of U.S. Government Securities Business Days specified in the applicable Pricing Supplement;

“**SOFR Administrator**” means the Federal Reserve Bank of New York (or a successor administrator of SOFR);

“**SOFR Administrator’s Website**” means the website of the Federal Reserve Bank of New York, currently at <http://www.newyorkfed.org>, or any successor source; and

“**U.S. Government Securities Business Day**” means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(3) If the Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Pricing Supplement, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon, subject to the provisions set out in Condition 4(g).

(d) Where the Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**€STR**” and the Calculation Method is specified as being “**Compounded €STR**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(q), be Compounded Daily €STR adjusted as required by Condition 4(k) all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

“**Compounded Daily €STR**” means, with respect to 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) and will be calculated by the Calculation Agent on the Interest Determination Date as follows, and the resulting percentage will be rounded, if necessary, to the fourth decimal place, with each 0.00005 per cent. being rounded upwards:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{(\text{€STR}_{i-p\text{TBD}} \times n_i)}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

“**d**” is the number of calendar days in the relevant Interest Period;

“**d_o**”, for any Interest Period, is the number of TARGET2 Business Days in the relevant Interest Period;

“**€STR_{i-pTBD}**”, for any TARGET2 Business Day “**i**” in the relevant Interest Period, means the €STR Reference Rate for the TARGET2 Business Day falling “**p**” TARGET2 Business Days prior to the relevant TARGET2 Business Day “**i**”;

“**i**” is a series of whole numbers from one to **d_o**, each representing the relevant TARGET2 Business Day in chronological order from, and including, the first TARGET2 Business Day in the relevant Interest Period;

“**n_i**” for any TARGET2 Business Day “**i**” is the number of calendar days from, and including, such TARGET2 Business Day “**i**” up to, but excluding, the earlier of (i) the following TARGET2 Business Day and (ii) the last day of the relevant Interest Period or in respect of the final Interest Period the Maturity Date;

“Observation Look-back Period” is as specified in the applicable Pricing Supplement and in no case shall be less than five TARGET2 Business Days;

“p”, for any Interest Period, is the number of TARGET2 Business Days included in the Observation Look-back Period, as specified in the applicable Pricing Supplement, which shall not be less than five without the prior agreement of the Calculation Agent;

“ECB Recommended Rate Index Cessation Event” means the occurrence 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 ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide the ECB Recommended Rate; or

(b) a public statement or the publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide the ECB Recommended Rate;

“ECB Recommended Rate Index Cessation Effective Date” means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate would ordinarily have been provided and is no longer provided;

“€STR Index Cessation Event” means the occurrence of one or more of the following events:

(a) a public statement or publication of information by or on behalf of the administrator of €STR announcing that it has ceased or will cease to provide €STR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide €STR; or

(b) a public statement or the publication of information by the regulatory supervisor for the administrator of €STR, the central bank for the currency of €STR, an insolvency official with jurisdiction over the administrator of €STR, a resolution authority with jurisdiction over the administrator of €STR or a court or an entity with similar insolvency or resolution authority over the administrator of €STR, which states that the administrator of €STR has ceased or will cease to provide €STR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide €STR;

“€STR Index Cessation Effective Date” means, in respect of an €STR Index Cessation Event, the first date on which €STR would ordinarily have been provided and is no longer provided;

“€STR Reference Rate” means in respect of any TARGET2 Business Day, a reference rate equal to the daily euro short-term rate (**“€STR”**) for such TARGET2 Business Day as provided by the European Central Bank, as administrator of such rate (or any successor administrator of such rate), on the website of the European Central Bank, currently at <http://www.ecb.europa.eu>, or any successor website officially designated by the European Central Bank (the **“ECB’s Website”**) (in each case, on or before 9:00 a.m. Central European Time on the TARGET2 Business Day immediately following such TARGET2 Business Day) (or any amended publication time as specified by the administrator of €STR in the €STR benchmark methodology); and

“TARGET2 Business Day” or **“TBD”** means a day on which the TARGET2 System (as defined in Condition 4(o)) is open.

If the €STR Reference Rate does not appear on a TARGET2 Business Day as specified above, unless both an €STR Index Cessation Event and an €STR Index Cessation Effective Date (each as defined below) have occurred, the €STR Reference Rate shall be a rate equal to €STR in respect of the last TARGET2 Business Day for which such rate was published on the ECB’s Website.

If the €STR Reference Rate does not appear on a TARGET2 Business Day as specified above, and both an €STR Index Cessation Event and an €STR Index Cessation Effective Date have occurred, the rate for each TARGET2 Business Day occurring on or after such €STR Index Cessation Effective Date will be determined as if references to “€STR” were references to the rate (inclusive of any spreads or adjustments) that was recommended as the replacement for €STR by the European Central Bank (or any successor administrator of €STR) and/or by a committee officially endorsed or convened by (i) the European Central Bank (or any successor administrator of €STR) and/or (ii) the European Securities Markets Authority, in each case for the purpose of recommending a replacement for €STR (which rate may be produced by the European Central Bank or another administrator) (the **“ECB Recommended Rate”**), provided that, if no such rate has been recommended before the end of the first TARGET2 Business Day following the €STR Index Cessation Effective Date, then the rate for each TARGET2 Business Day occurring on or after such €STR Index Cessation Effective Date will be determined as if references to €STR were references to the Eurosystem Deposit Facility Rate, the rate on the deposit facility that banks may use to make overnight deposits with the Eurosystem, as published on the ECB’s Website (the **“EDFR”**) on such TARGET2 Business Day plus the arithmetic mean of the daily difference between the €STR Reference Rate and the EDFR over an observation period of 30 TARGET2 Business Days starting 30 TARGET2 Business Days prior to the date on which the €STR Index Cessation Event occurs and ending on the TARGET2 Business Day immediately preceding the day on which the €STR Index Cessation Event occurs (the **“EDFR Spread”**); provided further that, if both an ECB Recommended Rate Index Cessation Event and an ECB Recommended Rate Index Cessation Effective Date subsequently occur, then the rate for each TARGET2 Business Day occurring on or after that ECB Recommended Rate Index Cessation Effective Date

will be determined as if references to “€STR” were references to the “EDFR” on such TARGET2 Business Day plus the arithmetic mean of the daily difference between the ECB Recommended Rate and the EDFR over an observation period of 30 TARGET2 Business Days starting 30 TARGET2 Business Days prior to the date on which the €STR Index Cessation Event occurs and ending on the TARGET2 Business Day immediately preceding the date on which the ECB Recommended Rate Index Cessation Event occurs.

In case an €STR Index Cessation Event and an €STR Index Cessation Effective Date occur, the Issuer will promptly notify the Noteholders in accordance with Condition 12 and the Calculation Agent thereof and of the action taken according to the foregoing provisions.

In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, but without prejudice to Condition 4(q), the Rate of Interest applicable to the Notes during such Interest Period will be the Rate of Interest last determined in relation to the Notes in respect of the last preceding Interest Period (though substituting, where a different Margin or Maximum Rate of Interest or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum Rate of Interest or Minimum Rate of Interest relating to that last preceding Interest Period).

If the Notes become due and payable in accordance with Condition 9, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the applicable Pricing Supplement, be deemed to be the date on which such Notes become due and payable and the Rate of Interest on such Notes shall, for so long as any such Note remains outstanding, be that determined on such date, and such Rate of Interest shall continue to apply to the Notes for so long as interest continues to accrue thereon, subject to the provisions set out in Condition 4(g).

(e) Where Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined and the Benchmark is specified in the applicable Pricing Supplement as being “**CMS Rate**”, the Rate of Interest for each Interest Period will, as provided below and subject to Condition 4(q), be:

- (x) where “**CMS Reference Rate**” is specified as the Applicable CMS Formula in the applicable Pricing Supplement, determined by the Calculation Agent by reference to the following formula:

$$\text{CMS Rate} + \text{Margin}$$

- (y) where “**Leveraged CMS Reference Rate**” is specified as the Applicable CMS Formula in the applicable Pricing Supplement, determined by the Calculation Agent by reference to the following formulae:

Either:

- (l) where “**Leveraged CMS Reference Rate: Standard**” is specified in the applicable Pricing Supplement:

$\text{Leverage} \times (\text{CMS Rate} + \text{Margin})$

- (II) where "**Leveraged CMS Reference Rate: Floor/Cap**" is specified in the applicable Pricing Supplement:

$\text{Min} \{ \text{Max} [\text{Leverage} \times (\text{CMS Rate} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

- (z) where "**Steepener CMS Reference Rate**" is specified as the Applicable CMS Formula in the applicable Pricing Supplement, determined by the Calculation Agent by reference to the following formulae:

Either:

- (I) where "**Steepener CMS Reference Rate: Unleveraged**" is specified in the applicable Pricing Supplement:

$\text{Min} \{ \text{Max} [(\text{CMS Rate 1} - \text{CMS Rate 2} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

or

- (II) where "**Steepener CMS Reference Rate: Leveraged**" is specified in the applicable Pricing Supplement:

$\text{Min} \{ \text{Max} [\text{Leverage} \times (\text{CMS Rate 1} - \text{CMS Rate 2} + \text{Margin}); \text{Floor}]; \text{Cap} \}$

For the purposes of this sub-paragraph (e):

"**CMS Rate**" shall mean the applicable swap rate for swap transactions in the Reference Currency with a maturity of the Designated Maturity, expressed as a percentage, which appears on the Screen Page as at the Relevant Time on the Interest Determination Date in question, all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner); and

"**Cap**", "**CMS Rate 1**", "**CMS Rate 2**", "**Designated Maturity**", "**Floor**", "**Leverage**", "**Margin**", and "**Reference Currency**" shall have the meanings given to those terms in the applicable Pricing Supplement.

If the Screen Page is not available, the Calculation Agent (acting in good faith and in a commercially reasonable manner) shall request each of the Reference Banks to provide it with its quotation for the Relevant Swap Rate at approximately the Relevant Time on the Interest Determination Date in question. If at least three of the Reference Banks provide the Calculation Agent with such quotation, the CMS Rate for such Interest Period shall be the arithmetic mean of such quotations, 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).

If on any Interest Determination Date fewer than three or none of the Reference Banks provides the Calculation Agent with such quotations as provided in the preceding paragraph, the CMS Rate shall be determined as at the last preceding Interest

Determination Date (though substituting, where a different Margin, Rate Multiplier, Minimum Rate of Interest and/or Maximum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, such Margin, Rate Multiplier, Minimum Rate of Interest and/or Maximum Rate of Interest relating to the relevant Interest Period, in place of that relating to that last preceding Interest Period).

For this purpose:

“Fixed Leg Day Count Fraction” means the Day Count Fraction specified as such in the applicable Pricing Supplement;

“Floating Rate Day Count Fraction” means the Day Count Fraction specified as such in the applicable Pricing Supplement;

“Floating Leg Rate Option” means the benchmark rate specified as such in the applicable Pricing Supplement;

“Reference Banks” means (i) where the Reference Currency is euro, the principal office of five leading swap dealers in the euro inter-bank market, (ii) where the Reference Currency is Sterling, the principal London office of five leading swap dealers in the London inter-bank market, (iii) where the Reference Currency is U.S. dollars, the principal New York City office of five leading swap dealers in the New York City inter-bank market or (iv) in the case of any other Reference Currency, the principal Relevant Financial Centre office of five leading swap dealers in the Relevant Financial Centre inter-bank market, in each case selected by the Issuer (acting in good faith and in a commercially reasonable manner).

“Specified Fixed Leg” means any of the following as specified in the applicable Pricing Supplement: (a) annual fixed leg; (b) semi-annual fixed leg; or (c) quarterly fixed leg;

“Specified Frequency” means any of the following as specified in the applicable Pricing Supplement: (a) annual; (b) semi-annual; or (c) quarterly;

“Relevant Swap Rate” means the mid-market Specified Frequency swap rate determined on the basis of the arithmetic mean of the bid and offered rates for the Specified Fixed Leg, calculated on a Fixed Leg Day Count Fraction, of a fixed-for-floating interest rate swap transaction in the Specified Currency with a term equal to the Designated Maturity commencing on the first day of the relevant Interest Period and in an amount that is representative for a single transaction in the relevant market at the relevant time with an acknowledged dealer of good credit in the swap market, where the floating leg, in each case calculated on the Floating Leg Day Count Fraction, is equivalent to the Floating Leg Rate Option with a designated maturity determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner) by reference to standard market practice and/or the ISDA Definitions; and

“Specified Frequency” has the meaning given to it in the applicable Pricing Supplement.

(B) ISDA Determination

In case of ISDA Determination the relevant provisions applicable to the Senior Notes shall be set out in the Pricing Supplement.

(e) Calculation of the Range Accrual Factor

This Condition 4(e) is applicable to Fixed Rate Notes or Floating Rate Notes to which Range Accrual is specified to be applicable in the applicable Pricing Supplement ("**Range Accrual Notes**").

The "Range Accrual Factor" means in respect of an Interest Period, an amount calculated by the Calculation Agent in accordance with the following formula:

$$\frac{N1}{N2}$$

For the purpose of this Condition 4(e):

"Calculation Day" means, in respect of each Interest Period, each calendar day falling within such Interest Period;

"Cap" means, in respect of a Relevant Rate for any relevant Interest Period, the per annum rate specified in the applicable Pricing Supplement;

"CMS" means the swap transaction in the Specified Currency with a maturity of the Specified Maturity;

"Common Valid Date" means each day that is a Business Day in each Relevant Financial Centre;

"First Reference Rate" means the Range Accrual Reference Rate so specified in the applicable Pricing Supplement and determined in accordance with these Conditions;

"Floor" means, in respect of a Relevant Rate for any relevant Interest Period, the per annum rate specified in the applicable Pricing Supplement;

"N1" means, in respect of any relevant Interest Period, the number of Calculation Days during such Interest Period for which, in respect of a Single Range Accrual Note, the Relevant Rate, and, in respect of a Dual Range Accrual Note, each applicable Relevant Rate is (a) if specified in the applicable Pricing Supplement that "greater than or equal to" shall apply, greater than or equal to the applicable Floor for that Interest Period (as determined by the Calculation Agent acting in good faith and in a commercially reasonable manner); or (b) if specified in the applicable Pricing Supplement that "greater than" shall apply, greater than the applicable Floor (as determined by the Calculation Agent acting in good faith and in a commercially reasonable manner); and (x) if specified in the applicable Pricing Supplement that "less than or equal to" shall apply, less than or equal to the applicable Cap for that Interest Period (as determined by the Calculation Agent acting in good faith and in a commercially reasonable manner); or (y) if specified in the applicable Pricing Supplement that "less than" shall apply, less than the applicable Cap (as determined by the Calculation Agent acting in good faith and in a commercially reasonable manner);

"N2" means, in respect of each Interest Period, the number of Calculation Days during such Interest Period, as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner);

"Range Accrual Reference Rate" means (i) SONIA, (ii) SOFR, (iii) €STR, (iv) EURIBOR, or (v) CMS, as specified in the applicable Pricing Supplement;

"Rate" means, in respect of a Range Accrual Reference Rate specified in the applicable Pricing Supplement, either:

- (i) the offered quotation (if there is only one quotation on the Screen Page); or
- (ii) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations (if there are two or more quotations on the Screen Page),

(in each case expressed as a percentage rate per annum) for the Range Accrual Reference Rate for the Specified Maturity and Specified Currency which appears or appear, as the case may be, on the Screen Page on which such Range Accrual Reference Rate is for the time being displayed at the Relevant Time in the Relevant Financial Centre on such Calculation Day. If such rate does not appear on the Screen Page at the Relevant Time in the Relevant Financial Centre on such Calculation Day, the Calculation Agent will determine such rate (or a method for determining such rate) for such Calculation Day, taking into consideration all available information and acting in good faith and in a commercially reasonable manner;

provided that: (i) in respect of a Single Range Accrual Note (as specified in the applicable Pricing Supplement), (A) subject to proviso (B) below, if any Calculation Day is not a Business Day in the Relevant Financial Centre, the rate for such Calculation Day shall be determined in respect of the immediately preceding Business Day in the Relevant Financial Centre; and (B) in respect of each Interest Period, the Relevant Rate in respect of each Calculation Day from, and including, the fifth Business Day in the Relevant Financial Centre or such other Business Day (such date being the **"Rate Cut Off Date"** for such Interest Period) prior to the Interest Payment Date falling immediately after the end of such Interest Period to, and including, the last Calculation Day of such Interest Period, shall be deemed to be the rate in respect of the Rate Cut Off Date; and (ii) in respect of a Single Range Accrual (as specified in the applicable Pricing Supplement) where CMS Spread is specified to be applicable in the Pricing Supplement and in respect of a Dual Range Accrual Note (as specified in the applicable Pricing Supplement), (A) subject to proviso (B) below, if any Calculation Day is not a Common Valid Date, the rate in respect of a Reference Rate for such Calculation Day shall be determined in respect of the immediately preceding Business Day in the Relevant Financial Centre for such Reference Rate; and (B) in respect of each Interest Period, the Relevant Rate in respect of each Calculation Day from, and including, the seventh Common Valid Date or such other Common Valid Date specified in the applicable Pricing Supplement (such date being the **"Rate Cut Off Date"** for such Interest Period) prior to the Interest Payment Date falling immediately after the end of such Interest Period to, and including, the last Calculation Day of such Interest Period, shall be deemed to be the rate for such Reference Rate in respect of the Rate Cut Off Date.

"Relevant Rate" means either:

- (i) where Single Range Accrual Note is specified to be applicable in the Pricing Supplement either:
 - (A) the Rate as determined in accordance with these Conditions; or
 - (B) where CMS Spread is specified to be applicable in the Pricing Supplement, the Rate in respect of the First Reference Rate minus the Rate in respect of the Second Reference Rate, as determined in accordance with these Conditions;
- or

- (ii) where Dual Range Accrual Note is specified to be applicable in the Pricing Supplement, each Rate determined in accordance with these Conditions provided that where CMS Spread is specified to be applicable in the Pricing Supplement, the Relevant Rate will be calculated as the Rate in respect of the First Reference Rate minus the Rate in respect of the Second Reference Rate, as determined in accordance with these Conditions;

"Second Reference Rate" means the Range Accrual Reference Rate so specified in the applicable Pricing Supplement and determined in accordance with the Conditions; and

"Specified Currency" means the currency in which the Notes are denominated unless otherwise specified in the applicable Pricing Supplement in relation to Range Accrual items thereof.

(f) Rate of Interest for Index-Linked Interest Notes

The Rate of Interest or amount of interest in respect of Index-Linked Interest Notes for each Interest Period shall be determined in the manner specified in the applicable Pricing Supplement and interest will accrue by reference to an Index or Formula as specified in the applicable Pricing Supplement.

(g) Accrual of Interest

Interest will cease to accrue on each Senior Note on the due date for redemption unless, upon due presentation, payment of principal is improperly withheld or refused, in which event interest will continue to accrue (as well after as before judgement) at the Rate of Interest in the manner provided in this Condition 4 to the Relevant Date (as defined in Condition 7), unless such Rate of Interest is lower than the default rate of interest established by law¹, in which (latter) case the default rate of interest established by law shall apply.

(h) Interest on Zero Coupon Notes

Where a Senior Note, the Interest Basis of which is specified to be Zero Coupon, 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 Redemption Amount of such Zero Coupon Note. As from the Maturity Date, the Rate of Interest for any overdue principal of such a Zero Coupon Note shall be a rate per annum (expressed as a percentage) equal to the Amortisation Yield (as defined in Condition 5(l)), subject to the provisions set out in Condition 4(g).

(i) Interest on 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 Rate of Exchange, the rate or amount of interest payable shall be determined in the manner specified in the applicable Pricing Supplement.

(j) Interest on 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 such Partly-Paid Notes and otherwise as specified in the applicable Pricing Supplement.

(k) Margin, Maximum Rate of Interest, Minimum Rate of Interest, Instalment Amounts and Redemption

¹ The default rate of interest established by law is five percentage points above the basic rate of interest published by the Deutsche Bundesbank from time to time, §§ 288 (1), 247 (1) German Civil Code (Bürgerliches Gesetzbuch).

Amounts, Rate Multipliers and Rounding

- (i) If any Margin (except for CMS linked Notes where the relevant formula in Condition 4(d)(ii)(e) already takes the Margin into account) or Rate Multiplier is specified in the applicable Pricing Supplement (either (x) generally, or (y) in relation to one or more Interest Periods), an adjustment shall be made to all Rates of Interest, in the case of (x), or the Rates of Interest for the specified Interest Periods, in the case of (y), calculated by adding (if a positive number) or subtracting the absolute value (if a negative number) of such Margin or multiplying by such Rate Multiplier, subject always to the next paragraph.
- (ii) If any Maximum Rate of Interest or Minimum Rate of Interest, Instalment Amount, Early Redemption Amount or Final Redemption Amount is specified in the applicable Pricing Supplement, then any Rate of Interest, Instalment Amount, Early Redemption Amount or Final Redemption Amount shall be subject to such maximum or minimum, as the case may be. Unless otherwise specified in the applicable Pricing Supplement, the Minimum Rate of Interest shall be zero.
- (iii) For the purposes of any calculations required pursuant to these Conditions (unless otherwise specified), (x) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with halves being rounded up), (y) all figures will be rounded to seven significant figures (with halves being rounded up) and (z) all currency amounts which fall due and payable will 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, with respect to any currency other than euro, the lowest amount of such currency which is available as legal tender in the country of such currency and, with respect to euro means 0.01 euro.

(l) Calculations

The amount of interest payable per Calculation Amount in respect of any Senior Note for any period shall be equal to the product of the Rate of Interest (adjusted as required by Condition 4(k)), the Calculation Amount specified in the applicable Pricing Supplement and the Day Count Fraction for such period (and subject to the application of the Range Accrual Factor, if applicable), 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 per Calculation Amount in respect of such Senior Note for such period shall equal such Interest Amount (or be calculated in accordance with such formula). Where any Interest Period comprises two or more Interest Periods, the amount of interest payable per Calculation Amount in respect of such Interest Period will be the sum of the amounts of interest payable in respect of each of those Interest Periods.

(m) Determination and Publication of Rates of Interest, Interest Amounts, Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts and Instalment Amounts

As soon as practicable after the Relevant Time on each Interest Determination Date, Reset Determination Date or such other time on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quote or make any determination or calculation, it will determine such rates and calculate the amount of interest payable (the “**Interest Amount**”) of the Senior Notes for the relevant Interest Period (or, if determining the First Reset Rate of Interest or a Subsequent Reset Rate of Interest, the Interest Amount for each Interest Period falling within the relevant Reset Period), calculate the Final

Redemption Amount, Early Redemption Amount, Optional Redemption Amounts or Instalment Amount, obtain such quote or make such determination or calculation, as the case may be, and cause the Rate of Interest and the Interest Amounts for each Interest Period and the relevant Interest Payment Date and, if required to be calculated, the Final Redemption Amount, Early Redemption Amount, Optional Redemption Amount or any Instalment Amount to be notified to the Fiscal Agent, the Registrar (if applicable), the Bank, each of the Paying Agents and the Noteholders (or in the case of Senior Notes where the Benchmark is specified in the applicable Pricing Supplement as being SONIA, the second London Banking Day after such determination). The Interest Amounts and the Interest Payment Date so provided 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 Senior Notes become due and payable under Condition 9, the accrued interest and the Rate of Interest payable in respect of the Senior Notes shall, save in the case of Compounded Daily SONIA for the purposes of Condition 4(d)(ii)(b) and subject to Condition 4(g), nevertheless continue to be calculated as previously in accordance with this Condition but no notification of the Rate of Interest or the Interest Amount so calculated need be made. The determination of any rate or amount, the obtaining of each quote and the making of each determination or calculation by the Calculation Agent shall (in the absence of manifest error) be final and binding upon all parties.

(n) *Linear Interpolation*

Where Linear Interpolation is specified as being applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight line linear interpolation by reference to two rates based on the relevant Benchmark, one of which shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period and the other of which rates are available next longer than the length of the relevant Interest Period provided however that if there is no rate available for the period of time next shorter or, as the case may be, next longer, then the Calculation Agent (acting in good faith and in a commercially reasonable manner) shall determine such rate at such time and by reference to such sources as it determines appropriate.

(o) *Definitions*

In these Conditions, unless the context otherwise requires, the following defined terms shall have the meanings set out below:

“Benchmark” means either the Euro-zone interbank offered rate (**“EURIBOR”**), SONIA, SOFR, €STR, Constant Maturity Swap Rate (**“CMS Rate”**) or such other reference rate specified in the applicable Pricing Supplement.

“Business Day” means:

- (i) in the case of a Specified Currency other than euro or Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the principal financial centre for that currency and each other place (if any) specified in the applicable Pricing Supplement as an Additional Business Centre and if TARGET2 is specified as an Additional Business Centre, a TARGET2 Business Day;
- (ii) in the case of euro, a day (other than a Saturday or Sunday) on which the TARGET2 System is open (a **“TARGET2 Business Day”**) and on which commercial banks are open for business in each place (if any) specified in the applicable Pricing Supplement as an Additional Business Centre; and/or

- (iii) in the case of Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for business and settlement of Renminbi payments in each Relevant Renminbi Settlement Centre (as defined below) and each other place (if any) specified in the applicable Pricing Supplement as an Additional Business Centre.

“Calculation Agent” means such entity as may be specified in the applicable Pricing Supplement as the Calculation Agent (provided that the Agent will not be appointed as Calculation Agent for: (i) Fixed Rate Reset Notes; (ii) Notes where the Reference Rate is the CMS Rate; or (iii) Notes where ISDA Determination is applicable).

“Day Count Fraction” means, in respect of the calculation of an amount of interest on any Senior Note for any period of time (from and including the first day of such period to but excluding the last) (whether or not constituting an Interest Period, the **“Calculation Period”**):

- (i) If **“Actual/365”** or **“Actual/Actual (ISDA)”** is specified in the applicable Pricing Supplement, the actual number of days in the Calculation Period divided by 365 (or, if any portion of that 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);
- (ii) if **“Actual/365 (Fixed)”** is specified in the applicable Pricing Supplement, the actual number of days in the Calculation Period divided by 365;
- (iii) if **“Actual/360”** is specified in the applicable Pricing Supplement, the actual number of days in the Calculation Period divided by 360;
- (iv) if **“Actual/365 (Sterling)”** is specified in the applicable Pricing Supplement, the actual number of days in the Calculation Period divided by 365 or, in the case the last day of the Calculation Period falls in a leap year, 366;
- (v) if **“30/360”**, **“360/360”** or **“Bond Basis”** is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“M₂” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“D₁” is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D₁ will be 30; and

“D₂” 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 D₁ is greater than 29, in which case D₂ will be 30;

- (vi) if “**30E/360**” or “**Eurobond Basis**” is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“M₂” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“D₁” is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D₁ will be 30; and

“D₂” 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 D₂ will be 30;

- (vii) if “**30E/360 (ISDA)**” is so specified, 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,

“Y₁” is the year, expressed as a number, in which the first day of the Calculation Period falls;

“Y₂” is the year, expressed as a number, in which the day immediately following the last day included the Calculation Period falls;

“M₁” is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

“M₂” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

“D₁” 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 D₁ will be 30; and

“**D₂**” 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 D₂ will be 30; and

- (viii) if “**Actual/Actual (ICMA)**” is specified in the applicable Pricing Supplement,
- (A) where the Calculation Period is equal to or shorter than the Determination Period during which the Calculation Period ends, the number of days in such Calculation Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or
 - (B) in the case of Senior Notes where the Calculation Period is longer than the Determination Period during which the Calculation Period ends, the sum of:
 - (1) the number of days in such Calculation Period falling in the Determination Period in which the Calculation Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; and
 - (2) the number of days in such Calculation Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year.

“**Determination Period**” means the period from (and including) a Determination Date to but excluding the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date).

“**Effective Date**” means, with respect to any Floating Rate to be determined on an Interest Determination Date, the date specified as such in the applicable Pricing Supplement or, if none is so specified, the first day of the Interest Period to which such Interest Determination Date relates.

“**euro**” means the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the functioning of the European Union, as amended.

“**Euro-zone**” means the region comprised of member states of the European Union that adopt or have adopted the single currency in accordance with the Treaty establishing the European Community, as amended.

“**Interest Amount**” means the amount of interest payable per Calculation Amount calculated in accordance with Condition 4(l) or as specified in the applicable Pricing Supplement and in the case of Fixed Rate Notes, if so specified in the applicable Pricing Supplement, shall mean Fixed Coupon Amount(s) or the Broken Amount(s).

“**Interest Commencement Date**” means the date of issue of the Senior Notes (the “**Issue Date**”) or such other date as may be specified in the applicable Pricing Supplement.

“**Interest Determination Date**” means, with respect to a Rate of Interest and Interest Period, the date specified as such in the Pricing Supplement or, if none is so specified, (i) the first day of such Interest Period

if the Specified Currency is Sterling or (ii) the day falling two TARGET2 Business Days prior to the first day of such Interest Period if the Specified Currency is euro.

“Interest Period” means (i) the period beginning on, and including, the Interest Commencement Date and ending on, but excluding, the first Interest Payment Date and each successive period beginning on, and including, an Interest Payment Date and ending on, but excluding, the next succeeding Interest Payment Date; and (ii) such other period (if any) in respect of which interest is to be calculated being the period from (and including) the first day of such period to (but excluding) the day on which the relevant payment of interest falls due (which, in the case of the scheduled final or early redemption of any Notes, shall be the date for redemption, and in other cases where the relevant Notes become due and payable in accordance with Condition 9, shall be the date on which such Notes become due and payable).

“Nominal Amount” means the Nominal Amount specified in the applicable Pricing Supplement.

“Rate of Interest” means the rate of interest payable from time to time in respect of the Senior Notes and which is either specified, or calculated in accordance with the provisions hereof.

“Reference Banks” means the institutions specified as such in the applicable Pricing Supplement or, if none, four major banks (which are unaffiliated with the Issuer) selected by the Calculation Agent (acting in good faith and in a commercially reasonable manner) in the interbank market (or, if appropriate, money market) which are most closely connected with the Benchmark (which, if EURIBOR or €STR is the relevant Benchmark, shall be the interbank market of the Euro-zone).

“Relevant Financial Centre” means, with respect to any Floating Rate to be determined in accordance with a Screen Rate Determination on an Interest Determination Date, the financial centre as may be specified in the applicable Pricing Supplement or, if none is so specified, the financial centre with which the Benchmark is most closely connected (which, in the case of EURIBOR and €STR, shall be the Euro-zone) or, if none is so connected, London.

“Relevant Rate” means the Benchmark for a Representative Amount of the Specified Currency for a period (if applicable or appropriate to the Benchmark) equal to the Specified Duration commencing on the Effective Date determined in accordance with the Primary Source specified in the applicable Pricing Supplement.

“Relevant Time” means, with respect to any Interest Determination Date, the local time in the Relevant Financial Centre specified in the applicable 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 the Euro-zone as a Relevant Financial Centre, Central European time).

“Representative Amount” means, with respect to any Floating Rate to be determined on an Interest Determination Date, the amount specified in the applicable Pricing Supplement or, if none is specified, an amount that is representative for a single transaction in the relevant market at the time.

“Screen Page” means such page, section, caption, column or other part of a particular information service (including, but not limited to, the Reuters Money 3000 Service (**“Reuters”**)) as may be specified herein for the purpose of providing a Relevant Rate or Benchmark, 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 specified by the person or organisation providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to that Relevant Rate or Benchmark.

“Specified Currency” means the currency specified as such in the applicable Pricing Supplement or, if none is specified, the currency in which the Senior Notes are denominated.

“Specified Duration” means, with respect to any Floating Rate to be determined in accordance with a Screen Rate Determination on an Interest Determination Date, the duration specified in the applicable Pricing Supplement or, if none is specified, a period of time equal to the relative Interest Period, ignoring any adjustment pursuant to Condition 4(b).

“TARGET2 System” means the Trans-European Automated Real-Time Gross Settlement Express Transfer System 2 (or any successor thereto).

(p) Calculation Agent and Reference Banks

The Bank will procure that there shall at all times be four Reference Banks (or such other number as may be required) with offices in the Relevant Financial Centre and a Calculation Agent if provision is made for them in the Conditions applicable to the Senior Notes and for so long as any Senior Notes are outstanding. If any Reference Bank (acting through its relevant office) is unable or unwilling to continue to act as a Reference Bank, then the Bank will appoint another Reference Bank with an office in the Relevant Financial Centre to act as such in its place. If the Calculation Agent is unable or unwilling to act as such or if the Calculation Agent fails duly to establish the Rate of Interest for any Interest Period or to calculate the Interest Amounts, Instalment Amount or the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount (as the case may be) or to comply with any other requirements, the Bank will appoint the London office of a leading bank engaged in the interbank market that is most closely connected with the calculation or determination to be made by the Calculation Agent to act as such in its place. The Calculation Agent may not resign its duties without a successor having been appointed as aforesaid.

(q) Benchmark Discontinuation

Unless Benchmark Discontinuation is specified as being not applicable in the applicable Pricing Supplement or the Original Reference Rate specified in the Pricing Supplement is SOFR and Condition 4(r) is specified as applicable, this Condition 4(q) shall apply to the Senior Notes.

(i) Independent Adviser

If a Benchmark Event occurs in relation to an Original Reference Rate when any Rate of Interest (or any component part(s) thereof) remains to be determined by reference to such Original Reference Rate, then the Bank shall use its reasonable endeavours to appoint and consult with an Independent Adviser (at the Bank’s expense) (selected by the Bank acting in good faith and in a commercially reasonable manner), as soon as reasonably practicable, with a view to the Bank determining (acting in good faith and in a commercially reasonable manner) a Successor Rate, or if there is no Successor Rate, an Alternative Rate (in accordance with Condition 4(q)(ii)) and, in either case, an Adjustment Spread if any (in accordance with Condition 4(q)(iii)) and any Benchmark Amendments (in accordance with Condition 4(q)(iv)).

An Independent Adviser appointed pursuant to this Condition 4(q) shall act in good faith and a commercially reasonable manner as an expert and (in the absence of bad faith, gross negligence or fraud) shall have no liability whatsoever to the Bank, the Fiscal Agent, the Paying Agents, the Calculation Agent or the Noteholders for any determination made by it or for any advice given to the Bank in connection with any determination made by the Bank, pursuant to this Condition 4(q).

If the Bank is unable to appoint an Independent Adviser or unable to make the determination set out in Condition 4(q) (i), (ii), (iii) and (iv) in consultation with an Independent Adviser, the Bank may make such determinations itself (acting in good faith and in a commercially reasonable manner) and having such regard as it shall think fit to the foregoing provisions, any relevant and applicable

market precedents as well as any published guidance from relevant associations involved in the establishment of market standards and/or protocols in the international debt capital markets, and subject always to any Minimum Rate of Interest and/or Maximum Rate of Interest specified in the applicable Pricing Supplement.

(ii) Successor Rate or Alternative Rate

If the Bank, following consultation with the Independent Adviser (if any), determines (acting in good faith and in a commercially reasonable manner) that:

(A) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 4(q)(iii)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part(s) thereof) for all future payments of interest on the Senior Notes (subject to the operation of this Condition 4(q)); or

(B) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 4(q)(iii)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part(s) thereof) for all future payments of interest on the Senior Notes (subject to the operation of this Condition 4(q)).

(iii) Adjustment Spread

If the Bank, following consultation with the Independent Adviser (if any) (acting in good faith and a commercially reasonable manner), determines (i) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) and (ii) the quantum of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall be applied to the Successor Rate or the Alternative Rate (as the case may be).

(iv) Benchmark Amendments

If any Successor Rate or Alternative Rate and, in either case, the applicable Adjustment Spread is determined in accordance with this Condition 4(q) and the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these Conditions are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and/or (in either case) the applicable Adjustment Spread (such amendments, the “**Benchmark Amendments**”) and (ii) the terms of the Benchmark Amendments, then the Bank shall (acting in good faith and in a commercially reasonable manner), subject to giving notice thereof in accordance with Condition 4(q)(v), vary these Conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice.

No consent of Noteholders shall be required in connection with effecting the relevant Successor Rate or Alternative Rate (as may be applicable) and/or any Benchmark Amendments, or varying these Conditions to give effect to such changes pursuant to this Condition 4(q), including for the execution of any documents thereto or the taking of any steps by the Bank or any parties to any relevant documents (if required).

In connection with any such variation in accordance with this Condition 4(q)(iv), the Bank shall comply with the rules of any stock exchange on which the Senior Notes are for the time being listed or admitted to trading.

(v) Notices, etc.

Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 4(q) will be notified promptly by the Bank to the Fiscal Agent and the Calculation Agent and, in accordance with Condition 12, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Successor Rate or Alternative Rate (as may be applicable), the Adjustment Spread, and/or the Benchmark Amendments, if any.

No later than one Business Day following the date of notifying the Fiscal Agent of the same, the Bank shall deliver to the Fiscal Agent a certificate signed by two authorised signatories of the Bank:

(A) confirming (i) that a Benchmark Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate and, (iii) where applicable, any Adjustment Spread and/or the specific terms of any Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 4(q); and

(B) certifying that the Benchmark Amendments are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and/or (in either case) the applicable Adjustment Spread.

The Fiscal Agent shall display such certificate at its offices for inspection by the Noteholders at all reasonable times during normal business hours.

The Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any)) be binding on the Bank, the Fiscal Agent, the Calculation Agent, the Paying Agents and the Noteholders.

(vi) Survival of Original Reference Rate

Without prejudice to the obligations of the Bank under Condition 4(q) (i), (ii), (iii) and (iv), the Original Reference Rate and the fallback provisions provided for in Condition 4(b), Condition 4(d)(ii)(A) or Condition 4(d)(ii)(B) will continue to apply unless and until the Calculation Agent has been notified of the Successor Rate or the Alternative Rate (as the case may be), and any Adjustment Spread (if applicable) and Benchmark Amendments, in accordance with Condition 4(q)(v).

(vii) Fallbacks

If, following the occurrence of a Benchmark Event and in relation to the determination of the Rate of Interest on the immediately following Interest Determination Date or Reset Determination Date, as the case may be, no Successor Rate or Alternative Rate (as the case may be) is determined pursuant to this Condition 4(q), the Original Reference Rate and the fallback provisions provided for in Condition 4(b), Condition 4(d)(ii)(A) or Condition 4(d)(ii)(B) will continue to apply for the purposes of determining such Rate of Interest on such Interest Determination Date or Reset Determination Date, as the case may be.

For the avoidance of doubt, the foregoing paragraph shall apply to the determination of the Rate of Interest on the relevant Interest Determination Date or Reset Determination Date, as the case may be only, and the Rate of Interest applicable to any subsequent Interest Period(s) or Reset Periods,

as the case may be is subject to the subsequent operation of, and to adjustment as provided in, this Condition 4(q).

(viii) Definitions:

As used in this Condition 4(q):

“Adjustment Spread” means either (a) a spread (which may be positive or negative or zero), or (b) a formula or methodology for calculating a spread, in either case, which the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, determines is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as the case may be) to Noteholders as a result of the replacement of the Original Reference Rate with the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

- (A) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or
- (B) if no such formal recommendation has been made in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body, the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Original Reference Rate; or
- (C) if the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and a commercially reasonable manner, that no such spread is customarily applied in international debt capital markets under (B) above, the Bank determines, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); or
- (D) if the Bank determines (acting in good faith and in a commercially reasonable manner) that no such spread is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate under (C) above, the Bank, following consultation with the Independent Adviser (if any) and acting in good faith and in a commercially reasonable manner, determines to be appropriate.

“Alternative Rate” means an alternative to the benchmark or screen rate which the Bank determines (acting in good faith and in a commercially reasonable manner) in accordance with Condition 4(q)(ii) has replaced the Original Reference Rate in customary market usage in the international debt capital markets for the purposes of determining rates of interest (or the relevant component part(s) thereof) for the same interest period and in the same Specified Currency as the Senior Notes.

“Benchmark Amendments” has the meaning given to it in Condition 4(q)(iv).

“Benchmark Event” means:

- (A) the Original Reference Rate ceasing to be published for a period of at least five Business Days or ceasing to exist; or
- (B) the making of a public statement by the administrator of the Original Reference Rate that it has ceased or that it will cease publishing the Original Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or
- (C) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or
- (D) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate will be prohibited from being used either generally or in respect of the Senior Notes; or
- (E) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate is no longer representative of its relevant underlying market; or
- (F) it has become unlawful for any Paying Agent, the Calculation Agent or the Bank to calculate any payments due to be made to any Noteholder using the Original Reference Rate (including, without limitation, under the Benchmarks Regulation (EU) 2016/1011 (as amended from time to time), if applicable),

provided that the Benchmark Event shall be deemed to occur (a) in the case of sub-paragraphs (B) and (C) above, on the date of the cessation of publication of the Original Reference Rate or the discontinuation of the Original Reference Rate, as the case may be, (b) in the case of sub-paragraph (D) above, on the date of the prohibition of use of the Original Reference Rate and (c) in the case of sub-paragraph (E) above, on the date with effect from which the Original Reference Rate will no longer be (or will be deemed by the relevant supervisor to no longer be) representative of its relevant underlying market and which is specified in the relevant public statement, and, in each case, not the date of the relevant public statement.

“Independent Adviser” means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Bank under Condition 4(q)(i).

“Original Reference Rate” means either (i) the benchmark and screen rate (as applicable) originally specified for the purposes of determining the Rate of Interest (or any component part(s) thereof, including without limitation, any component mid-swap floating rate leg) on the Senior Notes or (ii) any Successor Rate or Alternative Rate which replaces the Original Reference Rate pursuant to the operation of this Condition 4(q).

“Relevant Nominating Body” means, in respect of a benchmark and screen rate (as applicable):

- (A) the EU Commission or the central bank for the currency to which the benchmark and screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark and screen rate (as applicable); or

(B) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of the EU Commission or the central bank for the currency to which the benchmark and screen rate (as applicable) relates or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark and screen rate (as applicable) or a group of the aforementioned central banks or other supervisory authorities or the Financial Stability Board or any part thereof.

"Successor Rate" means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body.

(r) *Benchmark Replacement Provisions – SOFR Compounded Rates*

This Condition 4(r) applies to all Senior Notes with Original Reference Rate used to calculate a Rate of Interest or a component thereof where the Original Reference Rate specified in the Pricing Supplement is Compounded SOFR and Condition 4(r) is specified as applicable in the Pricing Supplement.

a) Effect of a Benchmark Transition Event.

Benchmark Replacement. If the Issuer determines (acting in good faith and in a commercially reasonable manner) 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 Benchmark on any date, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the Notes in respect of such determination on such date and all determinations on all subsequent dates.

Benchmark Replacement Conforming Changes. In connection with the implementation of a Benchmark Replacement, the Issuer (acting in good faith and in a commercially reasonable manner) will have the right to make Benchmark Replacement Conforming Changes from time to time.

Decisions and Determinations. Any determination, decision or election that may be made by the Issuer (acting in good faith and in a commercially reasonable manner) pursuant to the Benchmark Replacement Provisions described herein, including any determination with respect to tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

- will be conclusive and binding absent manifest error; and
- notwithstanding anything to the contrary in the Notes, shall become effective without consent from the holders of the Notes or any other party.

b) Certain Defined Terms.

As used herein for Notes with an Original Reference Rate of SOFR Compounded Rate:

"Benchmark" means, initially, Compounded SOFR, as such term is defined above; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Issuer (acting in good faith and in a commercially reasonable manner) as of the Benchmark Replacement Date:

(a) the sum of: (a) an alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (b) the Benchmark Replacement Adjustment;

(b) the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment; and

(c) the sum of: (a) the alternate rate of interest that has been selected by the Issuer (acting in good faith and in a commercially reasonable manner) as the replacement for the then-current Benchmark for the applicable Corresponding Tenor taking into account any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate notes at such time and (b) the Benchmark Replacement Adjustment.

"Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Issuer (acting in good faith and in a commercially reasonable manner) as of the Benchmark Replacement Date:

(a) the spread adjustment (which may be positive or negative 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; and

(c) the spread adjustment (which may be positive or negative or zero) that has been selected by the Issuer acting in good faith and in a commercial manner and taking into account any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark 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 the timing and frequency of determining rates and making payments of interest, the rounding of amounts or tenors, and other administrative matters) that the Issuer determines (acting in good faith and in a commercially reasonable manner) may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer determines (acting in good faith and in a commercially reasonable manner) that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines (acting in good faith and in a commercially reasonable manner) that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines (acting in good faith and in a commercially reasonable manner) is reasonably practicable).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark (including the daily published component used in the calculation thereof):

(a) in the case of clause (a) or (b) of the definition of "Benchmark Transition Event," the later of (1) the date of the public statement or publication of information referenced therein and (2) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or

(b) in the case of clause (c) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

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.

For the avoidance of doubt, for purposes of the definitions of Benchmark Replacement Date and Benchmark Transition Event, references to Benchmark also include any reference rate underlying such Benchmark.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark (including the daily published component used in the calculation thereof):

(a) a public statement or publication of information by or on behalf of the administrator of the Benchmark (or such component) announcing that such administrator has ceased or will cease to provide the Benchmark (or such component), 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 (or such component);

(b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component), the central bank for the currency of the Benchmark (or such component), an insolvency official with jurisdiction over the administrator for the Benchmark (or such component), a resolution authority with jurisdiction over the administrator for the Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark (or such component) 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 (or such component); or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

"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.

"ISDA Definitions" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

"ISDA Fallback Adjustment" means the spread adjustment (which may be positive or negative or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.

"ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

"Reference Time" with respect to any determination of the Benchmark means (1) if the Benchmark is Compounded SOFR, the SOFR Determination Time or the SOFR Index Determination Time, as applicable, and (2) if the Benchmark is not Compounded SOFR, the time determined by the Issuer in accordance with the Benchmark Replacement Confirming 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.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

c) Notices, etc.

The occurrence of a Benchmark Transition Event and its related Benchmark Replacement Date, any Benchmark Replacement, any Benchmark Replacement Adjustment and any Benchmark Replacement Confirming Changes determined under this Condition 4(r) will be notified promptly by the Issuer to the Fiscal Agent and the Calculation Agent and, in accordance with Condition 12, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Replacement, the Benchmark Replacement Adjustment and/or the Benchmark Replacement Confirming Changes, if any.

No later than one Business Day following the date of notifying the Fiscal Agent of the same, the Issuer shall deliver to the Fiscal Agent a certificate signed by two authorised signatories of the Issuer:

(1) confirming (i) that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, (ii) the Benchmark Replacement and, (iii) where applicable, any Benchmark Replacement Adjustment and/or Benchmark Replacement Confirming Changes, in each case as determined in accordance with the provisions of this Condition 4(r); and

(2) certifying that any Benchmark Replacement Adjustment and/or Benchmark Replacement Confirming Changes are necessary to ensure the proper operation of such Benchmark Replacement.

The Fiscal Agent shall make available such certificate at its offices for inspection by the Noteholders at all reasonable times during normal business hours.

The Benchmark Replacement and the Benchmark Replacement Adjustment and/or Benchmark Replacement Confirming Changes (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Benchmark Replacement and the Benchmark Replacement Adjustment (if any) and the Benchmark Replacement Confirming Changes (if any)) be binding on the Issuer, the Fiscal Agent, the Calculation Agent, the Paying Agents and the Noteholders.

In no event shall the Calculation Agent be responsible for choosing any substitute for any Original Reference Rate, or for making any adjustments to any Benchmark Replacement, any Benchmark Replacement Adjustment and/or any Benchmark Replacement Confirming Changes thereon, the Business Day Convention, Interest Determination Dates, Reset Determination Date or any other relevant methodology for calculating any such Benchmark Replacement, Benchmark Replacement Adjustment or Benchmark Replacement Confirming Changes, or for determining whether any Benchmark Transition Event and its related Benchmark Replacement Date have occurred, even in circumstances where the Issuer has not made such determinations. In connection with the

foregoing, the Calculation Agent will be entitled to conclusively rely on any determinations made by the Issuer in compliance with this Condition 4(r) and will have no liability in connection with the foregoing or for such actions taken at the direction of the Issuer.

5. Redemption, Purchase and Options

(a) Final Redemption

Unless previously redeemed or purchased and cancelled as provided below or its maturity is extended pursuant to any Bank's or Noteholders' option in accordance with Condition 5(h) or (i), each Senior Note will be redeemed at its Final Redemption Amount (which, unless otherwise provided in a Pricing Supplement, shall be at least 100 per cent. of its nominal amount) on the Maturity Date specified on each Senior Note.

(b) Redemption for Taxation Reasons

The Senior Notes may be redeemed at the option of the Bank in whole, but not in part, on any Interest Payment Date (if the Senior Note is a Floating Rate Note) or at any time (if the Senior Note is not a Floating Rate Note), on giving not less than 30 days nor more than 60 days notice to the Noteholders in accordance with Condition 12 (which notice shall be irrevocable), at their Early Redemption Amount (which unless otherwise specified in a Pricing Supplement shall be 100 per cent. of their Nominal Amount), (together with interest accrued to the date fixed for redemption), if (i) the Bank has or will become obliged to pay additional amounts as provided or referred to in Condition 7 as a result of any change in, or amendment to, the laws or regulations of Canada or any province thereof or in the case of Senior Notes issued by a branch of the Bank outside Canada, of the country in which such branch is located or any political subdivision or any authority or agency 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 Bank 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 Bank would be obliged to pay such additional amounts were a payment in respect of the Senior Notes then due and provided further that in respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's total loss absorbing capacity ("**TLAC**") requirements such redemption will be subject to the prior approval of the Superintendent. Prior to the publication of any notice of redemption pursuant to this paragraph, the Bank shall deliver to the Fiscal Agent a certificate signed by two senior officers of the Bank stating that the Bank is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Bank so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Bank has or will become obliged to pay such additional amounts as a result of such change or amendment.

(c) Redemption due to TLAC Disqualification Event:

This Condition 5(c) applies to Bail-inable Notes only.

Where a TLAC Disqualification Event Call is specified as being applicable in the relevant Pricing Supplement relating to a Series of Bail-inable Notes, the Bank may, at its option, on not less than the minimum period of notice and not more than the maximum period of notice specified in the applicable Pricing Supplement and in accordance with Condition 12, redeem all but not less than all of the outstanding Senior Notes of the Series within 90 days after a TLAC Disqualification Event (as defined below) at the Early Redemption Amount, plus any accrued but unpaid interest to (but excluding) the date fixed for redemption. Such redemption will be subject to the prior approval of the Superintendent.

A “**TLAC Disqualification Event**” means the Office of the Superintendent of Financial Institutions (“**OSFI**”) has advised the Bank in writing that the Series of Bail-inable Notes will no longer be recognised in full as TLAC under the guideline TLAC for banks in Canada in effect from time to time, as interpreted by the Superintendent, provided that a TLAC Disqualification Event shall not occur where the exclusion of the Series of Bail-inable Notes from the Bank’s TLAC requirements is due to the remaining maturity of such Series of Bail-inable Notes being less than any period prescribed by any relevant eligibility criteria applicable as of the Issue Date of the first Tranche of such Series of Bail-inable Notes.

(d) Early redemption for Illegality

Where Early Redemption for Illegality is specified as being applicable in the applicable Pricing Supplement, in the event that the Bank determines (acting in good faith and in a commercially reasonable manner) that the performance of the Bank’s obligations under such Notes or any arrangement made to hedge the Bank’s obligations under such Notes have or will become unlawful, illegal or otherwise prohibited in whole or in part as a result of compliance with any applicable present or future law, rule, regulation, judgment, order or directive of any governmental, administrative, legislative or judicial authority or power, or in the interpretation thereof, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Pricing Supplement to Noteholders in accordance with Condition 12 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank’s TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

(e) Early redemption for a Disruption Event

Where Early Redemption for a Disruption Event is specified as being applicable in the applicable Pricing Supplement, in the event of a Disruption Event, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Pricing Supplement to Noteholders in accordance with Condition 12 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank’s TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

As used in this Condition 5(e):

“**Disruption Event**” means a Hedging Disruption or an Increased Cost of Hedging.

“**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 any of the underlying reference rates, or other price risk of the Issuer issuing and performing its obligations with respect to the Notes, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s).

“**Hedging Entity**” means (a) the Issuer or (b) any affiliate or any entity (or entities) acting on behalf of the Issuer that is engaged in any underlying or hedging transactions related to the underlying reference rates in respect of the Issuer’s obligations under the Notes.

“**Increased Cost of Hedging**” means that the Hedging Entity would incur a materially increased (as compared with circumstances existing on 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) it deems necessary to hedge the price risk of the relevant securities or other

risk of the Issuer issuing and performing its obligations with respect to the Notes, or (b) realise, recover or remit the proceeds of any such transaction(s) or asset(s), provided that any such materially increased amount that is incurred solely due to the deterioration of the creditworthiness of the Issuer and/or the Hedging Entity shall not be deemed an Increased Cost of Hedging.

“**Trade Date**” has the meaning given to it in the applicable Pricing Supplement.

(f) Early redemption for Special Circumstance

Where Early Redemption for Special Circumstance is specified as being applicable in the applicable Pricing Supplement, in the event of a Special Circumstance, the Bank having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Pricing Supplement to Noteholders in accordance with Condition 12 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount together (if appropriate) with interest accrued to (but excluding) the date of redemption. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

As used in this Condition 5(f):

“**Special Circumstance**” means an event where, in the opinion of the Issuer acting reasonably and in good faith, an amendment or a change is made to a taxation act or regulation, to taxation practices, policies or administration, to the interpretation of a taxation act or regulation or taxation practice, policy or administration; or an event occurs, now or in future, caused by circumstances beyond the control of the Issuer making it illegal or disadvantageous, from a legislative or regulatory point-of-view, or disadvantageous, from a financial point-of-view, for the Issuer to allow the Notes to remain outstanding.

For the avoidance of doubt, a “Special Circumstance” shall **not** include any event or circumstance covered by Condition 5(b) and Condition 7, for which Condition 5(b) and Condition 7 shall continue to apply accordingly.

(g) Early Redemption for Administrator/Benchmark Event

Where Early Redemption for an Administrator/Benchmark Event is specified as being applicable in the applicable Pricing Supplement, in the event of an Administrator/Benchmark Event, the Bank may (at its option and acting in good faith and in a commercially reasonable manner):

- (i) instruct the Calculation Agent to make such adjustment(s) to the terms of the Senior Notes as it may determine appropriate (acting in good faith and in a commercially reasonable manner) to account for the relevant event or circumstance and, without limitation, such adjustment(s) may include selecting a successor benchmark(s) and making related adjustment(s) to the terms of the Senior Notes including where applicable to reflect any increased costs of the Bank and/or any Hedging Entity providing exposure to the successor benchmark(s) and, in the case of more than one successor benchmark, making provision for allocation of exposure as between the successor benchmarks; or
- (ii) having given not less than the minimum period and not more than the maximum period of notice specified in the applicable Pricing Supplement to Noteholders in accordance with Condition 12 (which notice shall be irrevocable), may, on expiry of such notice redeem all, but not some only, of the Notes, each Note being redeemed at the Early Redemption Amount and no further interest (if applicable) will be payable since the immediately preceding Interest Payment Date or, if none, the Issue Date. In respect of Bail-inable Notes, where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

For the avoidance of doubt, the above is additional, and without prejudice, to any other terms of the Senior Notes. In the event that under any such terms any other consequences could apply in relation to an event or occurrence the subject of an Administrator/Benchmark Event, the Bank shall determine (acting in good faith and in a commercially reasonable manner) which terms shall apply.

The Issuer shall give notice as soon as practicable to Noteholders in accordance with Condition 12 of any adjustment(s) made pursuant to paragraph (i) above, provided that any failure to give, or non-receipt of, such notice shall not affect the validity of such adjustment(s).

For the purposes of this Condition:

"Administrator/Benchmark Event" means, in relation to any Benchmark, the occurrence of a Benchmark Modification or Cessation Event, a Non-Approval Event, a Rejection Event, a Suspension/Withdrawal Event or a Non-Representative Event, all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

"Benchmark" means any figure, level, rate or value by reference to which any amount payable or deliverable under the Notes, or the value of the Notes, is determined in whole or in part, including, without limitation, any benchmark as defined in the BMR, all as determined by the Calculation Agent (acting in good faith and in a commercially reasonable manner).

"Benchmark Modification or Cessation Event" means, in respect of the Benchmark, any of the following has occurred or will occur:

- (i) any material change in such Benchmark;
- (ii) the permanent or indefinite cancellation or cessation in the provision of such Benchmark; or
- (iii) a regulator or other official sector entity prohibits the use of such Benchmark.

"BMR" means the EU Benchmark Regulation (Regulation (EU) 2016/1011) or any United Kingdom "on-shored" version thereof where applicable, in each case as amended from time to time.

"Hedging Entity" means (a) the Issuer or (b) any affiliate or any entity (or entities) acting on behalf of the Issuer that is engaged in any underlying or hedging transactions related to the underlying reference rates in respect of the Issuer's obligations under the Notes.

"Non-Approval Event" means, in respect of the Benchmark:

- (i) any authorisation, registration, recognition, endorsement, equivalence decision or approval in respect of the Benchmark or the administrator or sponsor of the Benchmark has not been or will not be obtained;
- (ii) the Benchmark or the administrator or sponsor of the Benchmark has not been or will not be included in an official register; or
- (iii) the Benchmark or the administrator or sponsor of the Benchmark does not or will not fulfil any legal or regulatory requirement applicable to the Notes, the Issuer, the Calculation Agent or the Benchmark,

in each case, as is or will be required under any applicable law or regulation in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

"Non-Representative Event" means, in respect of the Benchmark, an official announcement by the supervisor of the administrator and/or sponsor of the Benchmark that the Benchmark is no longer or, as of a specified future date will no longer be, representative of any relevant underlying market(s).

"Rejection Event" means, in respect of the Benchmark, the relevant competent authority or other relevant official body rejects or refuses or will reject or refuse any application for authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register which, in each case, is or will be required in relation to the Notes, the Benchmark or the administrator or sponsor of the Benchmark under any applicable law or regulation for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

"Suspension/Withdrawal Event" means, in respect of the Benchmark:

- (i) the relevant competent authority or other relevant official body suspends or withdraws or will suspend or withdraw any authorisation, registration, recognition, endorsement, equivalence decision or approval in relation to the Benchmark or the administrator or sponsor of the Benchmark which is or will be required under any applicable law or regulation in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes; or
- (ii) the Benchmark or the administrator or sponsor of the Benchmark is or will be removed from any official register where inclusion in such register is or will be required under any applicable law in order for any of the Issuer, the Calculation Agent or any other entity to perform its obligations in respect of the Notes.

(h) Purchases

The Bank and any of its subsidiaries in the ordinary course of their dealing in securities may at any time purchase Senior Notes in the open market or otherwise at any price provided that in respect of Bail-inable Notes where the purchase would lead to a breach of the Bank's TLAC requirements, such purchase will be subject to the prior approval of the Superintendent. If purchases are made by tender, tenders must be available to all Noteholders of the relevant Senior Notes alike.

(i) Early Redemption of Zero Coupon Notes

- (i) The Early Redemption Amount payable in respect of any Senior Note which does not bear interest prior to the Maturity Date, the Early Redemption Amount of which is not linked to an index and/or a formula, upon redemption of such Senior Note pursuant to Condition 5(b) or 5(c) or upon it becoming due and payable as provided in Condition 9 shall be the Amortised Face Amount (calculated as provided below) of such Senior Note.
- (ii) Subject to the provisions of sub-paragraph (iii) below, the Amortised Face Amount of any such Senior Note shall be the scheduled Final Redemption Amount of such Senior Note on the Maturity Date discounted at a rate per annum (expressed as a percentage) equal to the Amortisation Yield applied in a compounded or non-compounded basis as specified in the applicable Pricing Supplement (which, if none is shown in the applicable Pricing Supplement, shall be such rate (compounded annually) as would produce an Amortised Face Amount equal to the Issue Price of the Senior Notes if they were discounted back to their Issue Price on the Issue Date). 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 specified in the applicable Pricing Supplement.
- (iii) If the Early Redemption Amount payable in respect of any such Senior Note upon its redemption pursuant to Condition 5(b) or 5(c) or upon it becoming due and payable as provided in Condition 9 is not paid when due, the Early Redemption Amount due and payable in respect of such Senior Note shall be the Amortised Face Amount of such Senior Note as defined in sub-paragraph (ii) above, except that such sub-paragraph shall have

effect as though the reference therein to the date on which the Senior Note becomes due and payable were replaced by a reference to the Relevant Date. The calculation of the Amortised Face Amount in accordance with this sub-paragraph will continue to be made (as well after as before judgement), until the Relevant Date unless the Relevant 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 Senior Note on the Maturity Date together with any interest which may accrue in accordance with Condition 4(g).

*(j) Redemption at the Option of the Bank ("**Issuer Call Option**") and Exercise of Bank's Options*

If an Issuer Call Option is specified in the applicable Pricing Supplement, the Bank may, on giving not less than 10 nor more than 30 days' irrevocable notice to the Noteholders (or such other notice period as may be specified herein) in accordance with Condition 12 redeem, or exercise any Bank's option (as may be described herein) in relation to, all or, if so specified in the applicable Pricing Supplement, some of the Senior Notes on any Optional Redemption Date. Any such redemption of Senior Notes shall be at their Optional Redemption Amount together with interest accrued to the date fixed for redemption, provided that in respect of Bail-inable Notes where the redemption would lead to a breach of the Bank's TLAC requirements, such redemption will be subject to the prior approval of the Superintendent.

All Senior Notes in respect of which any such notice is given shall be redeemed, or the Bank's option shall be exercised, on the date specified in such notice in accordance with this Condition 5.

If so provided herein, the Bank shall redeem a specified number of the Senior Notes on the date or dates so provided. Any such redemption of Senior Notes shall be at their Optional Redemption Amount together with interest accrued to the date fixed for redemption which may, if so specified herein, be payable in instalments or otherwise. Notice of such redemption shall be irrevocably given to the Noteholders in accordance with Condition 12.

In the case of a partial redemption or a partial exercise of the Bank's option, the notice to Noteholders shall also contain the serial numbers of the Senior Notes to be redeemed or in respect of which such option has been exercised, which shall have been drawn in such place as the Fiscal Agent may approve and in such manner as it deems appropriate, subject to compliance with any applicable laws.

Any such redemption or exercise must relate to Senior Notes of a Nominal Amount at least equal to the Minimum Redemption Amount to be redeemed specified herein and no greater than the Maximum Redemption Amount to be redeemed specified herein.

*(k) Redemption at the Option of Noteholders ("**Noteholder Put Option**") and Exercise of Noteholders' Options*

This Condition 5(k) is not applicable to Bail-inable Notes.

If a Noteholder Put Option is specified in the applicable Pricing Supplement, the Bank shall, at the option of the holder of any such Senior Note upon the holder giving not less than 15 nor more than 30 days notice (or such other notice period as may be specified herein), redeem such Senior Note on the Optional Redemption Date(s) so provided at its Optional Redemption Amount together with interest accrued to the date fixed for redemption.

To exercise such option or any other Noteholders' option which may be set out herein, the holder must deposit the Certificate representing such Senior Note(s) with the Registrar at its specified office, together with a duly completed option exercise notice ("**Exercise Notice**") in the form obtainable from any Paying Agent or the Registrar (as applicable) within the Noteholders' Option Period. No Certificate so deposited and option exercised may be withdrawn without the prior consent of the Bank.

(l) Redemption by Instalments

Unless previously redeemed or purchased and cancelled as provided in this Condition 5 or the relevant Instalment Date (being one of the dates so specified herein) is extended pursuant to any Bank's or Noteholder's option in accordance with Condition 5(j) or (k), each Senior Note which provides for Instalment Dates and Instalment Amounts will be partially redeemed on each Instalment Date at the Instalment Amount specified in the applicable Pricing Supplement. The outstanding Nominal Amount of each such Senior Note shall be reduced by the Instalment Amount (or, if such Instalment Amount is calculated by reference to a proportion of the Nominal Amount of such Senior Note, such proportion) for all purposes with effect from the related Instalment Date, unless payment of the Instalment Amount is improperly withheld or refused on presentation of the related Receipt, in which case, such amount shall remain outstanding until the Relevant Date relating to such Instalment Amount.

(m) Cancellation

All Senior Notes purchased by or on behalf of the Bank or any of its subsidiaries may be surrendered for cancellation, in the case of Registered Notes, by surrendering the Certificate representing such Senior Notes to the Registrar and, in each case, if so surrendered, will, together with all Senior Notes redeemed by the Bank, be cancelled forthwith. Any Senior Notes so surrendered for cancellation may not be reissued or resold and the obligations of the Bank in respect of any such Notes shall be discharged.

(n) Other Senior Notes

The Early Redemption Amount payable in respect of any Senior Note (other than the Senior Notes described in (h) above), upon redemption of such Senior Note pursuant to Condition 5(b) or upon it becoming due and payable as provided in Condition 9, shall be the Final Redemption Amount unless otherwise specified in the applicable Pricing Supplement.

(o) Partly-Paid Notes

Partly-Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition 5 and the provisions specified in the applicable Pricing Supplement.

(p) Redemption Irrevocable

A notice of redemption under this Condition 5 shall be irrevocable provided that Bail-inable Notes continue to be subject to a Bail-in Conversion prior to their repayment in full.

6. Payments

(a) Registered Notes

- (i) Payments of principal (which for the purposes of this Condition 6(a) shall include final Instalment Amounts but not other Instalment Amounts) in respect of Registered Notes will be made against presentation and surrender of the relevant Certificates at the specified office of the Registrar and in the manner provided in paragraph (ii) below.
- (ii) Interest (which for the purpose of this Condition 6(a) shall include all Instalment Amounts other than final Instalment Amounts) on Registered Notes will be paid to the person shown on the Register at the close of business on the fifteenth day before the due date for payment thereof (the "**Record Date**"). Payments of interest on each Registered Note will be made in the currency in which such payments are due by cheque drawn on a bank in the principal financial centre of the country of the currency concerned and mailed to the holder (or to the first named of joint holders) of such Senior Note at its address appearing in the Register maintained by the Registrar. Upon application by the holder to the specified office of the

Registrar before the Record Date, such payment of interest may be made by transfer to an account in the Specified Currency maintained by the payee with a bank in the principal financial centre of the country of that currency.

(b) Payments subject to fiscal or other laws

Payments will be subject in all cases to (i) any fiscal or other laws and regulations applicable thereto in the place of payment but without prejudice to the provisions of Condition 9, (ii) the FATCA Withholding Tax Rules (as defined in Condition 7) and (iii) any withholding or deduction pursuant to Section 871(m) of the Code ("**871(m) Withholding**"). In addition, in determining the amount of 871(m) Withholding imposed with respect to any amounts to be paid on the Notes, the Issuer or any withholding agent shall be entitled to withhold on any "dividend equivalent" (as defined for purposes of Section 871(m) of the Code) at the highest rate applicable to such payments regardless of any exemption from, or reduction in, such withholding otherwise available under applicable law.

(c) Appointment of Agents

The Fiscal Agent, the Paying Agents, the Registrar and the Calculation Agent initially appointed by the Bank and their respective specified offices are listed below. The Fiscal Agent, the Paying Agents, the Registrar and the Calculation Agent act solely as agents of the Bank and do not assume any obligation or relationship of agency or trust for or with any Noteholder. The Bank reserves the right at any time to vary or terminate the appointment of the Fiscal Agent, any other Paying Agent or the Registrar and to appoint additional or other Paying Agents, provided that the Bank will at all times maintain (i) a Fiscal Agent, (ii) a Registrar in relation to Registered Notes, (iii) a Calculation Agent where the Conditions so require one, (iv) a Paying Agent, and (v) such other agents as may be agreed between the Bank and the relevant Dealer(s).

Notice of any such change or any change of any specified office will promptly be given to the Noteholders in accordance with Condition 12.

(d) Accrued Interest

If the due date for redemption of any Senior Note is not a due date for payment of interest, interest accrued from the preceding due date for payment of interest or the Interest Commencement Date, as the case may be, shall only be payable against presentation (and surrender if appropriate) of the Certificate representing it, as the case may be. Interest accrued on a Senior Note which only bears interest after its Maturity Date shall be payable on redemption of such Senior Note against presentation of the Certificate representing it.

(e) Non-business days

If any date for payment in respect of any Senior Note is not a business day, the holder shall not be entitled to payment until the next following business day and shall not be entitled to any interest or other sum in respect of such postponed payment. In this paragraph, "**business day**" means a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the relevant place of presentation, and in such jurisdictions as shall be specified as "Financial Centres" in the Pricing Supplement and if TARGET2 is specified as a Financial Centre, a TARGET2 Business Day, and:

- (i) in the case of a payment in a Specified Currency other than euro or Renminbi, where payment is to be made by transfer to an account maintained with a bank in the Specified Currency, on which foreign exchange transactions may be carried on in the Specified Currency in the principal financial centre of the country of such currency;
- (ii) in the case of a payment in euro, which is a TARGET2 Business Day (as defined in the definition of "Business Day" in Condition 4(o)); or

- (iii) in the case of a payment in Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for business for settlement of Renminbi payments in each Relevant Renminbi Settlement Centre (as defined below).

(f) *RMB Notes*

Notwithstanding any other provision in these Conditions, if Inconvertibility, Non-Transferability or Illiquidity occurs or if Renminbi is otherwise not available to the Issuer as a result of circumstances beyond its control and such unavailability has been confirmed by a Renminbi Dealer, acting in good faith and in a commercially reasonable manner, following which the Issuer is unable to satisfy payments of principal or interest (in whole or in part) in respect of RMB Notes, the Issuer on giving not less than five nor more than 30 days' irrevocable notice to the Noteholders prior to the due date for payment, may settle any such payment (in whole or in part) in U.S. dollars on the due date at the U.S. dollars Equivalent of any such Renminbi denominated amount.

In such event, payments of the U.S. dollars Equivalent of the relevant principal or interest in respect of the Senior Notes shall be made by transfer to the U.S. dollars account of the Relevant Account Holders for the benefit of the Noteholders. For the avoidance of doubt, no such payment of the U.S. dollars Equivalent shall by itself constitute a default in payment within the meaning of Condition 9.

All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition 6(f) by the RMB Rate Calculation Agent, will (in the absence of manifest error) be binding on the Issuer, the Paying Agent and all Noteholders and (in the absence of manifest error) no liability to the Issuer, the Paying Agent and all Noteholders shall attach to the RMB Rate Calculation Agent in connection with the exercise or non-exercise by it of its powers and duties pursuant to such provisions.

For the purposes of these Conditions:

"Calculation Agent" means the Agent or such other entity specified in the applicable Pricing Supplement;

"Governmental Authority" means 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 each Relevant Renminbi Settlement Centre.

"Hong Kong" means the Hong Kong Special Administrative Region of the People's Republic of China.

"Illiquidity" means that the general Renminbi exchange market in each Relevant Renminbi Settlement Centre becomes illiquid, other than as a result of an event of Inconvertibility or Non-Transferability, as determined by the Issuer in good faith and in a commercially reasonable manner following consultation with two Renminbi Dealers.

"Inconvertibility" means the occurrence of any event that makes it impossible for the Issuer to convert any amount due in respect of RMB Notes in the general Renminbi exchange market in each Relevant Renminbi Settlement Centre, other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental

Authority (unless such law, rule or regulation is enacted after the Issue Date and it is impossible for the Issuer, due to an event beyond its control, to comply with such law, rule or regulation).

“Non-Transferability” means the occurrence in each Relevant Renminbi Settlement Centre of any event that makes it impossible for the Issuer to transfer Renminbi (A) between accounts inside a Relevant Renminbi Settlement Centre, (B) from an account inside a Relevant Renminbi Settlement Centre to an account outside such Relevant Renminbi Settlement Centre, or (C) from an account outside a Relevant Renminbi Settlement Centre to an account inside such Relevant Renminbi Settlement Centre; in each case other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental Authority (unless such law, rule or regulation is enacted after the Issue Date and it is impossible for the Issuer, due to an event beyond its control, to comply with such law, rule or regulation).

“Relevant Renminbi Settlement Centre” means each of the jurisdiction(s) specified as such in the applicable Pricing Supplement or if no Relevant Renminbi Settlement Centre is specified in the relevant Pricing Supplement, the Relevant Renminbi Settlement Centre shall mean Hong Kong only.

“Renminbi”, “RMB” and “CNY” mean the lawful currency of the People’s Republic of China (the **“PRC”**) which, for the purposes of these Terms and Conditions, excludes the Hong Kong Special Administrative Region of the PRC, the Macau Special Administrative Region of the PRC and Taiwan.

“Renminbi Dealer” means an independent foreign exchange dealer of international repute active in the Renminbi exchange market in any Relevant Renminbi Settlement Centre reasonably selected by the Issuer.

“RMB Notes” means Senior Notes denominated in Renminbi.

“RMB Rate Calculation Agent” means the agent appointed from time to time by the Issuer for the determination of the RMB Spot Rate or identified as such in the relevant Pricing Supplement.

“RMB Rate Calculation Business Day” means a day (other than a Saturday or Sunday) on which commercial banks are open for general business (including dealings in foreign exchange) in each Relevant Renminbi Settlement Centre and in New York City.

“RMB Rate Calculation Date” means the day which is two RMB Rate Calculation Business Days before the due date for payment of the relevant Renminbi amount under the Conditions.

“RMB Spot Rate” for a RMB Rate Calculation Date means the spot CNY/U.S. dollars exchange rate for the purchase of U.S. dollars with RMB in the over-the-counter RMB exchange market in the Relevant Renminbi Settlement Centre in which the RMB Rate Calculation Agent is located for settlement on the relevant due date for payment, as determined by the RMB Rate Calculation Agent at or around 11.00 a.m. (local time of the Relevant Renminbi Settlement Centre) on such RMB Rate Calculation Date, on a deliverable basis by reference to Reuters Screen Page TRADCN3 or if no such rate is available on a non deliverable basis by reference to Reuters Screen Rate TRADNDF. If neither rate is available, the RMB Rate Calculation Agent will determine the RMB Spot Rate at or around 11.00 a.m. (local time of the Relevant Renminbi Settlement Centre) on the RMB Rate Calculation Date as the most recently available CNY/U.S. dollar official fixing rate for

settlement on the relevant due date for payment reported by the PRC, which is reported on the Reuters Screen Page CNY=SAEC. Reference to a page on the Reuters Screen means the display page so designated on the Reuter Monitor Money Rates Service (or any successor service) or such other page as may replace that page for the purpose of displaying a comparable currency exchange rate.

“U.S. dollars Equivalent” means the Relevant Renminbi amount converted into U.S. dollars using the RMB Spot Rate for the relevant RMB Rate Calculation Date, as calculated by the RMB Rate Calculation Agent.

7. Taxation

All payments of principal and interest in respect of the Senior Notes by or on behalf of the Bank will be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of Canada, any province or territory or political subdivision thereof or any authority or agency therein or thereof having power to tax, or in the case of Senior Notes issued by a branch of the Bank located outside Canada, the country in which such branch is located or any political subdivision thereof or any authority or agency therein or thereof having power to tax, unless the withholding or deduction of such taxes, duties, assessments or governmental charges is required by law, regulation or the administration thereof. In that event, the Bank will pay such additional amounts as may be necessary in order that the net amounts received by the Noteholders after such withholding or deduction shall equal the respective amounts of principal and interest, if any, which would have been received in respect of the Senior Notes in the absence of such withholding or deduction; except that no additional amounts shall be payable with respect to any payment in respect of any Senior Note:

- (a) to, or to a third party on behalf of, a holder who is liable to such taxes, duties, assessments or governmental charges in respect of such Senior Note by reason of his having some connection with Canada or the country in which such branch is located otherwise than the mere holding of such Senior Note;
- (b) to, or to a third party on behalf of, a holder in respect of whom such tax, duty, assessment or governmental charge is required to be withheld or deducted by reason of the holder being a person with whom the Bank is not dealing at arm's length (within the meaning of the *Income Tax Act* (Canada));
- (c) presented for payment more than 30 days after the Relevant Date except to the extent that the holder thereof would have been entitled to such additional amount on presenting the same for payment on the thirtieth such day, assuming that day to have been a Business Day (as defined in Condition 6(e));
- (d) to, or to a third party on behalf of, a Noteholder who is, or who does not deal at arm's length with a person who is a “specified shareholder” (as defined in subsection 18(5) of the *Income Tax Act* (Canada)) of the Bank;
- (e) to, or to a third party on behalf of, a holder who is liable for such taxes, duties, assessments or other governmental charges by reason of such holder's failure to comply with any certification, identification, documentation or other reporting requirement concerning the nationality, residence, identity or connection with Canada or the country in which such branch is located of such holder, if (i) compliance is required by law as a precondition to,

exemption from, or reduction in the rate of, the tax, assessment or other governmental charge and (ii) the Issuer has given holders at least 30 days' notice that holders will be required to provide such certification, identification, documentation or other requirement;

- (f) for or on account of any withholding tax or deduction imposed or collected pursuant to Sections 1471 through 1474 of the United States Internal Revenue Code of 1986, as amended (the "**Code**") (or any amended or successor version), any current or future regulations thereunder or official interpretations thereof, any agreement described in Section 1471(b)(1) of the Code, any intergovernmental agreement entered into between the United States and any other country in connection with the implementation of the foregoing, and any fiscal or regulatory legislation, rules or official practices adopted pursuant to any such intergovernmental agreement (the "**FATCA Withholding Tax Rules**"); or
- (g) for or on account of any withholding tax or deduction imposed or collected pursuant to Section 871(m) of the Code.

As used in these Conditions, "**Relevant Date**" in respect of any Senior Note means the date on which payment in respect thereof 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 on which notice is duly given to the Noteholders in accordance with Condition 12 that, upon further presentation of the Senior Note (or relative Certificate) being made in accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such presentation. References in these Conditions to (i) "**principal**" shall be deemed to include any premium payable in respect of the Senior Notes, all Instalment Amounts, Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts, Amortised Face Amounts and all other amounts in the nature of principal payable pursuant to Condition 5 or any supplement to it, (ii) "**interest**" shall be deemed to include all Interest Amounts and all other amounts payable pursuant to Condition 4 or any supplement to it and (iii) "**principal**" and/or "**interest**" shall be deemed to include any additional amounts which may be payable under this Condition 7.

8. Prescription and Counterclaims

(a) Prescription

The obligations of the Issuer to pay principal and interest in respect of this Registered Note shall be prescribed (i) in respect of principal upon the expiry of 10 years following the respective due date for the payment of principal and (ii) in respect of interest upon the expiry of 5 years following the respective due date for the relevant payment of interest.

(b) Counterclaims

If the Noteholder is an insurance company and the claims under the Registered Note belong to the security assets (*Sicherungsvermögen*) within the meaning of Sections 124 to 131 of the German Insurance Supervision Act (*Versicherungsaufsichtsgesetz - VAG*) (or any equivalent provisions in the laws of any other jurisdiction), the Issuer hereby waives any right of set-off against the claims arising from the Registered Note as well as the exercise of any pledge, right of retention or other rights through which the claims of the Noteholder could be prejudiced even in the event of insolvency, administration (whether voluntary or involuntary) or similar proceedings to the extent permitted pursuant to applicable law. The same applies if the Noteholder is a German mortgage bank (*Pfandbriefbank*) and the claims under the

Registered Note belong to cover assets (*Deckungswerte*) of a German mortgage bank within the meaning of the German Pfandbrief Act (*Pfandbriefgesetz*).

9. Events of Default

If any of the following events (each, an “**Event of Default**”) occurs and is continuing, the holder of any Senior Note may give written notice to the Fiscal Agent at its specified office that such Senior Note is immediately repayable, whereupon the Early Redemption Amount (which unless otherwise provided in a Pricing Supplement is 100 per cent. of its Nominal Amount) of such Senior Note together with accrued interest to the date of payment shall become immediately due and payable:

- (a) default is made for more than 30 Business Days (as defined in Condition 4) in the payment on the due date of interest or principal in respect of any of the Senior Notes; or
- (b) the Bank shall become insolvent or bankrupt or subject to the provisions of the *Winding-up and Restructuring Act* (Canada), or any statute hereafter enacted in substitution therefor, as such Act, or substituted Act, may be amended from time to time, or if the Bank goes into liquidation, either voluntary or under an order of a court of competent jurisdiction, passes a resolution for the winding-up, liquidation or dissolution of the Bank, is ordered wound-up or otherwise acknowledges its insolvency.

Noteholders may only exercise rights under this Condition 9 in respect of Bail-inable Notes where an order has not been made pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank. Notwithstanding the exercise of any rights by Noteholders under this Condition 9 in respect of Bail-inable Notes, Bail-inable Notes will continue to be subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares under subsection 39.2(2.3) of the CDIC Act prior to their repayment in full. A conversion of Bail-inable Notes into common shares under subsection 39.2(2.3) of the CDIC Act will not be an Event of Default. By its acquisition of the Bail-inable Notes, each holder (including each holder of a beneficial interest in any Bail-inable Note), to the extent permitted by law, waives any and all claims, in law and/or in equity, against the Fiscal Agent (in each case solely in its capacity as Fiscal Agent), for, agrees not to initiate a suit against the Fiscal Agent in respect of, and agrees that the Fiscal Agent shall not be liable for, any action that the Fiscal Agent takes, or abstains from taking, in either case in accordance with a Bail-in Conversion.

10. Modifications

The Bank shall only permit, without consent of the Noteholders, any modification of the Conditions or Senior Notes which is of a formal nature .

Notwithstanding anything in this Condition 10, where any amendment, modification or other variance that can be made to Bail-inable Notes may affect their recognition by the Superintendent as TLAC, that amendment, modification or variance will require the prior approval of the Superintendent.

11. Replacement of Senior Notes and Certificates

If a Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, at the specified office of the Registrar, 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 Certificate is subsequently presented for payment, there will be paid to the Bank on demand the amount payable by the Bank in respect of such

Certificates) and otherwise as the Bank may require. Mutilated or defaced Certificates must be surrendered before replacements will be issued.

12. Notices

Notices to the holders of Registered Notes will 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 Sunday) after the date of mailing.

13. Branch of Account

For the purposes of the *Bank Act* (Canada) the branch of the Bank specified in the applicable Pricing Supplement shall be the branch of account (the “**Branch of Account**”) for the deposits evidenced by this Senior Note.

This Senior Note will be paid without the necessity of first being presented for payment at the Branch of Account.

If the Branch of Account is not in Canada, the Bank may change the Branch of Account for the deposits evidenced by this Senior Note, upon not less than seven days’ prior notice to its holder given in accordance with Condition 12 and upon and subject to the following terms and conditions:

- (a) if this Senior Note is denominated in yen, the Branch of Account shall not be in Japan;
- (b) the Bank shall indemnify and hold harmless the holders of the Senior Notes against any tax, duty, assessment or governmental charge which is imposed or levied upon such holder as a consequence of such change, and shall pay the reasonable costs and expenses of the Fiscal Agent in connection with such change;
- (c) notwithstanding (b) above, no change of the Branch of Account may be made unless immediately after giving effect to such change (i) no Event of Default, and no event which, after the giving of notice or lapse of time or both, would become an Event of Default shall have occurred and be continuing and (ii) payments of principal and interest on Senior Notes of this Series to holders thereof (other than Excluded Holders, as hereinafter defined) shall not, in the opinion of external counsel to the Bank, be subject to any taxes, as hereinafter defined, to which they would not have been subject had such change not taken place. For the purposes of this section, an “**Excluded Holder**” means a holder of a Senior Note of this Series who is subject to taxes by reason of his having some connection with the Relevant Jurisdiction other than the mere holding of a Senior Note of this Series as a non resident of such Relevant Jurisdiction. “**Relevant Jurisdiction**” means and includes Canada, its provinces or territories and the jurisdiction in which the new Branch of Account is located, and “**taxes**” means and includes any tax, duty, assessment or other governmental charge imposed or levied in respect of the payment of the principal of the Senior Notes of this Series or interest thereon for or on behalf of a Relevant Jurisdiction or any authority therein or thereof having power to tax; and
- (d) in the case of Bail-inable Notes, if the change is to another Branch of Account outside of Canada, prior approval of the Superintendent will be required.

14. Currency Indemnity

Any amount received or recovered in a currency other than the currency in which payment under the relevant Senior Note is due (whether as a result of, or of the enforcement of, a judgment or order of a court of any jurisdiction, in the winding-up or dissolution of the Bank or otherwise) by any Noteholder in respect of any sum expressed to be due to it from the Bank shall only constitute a discharge to the Bank to the extent of the amount in the currency of payment under the relevant Senior Note which such Noteholder is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If the amount received or recovered is less than the amount expressed to be due to the recipient under any Senior Note, the Bank shall indemnify such Noteholder against any loss sustained by it as a result. In any event, the Bank shall indemnify such Noteholder against the cost of making any such purchase. For the purposes of this Condition 14, it will be sufficient for the Noteholder to demonstrate that it would have suffered a loss had an actual purchase been made. These indemnities constitute a separate and independent obligation from the Bank's other obligations, shall give rise to a separate and independent cause of action, shall apply irrespective of any indulgence granted by any Noteholder and shall continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Senior Note or any other judgment or order.

15. Waiver of set-off and netting rights

No Noteholder or beneficial owner of an interest in the Bail-inable Notes may exercise, or direct the exercise, claim or plead any right of set-off, netting, compensation or retention in respect of any amount owed to it by the Bank arising under, or in connection with, the Bail-inable Notes, and each Noteholder or beneficial owner of an interest in the Bail-inable Notes shall, by virtue of its acquisition of any Bail-inable Note (or an interest therein), be deemed to have irrevocably and unconditionally waived all such rights of set-off, netting, compensation or retention. Notwithstanding the foregoing, if any amounts due and payable to any Noteholder or beneficial owner of an interest in the Bail-inable Notes by the Bank in respect of, or arising under, the Bail-inable Notes are purportedly discharged by set-off, netting, compensation or retention, without limitation to any other rights and remedies of the Bank under applicable law, such Noteholder or beneficial owner of an interest shall be deemed to receive an amount equal to the amount of such discharge and, until such time as payment of such amount is made, shall hold such amount in trust for the Bank and, accordingly, any such discharge shall be deemed not to have taken place and such set-off, netting, compensation or retention shall be ineffective.

16. Partial Invalidity

If any provision of these Terms and Conditions is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected.

17. Governing Law and Jurisdiction

(a) *Governing Law*

The Registered Note and these Terms and Conditions are governed by the laws of the Federal Republic of Germany, except that the provisions thereof in respect of the CDIC Act with respect to the Registered Note and these Terms and Conditions which, in accordance with Condition 3(b)(ii), are governed by and construed in accordance with the laws of the Province of Québec and the federal laws of Canada applicable therein.

Any non-contractual rights and obligations arising out of or in connection with the Registered Note and these Terms and Conditions shall also be governed by the laws of the Federal Republic of Germany except that the provisions thereof in respect of the CDIC Act with respect to the Registered Note and these Terms and Conditions which, in accordance with Condition 3(b)(ii), are governed by the laws of the Province of Québec and the federal laws of Canada applicable therein.

(b) *Jurisdiction*

Except as set forth in Condition 3(b)(ii), the competent courts in Frankfurt am Main shall have non-exclusive jurisdiction (nicht-ausschließlicher Gerichtsstand) over any action or other legal proceedings arising out of or in connection with this Registered Note and these Terms and Conditions.

SCHEDULE

[Form of Assignment Agreement]

ASSIGNMENT AGREEMENT

[Name and address of Noteholder]

as the current noteholder (the "**Transferor**") of the Registered Note (*Namensschuldverschreibung*) [insert currency and aggregate principal amount] due [year of maturity] [insert serial number / Certificate number (the "**Registered Note**") hereby assigns [Currency] [insert assigned principal amount] of the principal amount evidenced by the Registered Note as well as all interests and rights as from [date of transfer] ("**Transfer Date**") in respect thereof to

[Company's legal name]]

(the "**Transferee**")

[Address of Transferee].

Except as otherwise defined herein, terms defined in the Conditions of the Registered Note shall have the same meaning in this agreement (the "**Assignment Agreement**").

1. The Transferor, hereby represents and warrants that the Registered Note is free from all liens, charges, encumbrances and other third party rights.
2. The Transferor will promptly notify the Issuer and the Registrar of the transfer and the Transfer Date by faxing them the completed letter in the Annex to this Assignment Agreement.
3. The Transferor will surrender the Certificate that has been issued in its name, together with the Assignment Agreement attached to it duly completed and executed, at the specified office of the Registrar as required pursuant to Clause 2.(a) of the Conditions.
4. The Transferee and the Transferor hereby request that
 - (i) the Transferee will be registered in the Register as new Noteholder of the Registered Note (provided that the Noteholder may not require the transfer of this Registered Note to be registered during a period of [15 calendar days] ending on any due date for any payment of principal [*in the case of fixed or floating interest rate Registered Notes insert:* or interest] under the Registered Note. Any registration of transfer required during such period shall be deemed to have been required on the business day (being, for the purposes hereof, a day, other than a Saturday or Sunday, on which commercial banks are open for business in the place of the specified office of the Registrar) immediately following the last day of such period) after payment to the Issuer and/or the Registrar (or the giving of such indemnity as may be required from the Issuer or the Registrar) in respect of any tax or other duties which may be imposed in relation to the transfer, and
 - (ii) [*in case of a transfer of the Registered Note in whole, insert:* a new Certificate shall be issued with respect to the Registered Note] [*in case of a transfer of a part only of the Registered Note, insert:* new Certificates in respect of the balance transferred and the balance not transferred (as the case may be)

shall be issued] within [seven] business days (being, for the purposes hereof, a day, other than a Saturday or Sunday, on which commercial banks are open for business in the place of the specified office of the Registrar) following the surrender of the original Certificate, together with this Assignment Agreement attached to it duly completed and executed, at the specified office of the Registrar.

5. The Transferee agrees and acknowledges that the Issuer and/or the Registrar may request prior to the issue of any new Certificate and/or any registration in the Register, to the extent it considers necessary, the delivery of further information and/or documents (including a certified copy of a current extract from the commercial register) with respect to the identity of the Transferee.

6. This assignment and transfer will become valid upon registration thereof in the Register. **[if mailing of this Registered Note is requested please insert:** [Each of the Transferor and the] [The] Transferee hereby asks the Issuer to mail (at the risk of the addressee) the new Certificate[s] representing the newly issued Registered Note to the Transferee **[in case of a partly transfer insert: and to the Transferor]** to [its][their respective] address[es] specified above at the risk of the [respective] addressee.]

7. [Each of the Transferor and the] [The] Transferee hereby authorises the production of the new Certificate[s] in any administrative or legal proceedings instituted in connection with the Registered Note to which the [respective] Certificate relates.

8. This assignment will be governed by the laws of the Federal Republic of Germany. Place of performance and place of jurisdiction will be Frankfurt Main in the Federal Republic of Germany.

Dated: [●]

[insert name of Transferor]

By: _____

Name:

Title:

[insert name of Transferee]

By: _____

Name:

Title:

Authenticated by:

[Registrar] as Registrar

By: _____

Name:

Title:

Annex to the Form of Assignment Agreement

[Form of notice from the Transferor to Issuer]

To

[Issuer] (the "**Issuer**")

[Currency] [•] Registered Note due [•], dated [•]

We hereby inform you that we have assigned to [•] (the "**Transferee**") all of our rights under the Registered Note, in particular including the claim for payment of principal [*in the case of fixed or floating interest rate Registered Notes insert:* and interest] and all other rights by contract and by operation of law, as against the Issuer pursuant to the Assignment Agreement, dated [•], attached hereto.

Transfer Date	[•]
Last Interest Payment Date	[•]
Next Interest Payment Date	[•]

Contact Details of Transferee

Name:	[•]
Address:	[•]
Phone:	[•]
Fax:	[•]
Attn.:	[•]

Account Details of Transferee

Bank:	[•]
Bank Code:	[•]
IBAN:	[•]
BIC:	[•]

Sincerely yours,

[Transferor]

By: _____
Name:
Title:

Attachment: Assignment Agreement

USE OF PROCEEDS

Except as otherwise specified in the applicable Final Terms, or, in the case of Exempt Notes, the applicable Pricing Supplement, the net proceeds from each issue of Senior Notes will be added to the general funds of the Bank or any of its affiliates to be used for general corporate purposes of the Bank or any of its affiliates. If, in relation to any particular issue of Senior Notes there is a particular identified use of proceeds, this will be stated in the applicable Final Terms, or, in the case of Exempt Notes, the applicable Pricing Supplement.

OVERVIEW OF PROVISIONS RELATING TO THE SENIOR NOTES WHILE IN GLOBAL FORM

Initial Issue of Senior Notes

Unless otherwise agreed upon between the Bank and the relevant Dealer(s) and specified in the applicable Final Terms or, in the case of the Exempt Notes, applicable Pricing Supplement, each Tranche of Bearer Notes having an original maturity of more than one year will initially be represented by a temporary Global Note and each Tranche of Bearer Notes having an original maturity of one year or less will initially be represented by a permanent Global Note, in each case, in bearer form without Coupons, Receipts or Talons attached.

Global Notes representing Bearer Notes will be deposited on or prior to the issue date of the relevant Tranche with a Common Depositary for Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) or be delivered outside a clearing system, as agreed between the Bank and the relevant Dealer(s).

Registered Notes which are held in Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) will be represented by a Global Registered Note registered in the name of nominees for Clearstream, Luxembourg and/or Euroclear (or any other agreed clearing system) or a common nominee for both, as the case may be.

*Upon the initial deposit of a Global Note representing Bearer Notes with the Common Depositary, or as the case may be, the appropriate depositary, or, in the case of Registered Notes, the initial registration in the name of nominees for Clearstream, Luxembourg and/or Euroclear, or a common nominee for both, or any other agreed clearing system, and delivery of the applicable Global Registered Note to the appropriate depositaries, or a common depositary for Clearstream, Luxembourg and/or Euroclear (or such other agreed clearing system (each an “**Approved Intermediary**”)), each subscriber will be credited with a nominal amount of Senior Notes equal to the nominal amount thereof for which it has subscribed and paid. Any reference herein to Clearstream, Luxembourg and/or Euroclear shall be deemed to include a reference to any successor operator and/or successor clearing system and/or any additional or alternative clearing system as specified in the applicable Final Terms or, in the case of the Exempt Notes, applicable Pricing Supplement.*

Relationship of Accountholders with Clearing Systems

Each of the persons shown in the records of Clearstream, Luxembourg and/or Euroclear or such Approved Intermediary as the holder of a Senior Note represented by a Global Note or a Global Certificate must look solely to Clearstream, Luxembourg and/or Euroclear or such Approved Intermediary for such person's share of each payment made by the Bank to the bearer of such Global Note or the holder of the underlying Registered Notes, as the case may be, and in relation to all other rights arising under the Global Notes or Global Certificates, save as specifically otherwise provided in the relevant Global Note and subject to and in accordance with the respective rules and procedures of Clearstream, Luxembourg, Euroclear or such Approved Intermediary. Such persons shall have no claim directly against the Bank in respect of payments due on the Senior Notes for so long as the Senior Notes are represented by such Global Note and such obligations of the Bank will be discharged by payment to the bearer of such Global Note or the registered holder of the underlying Registered Notes, as the case may be, in respect of each amount so paid, save as specifically otherwise provided in the relevant Global Note.

By its acquisition of an interest in a Bail-inable Note, each holder or beneficial owner of an interest in a Bail-inable Note is deemed to have authorised, directed and requested Euroclear and Clearstream, Luxembourg

and any direct participant in such clearing system or other intermediary through which it holds the Bail-inable Note to take any and all necessary action, if required, to implement the Bail-in Conversion or any other action pursuant to the Bail-in Regime with respect to the Bail-inable Note, as may be imposed on it, without any further action or direction on the part of that Noteholder or beneficial owner or the Fiscal Agent or the Registrar (if applicable), except as required in accordance with the rules and procedures for the time being of Euroclear and/or Clearstream, Luxembourg and/or the intermediary, as applicable.

Amendment to Conditions

The temporary Global Notes, the permanent Global Notes and Global Registered Notes (each a “**Global Note**”) and the Agency Agreement contain provisions which apply to the Senior Notes which they represent, some of which modify the effect of the Conditions of the Senior Notes set out in this document. The following is an overview of certain of those provisions:

1. Exchange

If the applicable Final Terms or, in the case of the Exempt Notes, applicable Pricing Supplement specifies that a temporary Global Note is issued in compliance with the D Rules, such temporary Global Note will be exchangeable in whole or in part for interests in a permanent Global Note or, if so provided in a temporary Global Note, for definitive Bearer Notes (as described in the next paragraph) after the date falling not earlier than 40 days after the Issue Date of the Senior Notes upon certification as to non-United States beneficial ownership, in the case of Bearer Notes or, if applicable, for Certificates free of charge to the holder promptly after the Issue Date in the case of Registered Notes. If the applicable Final Terms or, in the case of the Exempt Notes, applicable Pricing Supplement specifies that a temporary Global Note is issued in compliance with the C Rules or in a transaction to which TEFRA is not applicable, each such temporary Global Note will be exchangeable, free of charge to the holder on or after the Exchange Date for Senior Notes in definitive form. Each permanent Global Note is exchangeable, free of charge to the holder in whole (or, in the case of Partly-Paid Notes only, in part) at the request of the holder, (i) if so provided in a permanent Global Note, (ii) if a permanent Global Note is held on behalf of Clearstream, Luxembourg and/or Euroclear or an Approved Intermediary and such clearing system is closed for business for a continuous period of at least 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or in fact does so, or (iii) if an Event of Default has occurred and continues to occur in relation to the Senior Notes represented thereby for definitive Bearer Notes or (in the case of Exchangeable Bearer Notes or Global Registered Notes) definitive Registered Notes by such holder giving notice to the Fiscal Agent, or by the Bank giving notice to the Fiscal Agent and the Noteholders of its intention to exchange (at the option, cost and expense of the Bank) such permanent Global Note for definitive Bearer Notes or (in the case of Exchangeable Bearer Notes or Global Registered Notes) Certificates, in each case on or after the Exchange Date specified in the notice.

The exchange of a permanent Global Note for definitive Bearer Notes at the request of a holder shall not be expressed to be applicable in the applicable Final Terms if the Senior Notes are issued with a minimum Specified Denomination of at least €100,000 (or its equivalent in another currency) plus one or more higher integral multiples of another smaller amount (such as 1,000) in the relevant currency. Furthermore, such Specified Denominations construction is not permitted in relation to any issue of Senior Notes which is to be represented by an issue by a Temporary Global Note exchangeable for definitive Bearer Notes.

On or after any due date for exchange the holder of a Global Note may surrender such Global Note or, in the case of a partial exchange, present it for endorsement to or to the order of the Fiscal Agent. In exchange for any Global Note, or the part thereof to be exchanged, the Bank will (i) in the case of a temporary Global Note exchangeable for a permanent Global Note, deliver, or procure the delivery of, a permanent Global Note in an aggregate nominal amount equal to that of the whole or that part of a temporary Global Note

that is being exchanged or, in the case of a subsequent exchange, endorse, or procure the endorsement of, a permanent Global Note to reflect such exchange or (ii) in the case of a Global Note exchangeable for Definitive Notes or Certificates, deliver, or procure the delivery of, an equal aggregate nominal amount of duly executed and authenticated Definitive Notes and/or Certificates, as the case may be. In this Prospectus, “**Definitive Notes**” means, in relation to any Global Note, the definitive Bearer Notes for which such Global Note may be exchanged (if appropriate, having attached to them all Coupons and Receipts in respect of interest or Instalment Amounts that have not already been paid on the Global Note and a Talon). Definitive Notes will be security printed and Certificates will be printed in accordance with any applicable legal and stock exchange requirements in or substantially in the form set out in the relevant Schedules to the Agency Agreement. On exchange in full of each permanent Global Note, the Bank will, if the holder so requests, procure that it is cancelled and returned to the holder together with the relevant Definitive Notes or Certificates (as the case may be).

Senior Notes which are represented by a Global Note will be transferable only in accordance with the then current rules and procedures of Clearstream, Luxembourg and/or Euroclear or Approved Intermediary or any other relevant clearing system, as the case may be.

“**Exchange Date**” means in relation to a temporary Global Note, the day falling not earlier than 40 days after its issue date and in relation to a permanent Global Note, a day falling not less than 60 days, or in the case of an exchange for Certificates five days or in the case of an Event of Default 30 days after that on which the notice requiring exchange is given and on which commercial banks are open for business in the city in which the specified office of the Fiscal Agent is located and, except in the case of an exchange pursuant to (ii) above, in the cities in which the relevant clearing system is located.

2. Payment

No payment falling due more than 40 days after the Issue Date will be made on a temporary Global Note unless exchange for an interest in a permanent Global Note or for definitive Bearer Notes or Certificates is improperly withheld or refused. Payments on any temporary Global Note during the period up to 40 days after its Issue Date will only be made against presentation of certification as to non-United States beneficial ownership. All payments in respect of Senior Notes represented by a Global Note will be made against presentation for endorsement and, if no further payment is to be made in respect of the Senior Notes, surrender of that Global Note to or to the order of the Fiscal Agent, the Registrar or such other Paying Agent as shall have been notified to the Noteholders for such purpose. In respect of Global Notes, a record of each payment so made will be endorsed in the appropriate schedule to each Global Note, which endorsement will be prima facie evidence that such payment has been made in respect of the Senior Notes. Global Notes do not have any Coupons attached.

“**Business Day**” means (unless otherwise stated in a Senior Note) a day which is:

- (1) in the case of a Specified Currency other than euro or Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for general business (including dealings in foreign exchange and foreign currency deposits) and settle payments in the principal financial centre for that Specified Currency and in any other Additional Business Centre (including TARGET2) specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, and if TARGET2 is specified as an Additional Business Centre, a TARGET2 Business Day (as defined below); (2) if this Senior Note is denominated, or if it is a Dual Currency Note, payable in euro, a day on which the TARGET2 System is operating credit or transfer instructions in respect of payments in euro and in any other Additional Business Centre specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement; or

- (3) *if this Senior Note is denominated, or if it is a Dual Currency Note, payable in Renminbi, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets are open for business for settlement of Renminbi payments in each Relevant Renminbi Settlement Centre (as defined in Condition 6(j)).*

All payments on Global Registered Notes will be paid to the person shown on the register maintained by the Registrar at the close of the business day (in Clearstream, Luxembourg and/or Euroclear) prior to the due date for payment thereof (the “Record Date”).

3. Notices

So long as any Senior Notes are represented by a Global Note and such Global Note is held on behalf of a clearing system, notices to Noteholders of that Series may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for publication as required by the Conditions or by delivery of the relevant notice to the holder of the Global Note except that so long as the Senior Notes are listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market of the Luxembourg Stock Exchange, or listed on another stock exchange or admitted to listing by any other relevant authority, the requirements of the relevant stock exchange or authority with respect to publication of notices and notification to Noteholders have been complied with.

4. Purchase and Cancellation

Cancellation of any Senior Note surrendered for cancellation following its purchase will be effected by reduction in the Nominal Amount of the relevant Global Note.

5. Default

Each Global Note and Global Certificate provides that the holder may cause such Global Note, or a portion of it, or one or more Registered Notes represented by such Global Certificate to become due and repayable in the circumstances described in, and as limited by the restrictions set forth in, Condition 9 by stating in the notice to the Fiscal Agent or Registrar, as the case may be, the Nominal Amount of such Global Note or Registered Notes which is becoming due and repayable. Following the giving of a notice of an Event of Default by or through a Common Depositary the persons entitled to such portion as accountholders with a clearing system will acquire direct enforcement rights against the Bank under the terms of the relevant Global Note or Global Certificate, as the case may be.

6. Bank's Option

No drawing of Senior Notes will be required under Condition 5 in the event that the Bank exercises any option relating to those Senior Notes while all such Senior Notes which are outstanding are represented by a Global Note. In the event that any option of the Bank is exercised in respect to some but not all of the Senior Notes of any Series, the rights of accountholders with Clearstream, Luxembourg and/or Euroclear or such Approved Intermediary in respect of the Senior Notes will be governed by the standard procedures of Clearstream, Luxembourg and/or Euroclear or such Approved Intermediary.

7. Noteholders' Option

Any Noteholders' option may be exercised by the holder of a Global Note giving notice (whether electronically or otherwise) to the Fiscal Agent of the Nominal Amount of Senior Notes in respect of which the option is exercised and presenting such Global Note for endorsement of exercise within the time limits specified in the Conditions.

8. Exempt Notes that are Partly-Paid Notes

The provisions relating to Partly-Paid Notes will be contained in the applicable Pricing Supplement and thereby in Global Notes. While any instalments of the subscription moneys due from the holder of Partly-Paid Notes are overdue, no interest in a Global Note representing such Senior Notes may be exchanged for an interest in a permanent Global Note or for definitive Bearer Notes. In the event that any Noteholder fails to pay any instalment due on any Partly-Paid Notes within the time specified, the Bank may be entitled to forfeit such Senior Notes and shall have no further obligation to their holder in respect of them.

9. Integral Multiples in Excess of the Specified Denomination

*So long as the Senior Notes are represented by a temporary Global Note or a permanent Global Note and the relevant clearing system(s) so permit, the Senior Notes shall be tradeable only in principal amounts of at least the Specified Denomination (or if more than one Specified Denomination, the lowest Specified Denomination) as provided in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement and higher integral multiples of at least 1,000 in the relevant currency if specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement (the “**Integral Amount**”), notwithstanding that no definitive Senior Notes will be issued with a denomination above the Definitive Amount in such currency. The “**Definitive Amount**” shall be equal to two times the lowest Specified Denomination minus the Integral Amount. If a Global Note is exchangeable for definitive Senior Notes at the option of the Noteholder, the Senior Notes shall be tradeable only in principal amounts of at least the Specified Denomination (or if more than one Specified Denomination, the lowest Specified Denomination).*

11. Written Resolution and Electronic Consent.

While any Senior Note is held on behalf of a clearing system, then:

- (i) Electronic Consent. Where the terms of the resolution proposed by the Issuer have been notified to the Noteholders through the relevant clearing system(s), the Issuer shall be entitled to rely upon approval of such resolution given by way of electronic consents communicated through the electronic communications systems of the relevant clearing system(s) in accordance with their operating rules and procedures by or on behalf of the holders of not less than 75 per cent. in principal amount of the Senior Notes outstanding (“**Electronic Consent**”) by close of business on the date by which such electronic consents must be received in order of them to be validly given.*
- (ii) Written Resolution: Where Electronic Consent is not being sought, for the purpose of determining whether a Written Resolution has been validly passed, the Issuer shall be entitled to rely on consent or instructions given in writing directly to the Issuer and/or the Fiscal Agent, as the case may be, (a) by accountholders in the clearing system(s) with entitlements to such Senior Note (b) where the accountholders hold any such entitlement on behalf of another person, on written consent from or written instruction by the person identified by that accountholder as the person for whom such entitlement is held.*

NATIONAL BANK OF CANADA

Incorporation and Head Office

The Bank's roots date back to 1859 with the founding of Banque Nationale in Québec City, Québec, Canada. The Bank is a chartered bank governed by the Bank Act and is named in Schedule I of the Bank Act. The head office of the Bank is located at 4th Floor, 600 De La Gauchetière Street West, Montréal, Québec, Canada H3B 4L2. The telephone number of the Bank is 1-514-394-5000. The Issuer's website may be found at www.nbc.ca.

Business of the Bank

The Bank is the parent company of its group subsidiaries and, together, is an integrated provider of financial services to retail, commercial, corporate and institutional clients. As set out in the Bank Act, its corporate purpose is to act as a financial institution throughout Canada and can carry on business, conduct its affairs and exercise its powers in any jurisdiction outside Canada to the extent and in the manner that the laws of that jurisdiction permit. It operates in four business segments, Personal and Commercial, Wealth Management, Financial Markets, and U.S. Specialty Finance and International ("USSF&I") and offers a complete range of services: banking and investment solutions, insurance, wealth management, corporate and investment banking, mutual fund and pension fund management, and securities brokerage. Please refer to pages 30 to 51 of the 2021 Annual Report incorporated by reference in this Prospectus for a detailed description of the business segments.

The Bank had total assets in excess of \$369.8 billion as at 30 April 2022. It is the sixth largest bank in Canada in terms of assets (source: the Office of the Superintendent of Financial Institutions Canada (the "OSFI")) – Financial Data – Banks) with branches in almost every province. Clients in the United States, Europe and other parts of the world are served through a network of representative offices, subsidiaries and partnerships.

Major Shareholders

The Bank Act contains restrictions on the issue, transfer, acquisition, beneficial ownership and voting of all shares of a chartered bank. The following is a summary of such restrictions.

Subject to certain exceptions specified in the Bank Act, no person may be a major shareholder of a bank if the bank has equity of \$12 billion or more. In the event the equity of the Bank is less than \$12 billion and the Bank Act would otherwise permit a person to own up to 65 per cent. of any class of shares of the Bank, the Bank is deemed to be a bank to which the ownership restrictions for banks with equity of \$12 billion or more apply until the Minister of Finance (Canada) specifies, on application by the Bank, that these restrictions no longer apply to the Bank.

A person is a major shareholder of a bank where: (i) the aggregate of shares of any class of voting shares of a bank beneficially owned by that person, by entities controlled by that person and by any person acting jointly or in concert with that person is more than 20 per cent. of all of the outstanding shares of that class of shares; or (ii) the aggregate of shares of any class of non-voting shares of a bank beneficially owned by that person, by entities controlled by that person and by any person acting jointly or in concert with that person is more than 30 per cent. of all of the outstanding shares of that class of non-voting shares.

Furthermore, no person may have a significant interest in any class of shares of a Canadian bank, without approval under the Bank Act. A person has a significant interest in a class of shares of a bank where the aggregate of any shares of the class beneficially owned by that person, by entities controlled by that person and by any person acting jointly or in concert with that person exceeds 10 per cent. of all of the outstanding shares of that class of shares of such bank.

Subject to certain exceptions, the Bank Act also prohibits the registration of a transfer or issue of any shares of the Bank to Her Majesty in right of Canada or of a province or any agent or agency of Her Majesty in either of those rights, or to the government of a foreign country or any political subdivision, agent or agency of any of them.

There are no measures in place to ensure that control of the Bank is not abused as the Bank has no major shareholders.

To the extent known to the Bank, the Bank is not directly or indirectly owned or controlled by any person

Issuer Ratings

Each of the Bank's debt securities ratings as at the date of this Prospectus received from a rating agency with which it cooperated are listed below.

Rating Agency	Subordinated Debt / NVCC Subordinated Debt	Short-term Debt	Legacy Senior Debt²	Bail-in Senior Debt³	Outlook
Moody's	Baa2 / Baa2(hyb)	P-1	Aa3	A3	Stable
S&P	BBB+ / BBB	A-1	A	BBB+	Stable
Fitch	A- / -	F1+	AA-	A+	Stable
DBRS	A / BBB (high)	R-1 (middle)	AA (low)	A (high)	Positive

See pages 22 to 24 of the 2021 Annual Information Form incorporated by reference into this Prospectus for a definition of the categories of each of the credit ratings referred to above. Further information may be obtained from the applicable rating agency.

A credit rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time by the assigning rating agency. Investors may suffer losses if the credit rating assigned to the Senior Notes does not reflect the then creditworthiness of such Senior Notes.

² Includes Senior Notes issued prior to 23 September 2018 and Senior Notes issued on or after 23 September 2018 which are excluded from the Bank Recapitalization (Bail-in) Regime.

³ Expected ratings of Bail-inable Notes that are issued after 23 September 2018.

CAPITALISATION OF THE BANK

The following table sets forth the consolidated capitalisation of the Bank as at 30 April 2022 and 31 October 2021, which has been derived from the Bank's 2022 Second Quarter Report incorporated by reference in this Prospectus and the Audited Annual Consolidated Financial Statements of the Bank for the year ended 31 October 2021 incorporated by reference in this Prospectus. Redemptions referred to in the footnotes to the following table are all subject to the prior receipt of regulatory consents, including in all cases that of the Office of the Superintendent of Financial Institutions Canada.

		30 April 2022	31 October 2021
		Amount Outstanding	
		(millions of dollars)	
Bank debentures:			
3.183% due 1 February 2028	(1)	750	750
Floating Rate, due 28 February 2087	(2)	9	9
Total		759	759
Fair value hedge adjustment		6	10
Unamortized issuance costs		(1)	(1)
		764	768
Equity attributable to the Bank's shareholders and holders of other equity instruments:			
First preferred shares:			
Unlimited number of shares authorised without par value:			
Issued and Fully Paid:			
14,000,000 shares, Series 30.....	(3)	350	350
12,000,000 shares, Series 32.....	(4)	300	300
16,000,000 shares, Series 38.....	(5)	400	400
12,000,000 shares, Series 40.....	(6)	300	300
12,000,000 shares, Series 42.....	(7)	300	300
Total		1,650	1,650
Other equity instruments Limited Recourse Capital Notes (LRCN)			
500,000 LRCN - Series 1	(8)	500	500
500,000 LRCN - Series 2	(9)	500	500
Total.....		1,000	1,000
Common shares without par value:			
Unlimited number of shares authorised			
336,512,793 shares issued and outstanding as at 30 April 2022 and 337,912,283 shares issued and outstanding as at 31 October 2021		3,196	3,160
Contributed surplus, at end		49	47
Accumulated other comprehensive income.....		54	(32)
Retained earnings, at end		14,473	13,028

Total	<u>20,422</u>	<u>18,853</u>

- (1) Redeemable at the option of the bank, bearing interest at a rate of 3.183% until 1 February 2023 and thereafter at a floating rate equal to the rate on three-month CDOR plus 0.72%
- (2) Denominated in foreign currency totalling U.S.\$7 million at 30 April 2022 (31 October 2021: U.S.\$7 million), bearing interest at an annual rate of 1/8 per cent. above the six-month London interbank offered rate (LIBOR); redeemable at the Bank's option since 28 February 1993.
- (3) Redeemable in cash at the Bank's option, subject to the provisions of the Bank Act and to OSFI approval, on or after 15 May 2024 and 15 May every five years thereafter, in whole or in part, at a price equal to \$25.00 per share, plus all dividends declared and unpaid thereon on the date fixed for redemption. Convertible into floating-rate non-cumulative Series 31 First Preferred Shares of the Bank, subject to certain conditions, on 15 May 2024 and on 15 May every five years thereafter. These shares carry a non-cumulative quarterly dividend of \$0.25156 for the five-year period commencing on 16 May 2019 and ending on 15 May 2024. Thereafter, these shares carry a non-cumulative quarterly fixed dividend in an amount per share determined by multiplying the interest rate, equal to the sum of the 5-year Government of Canada bond-yield on the calculation date of the applicable fixed rate plus 2.40 per cent., by \$25.00.

Upon the occurrence of a trigger event as defined by OSFI, each outstanding Series 30 preferred share will be automatically and immediately converted, on a full and permanent basis, without the consent of the holder, into a number of common shares of the Bank determined pursuant to an automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$25.00 per share, plus all declared and unpaid dividends as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

- (4) Redeemable in cash at the Bank's option, subject to the provisions of the Bank Act and to OSFI approval, on or after 15 February 2025 and 15 February every five years thereafter, in whole or in part, at a price equal to \$25.00 per share, plus all dividends declared and unpaid thereon on the date fixed for redemption. Convertible into floating-rate non-cumulative Series 33 First Preferred Shares of the Bank, subject to certain conditions, on 15 February 2025 and on 15 February every five years thereafter. These shares carry a non-cumulative quarterly dividend of \$0.23994 for the five-year period commencing 16 February 2020 and ending on 15 February 2025. Thereafter, these shares carry a non-cumulative quarterly fixed dividend in an amount per share determined by multiplying the interest rate, equal to the sum of the 5-year Government of Canada bond-yield on the calculation date of the applicable fixed rate plus 2.25 per cent., by \$25.00.

Upon the occurrence of a trigger event as defined by OSFI, each outstanding Series 32 preferred share will be automatically and immediately converted, on a full and permanent basis, without the consent of the holder, into a number of common shares of the Bank determined pursuant to an automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$25.00 per share, plus all declared and unpaid dividends as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

- (5) Redeemable in cash at the Bank's option, subject to the provisions of the Bank Act and to OSFI approval, on or after 15 November 2022 and 15 November every five years thereafter, in whole or in part, at a price equal to \$25.00 per share, plus all dividends declared and unpaid thereon on the date fixed for redemption. Convertible into floating-rate non-cumulative Series 39 First Preferred Shares of the Bank, subject to certain conditions, on 15 November 2022 and on 15 November every five years thereafter. These shares carry a non-cumulative quarterly dividend of \$0.27813 for the initial period ending 15 November 2022. Thereafter, these shares carry a non-cumulative quarterly fixed dividend in an amount per share determined by multiplying the interest rate, equal to the sum of the 5-year Government of Canada bond-yield on the calculation date of the applicable fixed rate plus 3.43 per cent., by \$25.00.

Upon the occurrence of a trigger event as defined by OSFI, each outstanding Series 38 preferred share will be automatically and immediately converted, on a full and permanent basis, without the consent of the holder, into a number of common shares of the Bank determined pursuant to a non-viability contingent capital automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$25.00 per share, plus all declared and unpaid dividends as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading

price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

- (6) Redeemable in cash at the Bank's option, subject to the provisions of the Bank Act and to OSFI approval, on or after 15 May 2023 and 15 May every five years thereafter, in whole or in part, at a price equal to \$25.00 per share, plus all dividends declared and unpaid thereon on the date fixed for redemption. Convertible into floating-rate non-cumulative Series 41 First Preferred Shares of the Bank, subject to certain conditions, on 15 May 2023 and on 15 May every five years thereafter. These shares carry a non-cumulative quarterly dividend of \$0.28750 for the initial period ending 15 May 2023. Thereafter, these shares carry a non-cumulative quarterly fixed dividend in an amount per share determined by multiplying the interest rate, equal to the sum of the 5-year Government of Canada bond-yield on the calculation date of the applicable fixed rate plus 2.58 per cent., by \$25.00.

Upon the occurrence of a trigger event as defined by OSFI, each outstanding Series 40 preferred share will be automatically and immediately converted, on a full and permanent basis, without the consent of the holder, into a number of common shares of the Bank determined pursuant to a non-viability contingent capital automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$25.00 per share, plus all declared and unpaid dividends as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

- (7) Redeemable in cash at the Bank's option, subject to the provisions of the Bank Act and to OSFI approval, on or after 15 November 2023 and 15 November every five years thereafter, in whole or in part, at a price equal to \$25.00 per share, plus all dividends declared and unpaid thereon on the date fixed for redemption. Convertible into floating-rate non-cumulative Series 43 First Preferred Shares of the Bank, subject to certain conditions, on 15 November 2023 and on 15 November every five years thereafter. These shares carry a non-cumulative quarterly dividend of \$0.30938 for the initial period ending 15 November 2023. Thereafter, these shares carry a non-cumulative quarterly fixed dividend in an amount per share determined by multiplying the interest rate, equal to the sum of the 5-year Government of Canada bond-yield on the calculation date of the applicable fixed rate plus 2.77 per cent., by \$25.00.

Upon the occurrence of a trigger event as defined by OSFI, each outstanding Series 42 preferred share will be automatically and immediately converted, on a full and permanent basis, without the consent of the holder, into a number of common shares of the Bank determined pursuant to a non-viability contingent capital automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$25.00 per share, plus all declared and unpaid dividends as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

- (8) The LRCN – Series 1 for which recourse of the noteholders is limited to the assets held by an independent trustee in a consolidated limited recourse trust. The trust assets consist of \$500 million of Series 44 Preferred Shares issued by the Bank in conjunction with the LRCN – Series 1. In the event of (i) non-payment of interest on any of the interest payment dates, (ii) non-payment of the redemption amount upon redemption of the LRCN – Series 1, (iii) non-payment of the principal amount upon maturity of the LRCN – Series 1, or (iv) an event of default in respect of the LRCN – Series 1, the noteholders will have recourse only to the assets of the trust, and each noteholder will be entitled to its pro rata share of the assets of the trust. In such circumstances, delivery of the assets of the trust will eliminate all of the Bank's obligations with respect to the LRCN – Series 1. The LRCN – Series 1 are redeemable at maturity or earlier to the extent that the Bank redeems the Series 44 preferred shares on certain redemption dates specified in the terms and conditions of the Series 44 preferred shares, and subject to OSFI's consent and approval.

Series 44 Preferred Shares are held by a consolidated limited recourse trust on the Bank's balance sheet and are therefore eliminated for financial reporting purposes. Dividends are payable semi-annually and the dividend rate is the Government of Canada bond yield on the calculation date plus the reset premium; however, no dividend will be payable before the date on which all Series 44 First Preferred Shares are issued to the holders of LRCN – Series 1. Upon the occurrence of a trigger event, as defined by OSFI, 1) each LRCN – Series 1 will be automatically redeemed and the redemption price will be covered by delivery of the trust's assets that consist of Series 44 preferred shares; 2) each Series 44 outstanding preferred share will be automatically and immediately converted on a full and permanent basis, without the consent of the holder, into a number of Bank common shares determined pursuant to an automatic conversion formula. This conversion will be calculated by dividing

the value of the preferred shares, i.e., \$1,000 per share, plus all accrued and unpaid interest as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

The Notes will mature on 15 November 2080. The Bank will pay interest on the Notes in equal semi-annual instalments in arrears on 15 May and 15 November of each year. From the date of issue to, but excluding, 15 November 2025, the interest rate on the Notes will be fixed at 4.30% per annum. Starting on 15 November 2025 and on every fifth anniversary of such date thereafter until 15 November 2075, the interest rate on the Notes will be reset at an interest rate per annum equal to the Government of Canada Yield on the business day prior to such Interest Reset plus 3.943%.

- (9) The LRCN – Series 2 for which recourse of the noteholders is limited to the assets held by an independent trustee in a consolidated limited recourse trust. The trust assets consist of \$500 million of Series 45 Preferred Shares issued by the Bank in conjunction with the LRCN – Series 2. In the event of (i) non-payment of interest on any of the interest payment dates, (ii) non-payment of the redemption amount upon redemption of the LRCN – Series 2, (iii) non-payment of the principal amount upon maturity of the LRCN – Series 2, or (iv) an event of default in respect of the LRCN – Series 2, the noteholders will have recourse only to the assets of the trust, and each noteholder will be entitled to its pro rata share of the assets of the trust. In such circumstances, delivery of the assets of the trust will eliminate all of the Bank's obligations with respect to the LRCN – Series 2. The LRCN – Series 2 are redeemable at maturity or earlier to the extent that the Bank redeems the Series 45 preferred shares on certain redemption dates specified in the terms and conditions of the Series 45 preferred shares, and subject to OSFI's consent and approval.

Series 45 Preferred Shares are held by a consolidated limited recourse trust on the Bank's balance sheet and are therefore eliminated for financial reporting purposes. Dividends are payable semi-annually and the dividend rate is the Government of Canada bond yield on the calculation date plus the reset premium; however, no dividend will be payable before the date on which all Series 45 First Preferred Shares are issued to the holders of LRCN – Series 2. Upon the occurrence of a trigger event, as defined by OSFI, 1) each LRCN – Series 2 will be automatically redeemed and the redemption price will be covered by delivery of the trust's assets that consist of Series 45 preferred shares; 2) each Series 45 outstanding preferred share will be automatically and immediately converted on a full and permanent basis, without the consent of the holder, into a number of Bank common shares determined pursuant to an automatic conversion formula. This conversion will be calculated by dividing the value of the preferred shares, i.e., \$1,000 per share, plus all accrued and unpaid interest as at the date of the trigger event, by the value of the common shares. The value of the common shares will be the greater of a \$5.00 floor price or the current market price of the common shares. Current market price means the volume weighted average trading price of common shares for the ten consecutive trading days ending on the trading day preceding the date of the trigger event. If the common shares are not listed on an exchange when this price is being established, the price will be the fair value reasonably determined by the Bank's Board.

The Notes will mature on 15 August 2081. The Bank will pay interest on the Notes in equal semi-annual instalments in arrears on 15 February and 15 August of each year. From the date of issue to, but excluding, 15 August 2026, the interest rate on the Notes will be fixed at 4.05% per annum. Starting on 15 August 2026 and on every fifth anniversary of such date thereafter until 15 August 2076, the interest rate on the Notes will be reset at an interest rate per annum equal to the Government of Canada Yield on the business day prior to such Interest Reset Date plus 3.045%.

DEPOSITS

Outstanding deposits of the Bank on a consolidated basis as at 30 April 2022 were \$246.7 billion and as at 31 October 2021 were \$240.9 billion.

DIRECTORS AND SENIOR OFFICERS OF THE BANK

<u>Name</u>	<u>Principal Occupation</u>
Maryse Bertrand.....	Corporate Director
Pierre Blouin.....	Corporate Director
Pierre Boivin.....	President and Chief Executive Officer, Claridge Inc.
Lynn Loewen.....	Corporate Director
Yvon Charest	Corporate Director
Patricia Curadeau-Grou	Corporate Director
Jean Houde.....	Chairman of the Board of Directors, National Bank of Canada
Laurent Ferreira.....	President and Chief Executive Officer, National Bank of Canada
Karen Kinsley.....	Corporate Director
Rebecca McKillican.....	Chief Executive Officer of McKesson Corporation Canada
Robert Paré.....	Strategic Advisor, Fasken Martineau DuMoulin LLP
Lino A. Saputo.....	President and Chief Executive Officer of Saputo Inc.
Andrée Savoie	President and Chair of the Board of Directors of Acadian Properties Ltd.
Macky Tall.....	Partner and Chair of the Infrastructure Group of The Carlyle Group Inc.
Pierre Thabet	President, Boa-Franc Inc.

The business address of all of the Directors and Senior Officers is the head office of the Bank at 600 De La Gauchetière Street West, Montréal, Québec, Canada H3B 4L2.

As at the date of this Prospectus, the Bank is not aware of any potential conflicts of interest between the duties owed to the Bank by the persons listed above and their private interests and external duties. If a director were to have a material interest in a matter being considered by the board of directors or any of its committees, such director would not participate in any discussions relating to, or any vote on, such matter.

Office of the President

<u>Name</u>	<u>Position Held</u>
Stéphane Achard	Executive Vice-President and Co-Head of Commercial Banking and Private Banking
Lucie Blanchet.....	Executive Vice-President, Personal Banking and Client Experience
Éric Bujold.....	Executive Vice-President and Co-Head Commercial Banking and Private Banking
William Bonnell.....	Executive Vice-President, Risk Management
Laurent Ferreira	President and Chief Executive Officer
Martin Gagnon	Co-President and Co-Chief Executive Officer, National Bank Financial; Executive Vice-President, Wealth Management
Marie Chantal Gingras	Chief Financial Officer and Executive Vice-President, Finance
Denis Girouard	Executive Vice-President, Financial Markets
Brigitte Hébert	Executive Vice-President, Employee Experience
Julie Lévesque	Executive Vice-President, Technology and Operations
Ghislain Parent.....	Executive Vice-President, International

The full address of the senior officers is the head office of the Bank, 4th Floor, 600 De La Gauchetière Street West, Montréal, Québec, Canada H3B 4L2.

As at the date of this Prospectus, the Bank is not aware of any potential conflicts of interest between the duties owed to the Bank by the persons listed above in the section 'Office of the President' and their private interests and external duties. If an individual in the 'Office of the President' were to have a material interest in a matter being considered by the 'Office of the President', such individual would not participate in any discussions relating to, or any vote on, such matter.

SUSTAINABILITY BOND FRAMEWORK

The Bank may issue Senior Notes under the Programme where the use of proceeds is specified in the applicable Final Terms (or the applicable Pricing Supplement in the case of Exempt Notes) to be for the financing and/or refinancing, in whole or in part, of future or existing eligible businesses and eligible projects, including the Bank's own operations, that fall within the Eligible Categories, the whole in accordance with the National Bank of Canada Sustainability Bond Framework dated 30 November 2020 (as may be amended and updated from time to time) available on the following webpage: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/fonds-propres-et-dette/2020/nbc-sustainability-bond-framework-2020.pdf> (the "**Framework**"). The Framework addresses the four core components of the International Capital Market Association's Sustainability Bond Guidelines dated June 2018, and its recommendation on the use of external reviews and reporting:

- Use of Proceeds
- Project Selection and Evaluation Process
- Management of Proceeds
- Reporting

The Bank's look-back period for any financing using the proceeds of Sustainable Bonds is 36 months prior to the date of issuance of the relevant Sustainable Bonds.

"**Eligible Categories**" consist of the following five categories (all as more fully described in the Framework):

- Renewable Energy
- Sustainable Buildings
- Low-Carbon Transportation
- Affordable Housing
- Access to Basic and Essential Services
- Loans to Small and Medium-sized enterprises ("**SMEs**")

Where a business derives 90 per cent. or more of its revenues from activities in Eligible Categories, it will be considered as eligible for an allocation of the proceeds of Sustainable Bonds. In such instances, the use of proceeds can be used by the business for general purposes, so long as this financing does not fund expansion into activities that are excluded from the Eligible Categories.

The proceeds of Sustainable Bonds will not be knowingly allocated to any business or project where most of its activities are covered by one or more of the following sectors: weapons, gambling, pornography, predatory lending and tobacco. For loans to SMEs, additional exclusions may apply in accordance with the Bank's Social Economic Loan Selection Methodology, which will be available on the Bank's website prior to the first issuance of Sustainable Bonds related to this Eligible Category.

The Bank shall select eligible businesses and eligible projects that fall within the Eligible Categories in accordance with the Framework, with evaluation and review conducted by the Bank's ESG programme officers and Sustainability Bond Committee (as described in more detail in the Framework).

The proceeds of Sustainable Bonds will be deposited in the general funding accounts of the Bank. An amount equal to the proceeds will be earmarked for allocation in a sustainability bond register (the "**Sustainability Bond Register**") (which the Bank will establish in relation to Sustainable Bonds issued by the Bank for the purpose of recording the eligible businesses and eligible projects and allocation of the proceeds from Sustainable Bonds to such eligible businesses and eligible projects) in accordance with the Framework.

The Bank intends to maintain an aggregate amount of assets relating to eligible businesses and eligible projects that is at least equal to the aggregate proceeds of all Sustainable Bonds that are outstanding from time to time. The Bank aims to fully allocate proceeds of an issue of Sustainable Bonds within a period of 18 months from issuance.

Until an amount equal to the proceeds of Sustainable Bonds has been fully allocated, such proceeds may be invested according to the Bank's normal liquidity management activities.

Within one year of the issuance of Sustainable Bonds, the Bank will publish a sustainability bond report (the "**Sustainability Bond Report**") on its website. The Sustainability Bond Report will be updated every year until complete allocation of the proceeds from the relevant Sustainable Bonds, and thereafter, as necessary in case of new developments.

The Sustainability Bond Report will contain at least the following:

- (a) Confirmation that the use of proceeds of the relevant Sustainable Bonds complies with the Framework
- (b) The amount of proceeds allocated to each Eligible Category
- (c) For each Eligible Category, one or more examples of eligible businesses and projects financed, in whole or in part, by the proceeds obtained from the relevant Sustainable Bonds, including their general details (brief description, location, stage — construction or operation)
- (d) The balance of unallocated proceeds
- (e) Impact reporting items as described in the potential indicators table of the Framework

Where feasible, the Sustainability Bond Report will include qualitative and (if reasonably practicable) quantitative environmental and social performance indicators. Performance indicators may change from year to year.

Pursuant to the Framework a second party opinion has been obtained from an appropriate second party opinion provider. The second party opinion is available on: <https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/relations-investisseurs/fonds-propres-et-dette/2020/nbc-sustainability-bond-second-opinion-2020.pdf>, and may be updated from time to time.

Further, the Bank may appoint a third party to provide an independent opinion on the management of its Sustainability Bonds issuances. For issuances covered by the Framework, the Bank will request, on an

annual basis, a limited assurance report of the proceeds of such Sustainable Bonds earmarked for the eligible businesses and eligible projects. In the unlikely event that the annual review identifies projects or businesses that do not comply with the Framework, such projects or businesses will be removed from the Sustainability Bond Register and replaced with eligible projects or eligible businesses, or these amounts will be invested in liquid instruments for future allocation.

Any websites included or referred to in this Prospectus are for information purposes only and do not form part of this Prospectus.

CERTAIN MATERIAL INCOME TAX CONSIDERATIONS

Canada

The following overview describes the principal Canadian federal income tax considerations generally applicable to an initial holder of Senior Notes who acquires, as beneficial owner, the Senior Notes, including entitlements to all payments thereunder, pursuant to this Prospectus or common shares of the Bank or any affiliate of the Bank on a Bail-in Conversion (“**Common Shares**”), and who, for the purposes of the *Income Tax Act* (Canada) and the regulations thereunder (the “**Act**”) and any applicable income tax treaty or convention, at all relevant times, (i) is not resident or deemed to be resident in Canada, (ii) deals at arm’s length with the Bank, any issuer of Common Shares and any Canadian resident (or deemed Canadian resident) to whom the holder assigns or otherwise transfers the Senior Notes, (iii) does not use or hold and is not deemed to use or hold the Senior Notes or Common Shares in or in the course of carrying on a business in Canada, (iv) does not receive any payment of interest (including any amounts deemed to be interest) on the Senior Notes in respect of a debt or other obligation to pay an amount to a person with whom the Bank does not deal at arm’s length, (v) is not and deals at arm’s length with every “specified shareholder” (as defined in sub-section 18(5) of the Act for the purposes of the “thin capitalization” rules) of the Bank, and (vi) is not an insurer carrying on an insurance business in Canada and elsewhere (a “**Non-resident Holder**”). A “specified shareholder” for these purposes generally includes a person who (either alone or together with persons with whom that person is not dealing at arm’s length for the purposes of the Act) owns or has the right to acquire or control 25% or more of a debt issuer’s shares determined on a votes or fair market value basis.

This overview is based upon the provisions of the Act in force on the date hereof, and counsel’s understanding of the current administrative policies and assessing practices of the Canada Revenue Agency published in writing prior to the date hereof. This overview takes into account all specific proposals to amend the Act publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the “**Proposed Amendments**”) and assumes that all Proposed Amendments will be enacted in the form proposed. However, no assurances can be given that the Proposed Amendments will be enacted as proposed, or at all. This overview does not otherwise take into account or anticipate any changes in law, or administrative policy or assessing practice whether by legislative, governmental, regulatory, administrative or judicial decision, action or interpretation, nor does it take into account any other federal or any provincial, territorial or foreign income tax legislation or considerations, which may differ from those discussed herein. Subsequent developments could have a material effect on the following description.

This overview is of a general nature only and is not, and is not intended to be, legal or tax advice in respect of any particular issuance of Senior Notes, the specific terms and conditions of which will be material to the Canadian federal income tax considerations with respect thereto. The Canadian federal income tax considerations may also be supplemented, amended and/or replaced in a Pricing Supplement, Drawdown Prospectus or a supplemental prospectus, based on the terms and conditions of the Senior Notes issued pursuant to such Pricing Supplement, Drawdown Prospectus or supplemental prospectus, as the case may be. If Senior Notes are otherwise issued without disclosure of Canadian federal income tax considerations, prospective investors should consult their own tax advisors.

This overview is of a general nature only and is not, and is not intended to be, legal or tax advice to any particular holder. This overview is not exhaustive of all Canadian federal income tax

considerations. Accordingly, prospective purchasers of Senior Notes should consult their own tax advisors with respect to their particular circumstances.

For purposes of the Act, all amounts relating to the acquisition, holding or disposition of Senior Notes and Common Shares not otherwise expressed in Canadian dollars must be converted into Canadian dollars based on the relevant exchange rate determined in accordance with the rules in the Act.

Interest paid or credited or deemed to be paid or credited by the Bank on a Senior Note (including amounts on account of, or in lieu of payment of, or in satisfaction of interest and amounts paid at maturity in excess of the principal amount) to a Non-resident Holder will not be subject to Canadian non-resident withholding tax, unless all or any portion of such interest (other than on a “prescribed obligation” described below) is contingent or dependent on the use of or production from property in Canada or is computed by reference to revenue, profit, cash flow, commodity price or any other similar criterion or by reference to dividends paid or payable to shareholders of any class or series of shares of the capital stock of a corporation (“**Participating Debt Interest**”). A “**prescribed obligation**” is a debt obligation the terms or conditions of which provide for an adjustment to an amount payable in respect of the obligation for a period during which the obligation was outstanding, which adjustment is determined by reference to a change in the purchasing power of money and no amount payable in respect thereof, other than an amount determined by reference to a change in the purchasing power of money, is contingent or dependent upon the use of, or production from, property in Canada or is computed by reference to any of the criteria described in the definition of Participating Debt Interest (as described above).

In the event that a Senior Note, the interest on which is not exempt from Canadian withholding tax by virtue of its terms, is redeemed, cancelled, repurchased or purchased by the Bank or any other person resident or deemed to be resident in Canada from a Non-resident Holder or is otherwise assigned or transferred by a Non-resident Holder to a person resident or deemed to be resident in Canada for an amount which exceeds, generally, the issue price thereof, the excess may be deemed to be interest and may, together with (but without any duplication of) the amount of any interest that has accrued or is deemed to have accrued on the Senior Note to that time, be subject to Canadian non-resident withholding tax if the Senior Note is not considered to be an “**excluded obligation**” for purposes of the Act. A Senior Note will be an “**excluded obligation**” for this purpose if the Senior Note is not an “**indexed debt obligation**” (as defined below) and it was issued for an amount not less than 97 per cent of its principal amount (as defined for the purposes of the Act), and the Senior Note’s yield, expressed in terms of an annual rate (determined in accordance with the Act) on the amount for which the Senior Note was issued, does not exceed 4/3 of the interest stipulated to be payable on the Senior Note, expressed in terms of an annual rate on the Senior Note’s outstanding principal amount from time to time. An “**indexed debt obligation**” is a debt obligation the terms or conditions of which provide for an adjustment to an amount payable in respect of the obligation for a period during which the obligation was outstanding that is determined by reference to a change in the purchasing power of money.

Generally, there are no other Canadian federal taxes on income (including taxable capital gains) payable by a Non-resident Holder in respect of the holding or disposition of a Senior Note including on a redemption, payment on maturity, Bail-in Conversion, cancellation or purchase.

Dividends paid or credited, or deemed under the Tax Act to be paid or credited, on Common Shares of the Bank or of any affiliate of the Bank that is a Canadian resident corporation to a Non-resident Holder will generally be subject to Canadian non-resident withholding tax at the rate of 25 per cent. on the gross amount of such dividends unless the rate is reduced under the provisions of an applicable income tax treaty or convention between Canada and the country of residence of the Non-resident Holder.

A Non-resident Holder will not be subject to tax under the Tax Act in respect of any capital gain realized on a disposition or deemed disposition of a Common Share unless the Common Share is or is deemed to be “taxable Canadian property” of the Non-resident Holder for the purposes of the Tax Act and the Non-resident Holder is not entitled to an exemption under an applicable income tax treaty or convention between Canada and the country in which the Non-resident Holder is resident.

United Kingdom

The comments below are of a general nature based on current United Kingdom law and HM Revenue & Customs published practice (which may not be binding on HM Revenue & Customs) relating principally to United Kingdom withholding tax on payments of principal and interest in respect of the Senior Notes as of the date of this document. In providing these comments, we have assumed that the Exempt Notes will be issued on the same terms as the Senior Notes which are not Exempt Notes. They do not apply to individuals, or where the income is deemed for tax purposes to be the income of any other person. They relate only to the position of persons who are the absolute beneficial owners of their Senior Notes and Coupons and may not apply to certain classes of persons such as dealers or certain professional investors to whom special rules may apply. The United Kingdom tax treatment of prospective Noteholders depends on their individual circumstances and may be subject to change in the future. Prospective Noteholders should be aware that the particular terms of issue of any Tranche may affect the tax treatment.

The following is a general guide and is not intended to be exhaustive. Prospective Noteholders who are in any doubt as to their own tax position or who may be subject to tax in a jurisdiction other than the United Kingdom should consult their professional advisors.

Senior Notes issued by the Bank's London Branch Only

The Bank's London branch may be obliged to withhold or deduct an amount in respect of United Kingdom income tax from payments of interest on the Senior Notes issued by the Bank's London branch where any such payment of interest has a United Kingdom source unless an exemption applies.

1. While the Bank's London branch continues to be a bank within the meaning of section 991 of the *Income Tax Act 2007* (the “**Act**”), and the interest on the Senior Notes is paid in the ordinary course of its business for the purposes of section 878 of the Act, interest on such Senior Notes may be paid without withholding or deduction for or on account of United Kingdom income tax.
2. Interest on the Senior Notes issued by the Bank's London branch which cannot be paid gross under paragraph 1 above, but which Senior Notes carry a right to interest and are and continue to be listed on a recognised stock exchange and admitted to trading on that recognised stock exchange within the meaning of section 1005 of the Act, may be paid without withholding or deduction for or on account of United Kingdom income tax. The Luxembourg Stock Exchange is a recognised stock exchange for these purposes. Securities will be treated as listed on the Luxembourg Stock Exchange if they are both admitted to trading on either the Regulated Market or the Euro MTF Market and officially listed in Luxembourg in accordance with provisions corresponding to those generally applicable in countries in the European Economic Area.
3. Interest on the Senior Notes issued by the Bank's London Branch may also be paid without withholding or deduction on account of United Kingdom income tax where interest on the Senior Notes is paid by the Issuer and, at the time the payment is made, the Bank reasonably believes (and any person by or through whom interest on the Senior Notes is paid reasonably believes) that the beneficial owner is within the charge to United Kingdom corporation tax as regards the payment of interest, provided that HM

Revenue & Customs has not given a direction (in circumstances where it has reasonable grounds to believe that it is likely that the beneficial owner is not within the charge to United Kingdom corporation tax in respect of such payment of interest at the time the payment is made) that the interest should be paid under deduction of United Kingdom income tax.

4. In cases where a deduction is required by law, not covered by paragraphs 1, 2 and 3 above, interest should be paid under deduction of United Kingdom income tax at the basic rate (currently 20 per cent.) subject to the availability of other relief or exemption or to any direction to the contrary from HM Revenue & Customs in respect of such relief or exemption, for example pursuant to the provisions of any applicable double taxation treaty, or in certain other circumstances.

5. The interest on the Senior Notes issued by the Bank's London branch may have a United Kingdom source and accordingly may be chargeable to United Kingdom income tax by direct assessment. Where the interest is paid without withholding or deduction, the interest will not be assessed to United Kingdom income tax in the hands of the Noteholders who are not resident in the United Kingdom, except where such persons carry on a trade, profession or vocation in the United Kingdom through a United Kingdom branch or agency, or in the case of a corporate holder, carries on a trade through a permanent establishment in the United Kingdom, in connection with which the interest is received or to which the Senior Notes are attributable, in which case (subject to exemptions for interest received by certain categories of agent) United Kingdom income tax may be levied on the United Kingdom branch or agency or permanent establishment.

6. Noteholders should note that the provisions relating to additional amounts referred to in Condition 7 of the Senior Notes would not apply if HM Revenue & Customs sought to assess directly the person entitled to the relevant interest, to United Kingdom income tax. However, exemption from or reduction of such United Kingdom income tax liability might be available under an applicable double taxation treaty.

7. Where interest has been paid under deduction of United Kingdom income tax, Noteholders who are not resident in the United Kingdom may be able to recover all or part of the tax deducted if there is an appropriate provision in an applicable double taxation treaty.

8. Where Senior Notes are to be, or may fall to be, redeemed at a premium, then, depending on the circumstances, any such element of premium may constitute a payment of interest for United Kingdom tax purposes. Any such payments of interest, subject to the exemptions described above, may be subject to United Kingdom withholding tax and reporting requirements as outlined above.

Senior Notes issued by either the Bank's London Branch and/or the Bank

1. Persons in the United Kingdom paying (i) interest to or receiving interest on behalf of another person who is an individual or (ii) amounts due on redemption of any Senior Notes which constitute deeply discounted securities as defined in Chapter 8 of Part 4 of the *Income Tax (Trading and Other Income) Act 2005* to or receiving such amounts on behalf of another person who is an individual, may be required to provide certain information (which may include the name and address of the beneficial owner of the amount payable on redemption) to HM Revenue & Customs regarding the identity of the payee or person entitled to the interest (although in this regard HM Revenue & Customs' published guidance for the years 2018/2019 through 2021/2022 indicates that HM Revenue & Customs will not exercise its power to obtain information in relation to such payments in those year(s)) and, in certain circumstances, such information may be exchanged with tax authorities in other countries, including the jurisdiction in which the Noteholder is resident for tax purposes in respect to (ii) above.

2. Noteholders who are not resident in the United Kingdom will have no United Kingdom tax liability on a disposal of the Senior Notes unless the Senior Notes are attributable to a United Kingdom branch or agency or permanent establishment through which the non-resident carries on a trade, profession or vocation in the United Kingdom.

3. Noteholders should be aware that the application of certain provisions of United Kingdom tax legislation, in particular the deeply discounted securities and loan relationships legislation, may have the effect that, where Senior Notes are issued in more than one Tranche, the tax treatment of subsequent Tranches may be different from the tax treatment of earlier Tranches.

Luxembourg

The comments below are of a general nature based on the Bank's understanding of Grand Duchy of Luxembourg law and administrative practice as of the date of this Prospectus and is subject to any change in law that may take effect after such date. The following information does not purport to be a comprehensive description of all the tax considerations which may be relevant to a decision to purchase, own or dispose of the Senior Notes. It is not intended to be, nor should it be considered to be, legal or tax advice to any particular Noteholder. It is a description of the main Luxembourg tax consequences with respect to the Senior Notes and may not include tax considerations that arise from rules of general application or that are generally assumed to be known to Noteholders. Prospective holders or beneficial owners of the Senior Notes should therefore consult their tax advisor with respect to their particular circumstances, the effects of state, local or foreign laws to which they may be subject and as to their tax position.

Please be aware that the residence concept used under the respective headings below applies for Luxembourg tax assessment purposes only. Any reference in the present section to a tax, duty, levy, impost or other charge or withholding of a similar nature refers to Luxembourg tax law and/or concepts only. Also, please note that a reference to Luxembourg income tax encompasses generally corporate income tax (*impôt sur le revenu des collectivités*), municipal business tax (*impôt commercial communal*), a solidarity surcharge (*contribution au fonds pour l'emploi*) levied at the standard combined rate of 24.94 cent., and for companies established in the City of Luxembourg as well as personal income tax levied at progressive income tax rates (*impôt sur le revenu*). Corporate taxpayers may further be subject to net wealth tax (*impôt sur la fortune*) levied on a yearly basis at the rate of 0.5 per cent. up to a taxable basis of EUR 500 million and at a reduced rate of 0.05 per cent. for the portion of the net wealth exceeding EUR 500 million, as well as other duties, levies or taxes. Corporate income tax, municipal business tax as well as the solidarity surcharge invariably apply to most corporate taxpayers resident of Luxembourg for tax purposes. Individual taxpayers are normally subject to personal income tax levied at progressive income tax rates, as well as to the solidarity surcharge, with a maximum of 45.78 per cent; in addition, Luxembourg resident individuals registered to the Luxembourg social security, may have their private estate income subject to a 1.4% dependence insurance contribution. Under certain circumstances, where an individual taxpayer acts in the course of the management of a professional or business undertaking, municipal business tax may apply as well.

Luxembourg tax residency of the Noteholders

Noteholders will not become resident, or be deemed to be resident, in Luxembourg by reason only of the holding and/or disposing of the Senior Notes, or the execution, performance, delivery, exchange and/or enforcement of the Senior Notes.

Withholding tax on interest

Luxembourg non-resident individuals

Under the Luxembourg tax law currently in effect, there is generally no withholding tax on payments of at arm's length interest and non profit participating interest (including accrued but unpaid interest) made to a Luxembourg non-resident Noteholder. There is also generally no Luxembourg withholding tax upon repayment of the principal, sale, refund or upon redemption or exchange of the Senior Notes.

Luxembourg resident individuals

Under the amended Luxembourg law dated 23 December 2005 (the "**Relibi Law**"), a 20 per cent. Luxembourg withholding tax is levied on interest payments or similar income made by Luxembourg paying agents to (or for the immediate benefit of) beneficial owners who are Luxembourg individual residents. This withholding tax also applies on accrued interest received upon disposal, redemption or repurchase of the Senior Notes. Such withholding tax will be in full discharge of personal income tax if the beneficial owner is an individual acting in the course of the management of his/her private wealth. Responsibility for the withholding of tax in application of the Relibi Law is assumed by the Luxembourg paying agent within the meaning of the Relibi Law.

In addition, pursuant to the Relibi Law, Luxembourg resident individuals acting in the course of the management of their private wealth, who are the beneficial owners of interest payments and other similar income made by a paying agent established outside Luxembourg in a Relevant Member State of the European Union or the European Economic Area can opt to self-declare and pay the 20 per cent. withholding tax on these payments (both operations are to be completed by the individuals at the latest on 31 March of the year following the tax year concerned). In such cases, the 20 per cent. levy is calculated on the same amounts as for the payments made by Luxembourg paying agents. The option for the 20 per cent. final levy must cover all interest payments made by these paying agents to the beneficial owner over the full civil year.

Taxation of Luxembourg non-resident Noteholders

Holders of Senior Notes who are Luxembourg non-residents and who have neither a permanent establishment nor a permanent representative in Luxembourg to which or whom the Senior Notes are attributable are not liable to any Luxembourg personal income tax (subject to what is stated in the withholding tax section above), whether they receive payments of principal, payments of interest (including accrued but unpaid interest), payments received upon the redemption of the Senior Notes, or realise capital gains on the sale, redemption, repurchase, disposal or exchange, in any form whatsoever, of any Senior Notes.

Holders who are non-residents of Luxembourg (who are residents in a tax treaty country) and who have a permanent establishment or a permanent representative in Luxembourg to which or whom the Senior Notes are attributable are in principle liable to Luxembourg personal income tax on any interest received or accrued, as well as any reimbursement premium received at maturity and any capital gain realised on the sale or disposal, in any form whatsoever, of the Senior Notes and have to include this income in their taxable income for Luxembourg income tax assessment purposes. Taxable gains are determined as being the difference between the sale, repurchase or redemption price and the lower of the cost or book value of the Senior Notes sold or redeemed.

Taxation of Luxembourg resident Noteholders

Luxembourg resident individuals

An individual Noteholder, acting in the course of the management of his/her private wealth, is subject to Luxembourg personal income tax at the ordinary progressive tax rates in respect of interest received, accrued but unpaid interest in case of disposal of the Senior Notes, redemption premiums or issue discounts under the Senior Notes, except if (i) a final withholding tax has been levied on such payments in accordance with the Relibi Law, or (ii) the individual Noteholder has opted for the application of the 20 per cent. levy in full discharge of income tax in accordance with the Relibi Law (see section "Withholding tax on interest" above), which applies if an interest payment has been made by a paying agent established in a Relevant Member State of the European Union (other than Luxembourg) or the European Economic Area.

Under Luxembourg domestic tax law, gains realised upon the sale, disposal or redemption of the Senior Notes, by an individual Noteholder, who is a resident of Luxembourg for tax purposes and who acts in the course of the management of his/her private wealth, are not subject to Luxembourg income tax, provided this sale or disposal took place more than six months after the acquisition of the Senior Notes and the Senior Notes do not constitute Zero Coupon Notes. Gains realised by an individual Noteholder of Zero Coupon Notes, who acts in the course of the management of his/her private wealth and who is a resident of Luxembourg for tax purposes may have to include the difference between the sale (taking place at or before maturity), repurchase, exchange or redemption price and the issue price of a Zero Coupon Notes in his/her household's taxable income.

An individual Noteholder, who acts in the course of the management of his/her private wealth and who is a resident of Luxembourg for tax purposes, may further have to include the portion of the gain corresponding to accrued but unpaid income in respect of the Senior Notes in his/her household's taxable income.

Luxembourg resident individual Noteholders acting in the course of the management of a professional or business undertaking to whom the Senior Notes are attributable, have to include any interest received or accrued, as well as any gain realised on the sale or disposal of the Senior Notes, in their household's taxable income for Luxembourg income tax assessment purposes. Taxable gains are determined as being the difference between the sale, repurchase or redemption price (including accrued but unpaid interest) and the lower of the cost or book value of the Senior Notes sold or redeemed.

Luxembourg corporate residents

Fully taxable Luxembourg corporate Noteholders, who are resident of Luxembourg for tax purposes, must include any interest received or accrued, as well as any gain realised on the sale or disposal of the Senior Notes, in their taxable income for Luxembourg income tax assessment purposes. Taxable gains are determined as being the difference between the sale, repurchase or redemption price (including accrued but unpaid interest) and the lower of the cost or book value of the Senior Notes sold or redeemed.

Luxembourg resident companies benefiting from a special tax regime

Luxembourg resident corporate Noteholders which benefit from a special tax regime, such as (i) undertakings for collective investment governed by the amended law of 17 December 2010, (ii) specialised investment funds governed by the amended law of 13 February 2007, (iii) family wealth management companies governed by the amended law of 11 May 2007, and (iv) reserved alternative investment funds treated as a specialised investment fund for Luxembourg tax purposes and governed by the law of 23 July 2016 are tax exempt entities in the Grand-Duchy of Luxembourg and thus income derived from the Senior Notes, as well as gains realised thereon, are not subject to income taxes.

Net Wealth Tax

Luxembourg resident Noteholders, as well as non-resident Noteholders who have a permanent establishment or a permanent representative in Luxembourg to which or whom the Senior Notes are attributable, are subject to Luxembourg Net Wealth Tax (*impôt sur la fortune*) on such Senior Notes, except if the Noteholder is (i) a resident or non-resident individual taxpayer, (ii) an undertaking for collective investment governed by the amended law of 17 December 2010, (iii) a securitisation company governed by the amended law of 22 March 2004, (iv) a company governed by the amended law of 15 June 2004 on venture capital vehicles, (v) a specialised investment fund governed by the amended law of 13 February 2007, (vi) a family wealth management company governed by the amended law of 11 May 2007, (vii) a professional pension institution governed by the amended law of 13 July 2005, or (viii) a reserved alternative investment fund governed by the law of 23 July 2016 .

A minimum Net Wealth Tax (“**MNWT**”) of EUR 4,500 (increased to EUR 4,815 by the 7 per cent. solidarity surcharge or the employment fund) is levied on any company whose financial assets, transferable securities and cash deposits exceed 90 per cent. of its total balance sheet and EUR 350,000. If the aforementioned threshold is not met, the amount of MNWT will depend on the total balance-sheet of the company at the closing of the preceding financial year and will then range from EUR 535 to EUR 32,100. The MNWT also applies to companies governed by the amended law of 15 June 2004 on venture capital vehicles subject to the amended law of 15 June 2004, reserved alternative investment funds subject to the law of 23 July 2016 investing exclusively in risk capital, securitisation vehicles subject to the amended law of 22 March 2004 as well as professional pension institutions governed by the amended law of 13 July 2005.

Value added tax

There is no Luxembourg value added tax payable in respect of payments exclusively in consideration for the issue of the Senior Notes or in respect of the payment of interest or principal under the Senior Notes or the price of the Senior Notes in case of a transfer of the Senior Notes.

Other Taxes

There is no Luxembourg registration tax, stamp duty or any other similar tax or duty payable in Luxembourg by Noteholders as a consequence of the issue of the Senior Notes, nor will any of these taxes be payable as a consequence of a subsequent transfer, redemption or exchange of the Senior Notes, unless the documents relating to the Senior Notes are voluntarily registered in Luxembourg or any of these documents is appended to a document (*annexé à un acte*) that must itself be legally registered or deposited in the minutes of a notary (*déposé au rang des minutes d'un notaire*).

No Luxembourg estate or inheritance tax is levied on the transfer of the Senior Notes upon death of an individual Noteholder in cases where the deceased was not a resident of Luxembourg for inheritance tax

purposes at the time of his/her death. However, where an individual Holder is a resident for inheritance tax purposes of Luxembourg at the time of his/her death, the Senior Notes are included in his/her taxable estate for inheritance tax purposes.

Luxembourg gift tax (depending on the relationship between the donor and the donee) may be due on a gift or donation of Senior Notes if embodied in a Luxembourg deed passed in front of a Luxembourg notary or if registered in Luxembourg for any other reason.

Automatic exchange of information

The European Union Savings Directive (Council Directive 2003/48/EC) has been repealed as from 1 January 2016 to prevent overlap with a new automatic exchange of information regime to be implemented under Council Directive 2011/16/EU on Administrative Cooperation in the Field of Taxation as amended by Council Directive 2014/107/EU ("**DAC II**"). DAC II establishes the Common Reporting Standard ("**CRS**") and extends the automatic exchange of information to financial account information between European Union Relevant Member States. Relationships with non-European Union countries are ruled by means of multilateral agreements. Luxembourg, as a European Union Relevant Member State, has implemented DAC II and CRS in its national legislation by the Law of 18 December 2015 (the "**CRS Law**"). The CRS Law has been in force since 1 January 2016 where Luxembourg financial institutions are required to collect and report to the Luxembourg tax authorities' information on financial accounts held directly or indirectly, by account holders that are tax residents in a CRS jurisdiction. The Luxembourg tax authorities will in turn communicate this information to the tax authorities in the country or countries in which each account holder is tax resident. Further, on 25 May 2016, the Council of the European Union adopted Directive 2016/881/EU amending Directive 2011/16/EU extending the automatic exchange of information between tax authorities (Country by Country Reporting) and on 6 December 2016, the Council of the European Union adopted Directive 2016/2258/EU amending Directive 2011/16/EU as regards access to anti-money-laundering information by tax authorities. Lastly, on 25 May 2018, the Council of the European Union adopted Directive 2018/822/EU amending council directive 2011/16/EU and imposing mandatory disclosure requirements on intermediaries and taxpayers in respect of certain reportable cross-border tax planning arrangements.

U.S. Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Code ("**FATCA**") impose a reporting regime and potentially a 30 per cent. withholding tax with respect to certain payments to (i) any non-U.S. financial institution (a "foreign financial institution", or "**FFI**" (as defined by FATCA)) that does not become a "**Participating FFI**" by entering into an agreement with the U.S. Internal Revenue Service ("**IRS**") to provide the IRS with certain information in respect of its account holders and investors or is not otherwise exempt from or in deemed compliance with FATCA (including by reason of being a Reporting FI (as defined below)) and (ii) any investor (unless otherwise exempt from FATCA) that does not provide information sufficient to determine whether the investor is a U.S. person or should otherwise be treated as holding a "United States account" of the Bank (a "**Recalcitrant Holder**"). The Bank is classified as an FFI.

The withholding regime is in effect for payments from sources within the United States and will apply to "**foreign passthru payments**" (a term not yet defined). Such withholding would not apply prior to the date that is two years after the date on which final regulations defining "foreign passthru payments" are published in the U.S. Federal Register. In addition, (a) Notes characterised as debt (or which are not otherwise characterised as equity and have a fixed term) for U.S. federal tax purposes that are issued on or prior to the date that is six months after the date on which final regulations defining "foreign passthru payments" are filed with the U.S. Federal Register, and (b) Notes that give rise to a dividend equivalent pursuant to

Section 871(m) of the Code that are executed on or prior to the date is six months after the date on which obligations of its type are first treated as giving rise to dividend equivalents, generally would be “grandfathered” for purposes of FATCA withholding unless materially modified after such date. If Senior Notes are issued on or before the grandfathering date, and additional Senior Notes of the same series are issued after that date, the additional Senior Notes may not be treated as grandfathered, which may have negative consequences for the existing Senior Notes, including a negative impact on market price.

The United States and a number of other jurisdictions have entered into intergovernmental agreements to facilitate the implementation of FATCA (each, an “**IGA**”). Pursuant to FATCA and the “Model 1” and “Model 2” IGAs released by the United States, an FFI in an IGA signatory country could be treated as a “**Reporting FI**” not subject to withholding under FATCA on any payments it receives. Further, an FFI in an IGA jurisdiction that complies with such IGA would generally not be required to withhold under FATCA or an IGA (or any law implementing an IGA) (any such withholding being “**FATCA Withholding**”) from payments it makes. Under each Model IGA, a Reporting FI would still be required to report certain information in respect of its account holders and investors to its home government or to the IRS. The United States have concluded agreements with Canada, the United Kingdom and Luxembourg respectively (the “**US-Canada IGA**”, the “**US-UK IGA**” and the “**US-Luxembourg IGA**”) based largely on the Model 1 IGA.

If the Bank is treated as a Reporting FI pursuant to the US-Canada IGA, the US-UK IGA or the US-Luxembourg IGA, it does not anticipate that it will be obliged to deduct any FATCA Withholding on payments it makes. There can be no assurance, however, that the Bank will be treated as a Reporting FI, or that it would in the future not be required to deduct FATCA Withholding from payments it makes. Accordingly, the Bank and financial institutions through which payments on the Senior Notes are made may be required to withhold FATCA Withholding if (i) any FFI through or to which payment on such Senior Notes is made is not a Participating FFI, a Reporting FI, or otherwise exempt from or in deemed compliance with FATCA or (ii) an investor is a Recalcitrant Holder.

Whilst the Senior Notes are in global form and held within the ICSDs, it is expected that FATCA will not affect the amount of any payments made under, or in respect of, the Senior Notes by the Bank, any paying agent and the common depositary, given that each of the entities in the payment chain between the Bank and the participants in the ICSDs is a major financial institution whose business is dependent on compliance with FATCA and that any alternative approach introduced under an IGA will be unlikely to affect the Senior Notes. The documentation expressly contemplates the possibility that the Senior Notes may go into definitive form and therefore that they may be taken out of the ICSDs. If this were to happen, then a non-FATCA compliant holder could be subject to FATCA Withholding. However, definitive Senior Notes will only be printed in remote circumstances.

FATCA is particularly complex and some aspects of its application are uncertain at this time. The above description is based in part on regulations, official guidance and model IGAs, all of which are subject to change or may be implemented in a materially different form. Prospective investors should consult their tax advisers on how these rules may apply to the Bank and to payments they may receive in connection with the Senior Notes.

Section 871(m) of the Code

Section 871(m) of the Code treats a “dividend equivalent” payment as a dividend from sources within the United States that is generally subject to a 30% U.S. withholding tax which may be reduced by an applicable tax treaty, eligible for credit against other U.S. tax liabilities or refunded, provided that the beneficial owner timely claims a credit or refund from the IRS. A “dividend equivalent” payment is (i) a substitute dividend

payment made pursuant to a securities lending or a sale-repurchase transaction that (directly or indirectly) is contingent upon, or determined by reference to, the payment of a dividend from sources within the United States, (ii) a payment made pursuant to a “specified notional principal contract” that (directly or indirectly) is contingent upon, or determined by reference to, the payment of a dividend from sources within the United States, and (iii) any other payment determined by the IRS to be substantially similar to a payment described in (i) or (ii). U.S. Treasury regulations issued under Section 871(m) and applicable guidance (“**Section 871(m) Regulations**”) require withholding on certain non-U.S. holders of the Notes with respect to amounts treated as dividend equivalent payments. Under the Section 871(m) Regulations, only a Note that has an expected economic return sufficiently similar to that of the underlying U.S. security based on tests set forth in the Section 871(m) Regulations, will be subject to the Section 871(m) withholding regime (making such security a “**Specified Note**”). Certain exceptions to this withholding requirement apply, in particular for instruments linked to certain broad-based indices.

The Section 871(m) Regulations will generally apply to Specified Notes, which are Notes that meet the relevant tests and (a) for Notes that have a “delta” of one, are issued on or after January 1, 2017 and (b) for any other Notes, are issued on or after January 1, 2023. Delta is generally defined as the ratio of the change in the fair market value of a financial instrument to a small change in the fair market value of the number of shares of the underlying U.S. security. If the terms of a Note are subject to a “significant modification” (as defined for U.S. tax purposes), the Notes generally would be treated as retired and reissued on the date of such modification for purposes of determining, based on economic conditions in effect at that time, whether such Note is a Specified Note. Similarly, if additional Notes of the same series are issued (or deemed issued for U.S. tax purposes, such as certain sales of Notes out of inventory) after the original issue date, the IRS could treat the issue date for determining whether the existing Notes are Specified Notes as the date of such subsequent sale or issuance. Consequently, a previously out of scope Note might be treated as a Specified Note following such modification or further issuance.

Withholding in respect of dividend equivalents will generally be required when cash payments are made on a Specified Note or upon the date of maturity, lapse or other disposition of, the Specified Note. If the underlying U.S. security or securities are expected to pay dividends during the term of the Specified Note, withholding generally will still be required even if the Specified Note does not provide for payments explicitly linked to dividends. Additionally, the Issuer may withhold the full 30% tax on any payment on the Specified Notes in respect of any dividend equivalent arising with respect to such Specified Notes regardless of any exemption from, or reduction in, such withholding otherwise available under applicable law (including, for the avoidance of doubt, where a non-U.S. holder is eligible for a reduced tax rate under an applicable tax treaty with the United States). A non-U.S. holder may be able to claim a refund of any excess withholding provided the required information is timely furnished to the U.S. Internal Revenue Service. Refund claims are subject to U.S. tax law requirements and there can be no assurance that a particular refund claim will be timely paid or paid at all. If the Issuer or any withholding agent determines that withholding is required, neither the Issuer nor any withholding agent will be required to pay any additional amounts with respect to amounts so withheld.

In addition, payments on the Specified Notes may be calculated by reference to dividends on underlying U.S. securities that are reinvested. In such case, in calculating the relevant payment amount, the holder will be deemed to receive, and the Issuer will be deemed to withhold, 30% of any dividend equivalent payments (as defined in Section 871(m) of the Code) in respect of the relevant U.S. securities. The Issuer will not pay any additional amounts to the holder on account of the Section 871(m) amount deemed withheld.

The applicable Pricing Supplement will indicate whether the Issuer has determined that Notes are Specified Notes and will specify contact details for obtaining additional information regarding the application of Section 871(m) to Notes. A non-U.S. holder of Specified Notes should expect to be subject to withholding in respect of any dividend-paying U.S. securities underlying those Notes. The Issuer's determination is binding on non-U.S. holders of the Notes, but it is not binding on the IRS. The Section 871(m) Regulations require complex calculations to be made with respect to Notes linked to U.S. securities and their application to a specific issue of Notes may be uncertain.

Prospective investors should consult their tax advisers regarding the potential application of Section 871(m) to the Notes.

The Proposed Financial Transactions Tax

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common financial transactions tax ("**FTT**") in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in Senior Notes (including secondary market transactions) in certain circumstances. Primary market transactions referred to in Article 5(c) of Regulation (EC) No 1287/2006 are expected to be exempt.

Under the Commission's Proposal the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in Senior Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional European Union Member States may decide to participate.

Prospective Noteholders are advised to seek their own professional advice in relation to the FTT.

SUBSCRIPTION AND SALE

Subject to the terms and conditions contained in an amended and restated Dealer Agreement dated as of 15 June 2022 (the “**Dealer Agreement**” which expression shall include any amendment or supplements thereto or restatements thereof) between the Bank and the Permanent Dealers, the Senior Notes will be offered on a continuous basis by the Bank to the Permanent Dealers, however the Bank has reserved the right to sell Senior Notes directly on its own behalf to Dealers which are not Permanent Dealers. The Senior Notes may be resold at prevailing market prices, or at prices related thereto, at the time of such resale, as determined by the relevant Dealer(s). The Senior Notes may also be sold by the Bank through the Dealers, acting as agents of the Bank. The Dealer Agreement also provides for Senior Notes to be issued in syndicated Tranches which are solidarily (the Québec civil law concept similar to joint and several liability) underwritten by two or more Dealers and that the obligation of any Dealer to subscribe for Senior Notes under any such agreement is subject to certain conditions and that, in certain circumstances, a Dealer shall be entitled to be released and discharged from its obligations under any such agreement prior to the issue of the relevant Senior Notes. Senior Notes may also be offered directly to persons other than Dealers.

The Bank will pay each relevant Dealer a commission depending upon maturity in respect of Senior Notes subscribed or procured for subscription by it. The Bank has agreed to reimburse the Dealers for certain of their expenses incurred in connection with the establishment of the Programme and the issue of Senior Notes under the Programme.

The Dealer Agreement also provides that Dealers shall not be bound by any of the restrictions relating to any specific jurisdiction (set out below) to the extent that such restrictions shall, as a result of change(s) or change(s) in official interpretation, after the date hereof, in applicable laws and regulations, no longer be applicable but without prejudice to the obligations of the Dealers described in the paragraph below headed “General”.

The Bank has agreed to indemnify the Dealers against certain liabilities in connection with the offer and sale of the Senior Notes. The Dealer Agreement may be terminated in relation to all the Dealers or any of them by the Bank or, in relation to itself and the Bank only, by any Dealer, at any time on giving not less than 10 business days’ notice.

Persons into whose hands this Prospectus or any Final Terms, Pricing Supplement or Drawdown Prospectus comes are required by the Bank, the Arrangers and the Dealers to comply with all applicable laws and regulations in each country or jurisdiction in or from which they purchase, offer, sell or deliver Senior Notes or have in their possession or distribute such offering material, in all cases at their own expense.

Other relationships

Certain of the Dealers and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for, the Issuer in the ordinary course of business.

Certain of the Dealers and their affiliates may have positions, deal or make markets in the Senior Notes issued under the Programme, related derivatives and reference obligations, including (but not limited to) entering into hedging strategies on behalf of the Bank or any of its affiliates, investor clients, or as principal in order to manage their exposure, their general market risk, or other trading activities.

In addition, in the ordinary course of their business activities, the Dealers and/or their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative

securities) and financial instruments (including bank loans) for their own account or for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Bank or Bank's affiliates. Certain of the Dealers or their affiliates that have a lending relationship with the Bank routinely hedge their credit exposure to the Bank consistent with their customary risk management policies. Typically, such Dealers and/or their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Senior Notes issued under the Programme. The Dealers and/or their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

United States

Regulation S, Category 2 will apply and TEFRA D will apply, unless TEFRA C are specified as applicable in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement or the TEFRA rules are specified as not applicable in the applicable Final Terms or (in the case of Exempt Notes) applicable Pricing Supplement.

The Senior Notes have not been and will not be registered under the *United States Securities Act of 1933*, as amended (the “**Securities Act**”) or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from or not subject to the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

Senior Notes in bearer form having a maturity of more than one year are subject to United States tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a U.S. person, except in certain transactions permitted by United States tax regulations. Terms used in this paragraph have the meanings given to them by the United States Internal Revenue Code of 1986 and regulations promulgated thereunder.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that, except as permitted by the Dealer Agreement, it will not offer, sell or deliver the Senior Notes of any identifiable Tranche, (i) as part of their distribution at any time or (ii) otherwise until 40 days after completion of the distribution of such Tranche (as determined, and certified to the Bank, by the Fiscal Agent, or in the case of Senior Notes issued on a syndicated basis, the Lead Manager(s)) within the United States or to, or for the account or benefit of, U.S. persons except in accordance with Regulation S of the Securities Act, it will not engage in any directed selling efforts with respect to the Senior Notes of any Tranche, except in accordance with Regulation S of the Securities Act and it will have sent to each dealer to which it sells Senior Notes during the restricted period a confirmation or other notice setting forth the restrictions on offers and sales of the Senior Notes within the United States or to, or for the account or benefit of, U.S. persons.

In addition, until 40 days after the commencement of the offering, an offer or sale of Senior Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

Each issuance of Exempt Notes that are Index Linked Notes and Dual Currency Notes will be subject to such additional United States selling restrictions as the Bank and the relevant Dealer may agree, as specified in the applicable Pricing Supplement. Each Dealer will be required to agree that it will offer, sell or deliver such Senior Notes only in compliance with such additional United States selling restrictions.

Canada

No prospectus in relation to the Senior Notes has been filed with the securities regulatory authority in any province or territory of Canada. The Senior Notes have not been, and will not be, qualified for sale under the securities laws of Canada or any province or territory of Canada. 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 distributed, and that it will not offer, sell or distribute, any Senior Notes, directly or indirectly, in Canada or to, or for the benefit of, any resident thereof (i) without the prior written consent of the Bank; and, (ii) if such consent is granted, in contravention of the securities laws of Canada or any province or territory of Canada. Senior Notes offered in Canada may be subject to additional Canadian selling restrictions as the Bank and the relevant Dealer may agree. Each Dealer will be required to agree that it will offer, sell or distribute such Senior Notes only in compliance with such additional Canadian selling restrictions and only pursuant to an exemption from the requirement to file a prospectus in the province or territory of Canada in which such offer, sale or distribution is made. Each Dealer has agreed, and each further Dealer appointed under the Programme will be required to agree, not to distribute or deliver this Prospectus, or any other offering material or advertisement relating to the Senior Notes, in Canada (i) without the prior written consent of the Bank; and, (ii) if such consent is granted, in contravention of the securities laws of any province or territory of Canada.

EEA - Prohibition of Sales to EEA Retail Investors

Unless the Final Terms (or Pricing Supplement, as the case may be) in respect of any Senior Notes specifies the “Prohibition of Sales to EEA Retail Investors” as “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 Senior Notes which are the subject of the offering contemplated by this Prospectus as completed by the Final Terms (or Pricing Supplement, as the case may be) in relation thereto to any retail investor in the EEA. 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 (EU) 2016/97 (as amended) 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 Prospectus Regulation (as defined below); and
- (b) the expression an “**offer**” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Senior Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Senior Notes.

If the Final Terms (or Pricing Supplement, as the case may be) in respect of any Senior Notes specifies “Prohibition of Sales to EEA Retail Investors” is “Not Applicable” in relation to each Member State of the EEA (each, a “**Relevant Member State**”), 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 Senior Notes which are the subject of the offering contemplated by this Prospectus as completed by the applicable Final Terms in relation thereto to the public in that Relevant Member State except that it may make an offer of such Senior Notes to the public in that Relevant Member State:

- (a) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (b) at any time to fewer than 150 natural or legal persons (other than qualified investors, as defined in the Prospectus Regulation) subject to obtaining the prior consent of the relevant Dealer(s) nominated by the Bank for any such offer;
- (c) at any time if the denomination per Senior Note being offered amounts to at least €100,000; or
- (d) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Senior Notes referred to in (a) to (d) above shall require the Bank or any Dealer(s) to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “**offer of Senior Notes to the public**” in relation to any Senior Notes in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Senior Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Senior Notes and the expression “**Prospectus Regulation**” means Regulation (EU) 2017/1129 (as amended).

UK - Prohibition of Sales to UK Retail Investors

Unless the Final Terms (or Pricing Supplement, as the case may be) in respect of any Senior Notes specifies “Prohibition of Sales to UK Retail Investors” as “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 Senior Notes which are the subject of the offering contemplated by this Prospectus as completed by the Final Terms (or Pricing Supplement, as the case may be) in relation thereto to any retail investor in the UK. 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 domestic law of the UK 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 (as amended), 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 domestic law of the UK by virtue of the EUWA; or
 - (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation; and
- (b) the expression an “**offer**” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Senior Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Senior Notes.

If the Final Terms (or Pricing Supplement, as the case may be) in respect of any Senior Notes specifies “Prohibition of Sales to UK Retail Investors” as “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 made and will not make an offer of Senior Notes which are the subject of the offering contemplated by this Prospectus as completed by the Final Terms in relation thereto to the public in the UK except that it may make an offer of such Senior Notes to the public in the UK:

- (a) at any time to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;
- (b) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation) in the UK subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Bank for any such offer; or
- (c) at any time in any other circumstances falling within section 86 of the FSMA,

provided that no such offer of Senior Notes referred to in (a) to (c) above shall require the Bank 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 Notes to the public**” in relation to any Senior Notes means the communication in any form and by any means of sufficient information on the terms of the offer and the Senior Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Senior Notes and the expression “**UK Prospectus Regulation**” means Regulation (EU) 2017/1129 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA.

Selling Restrictions Addressing Additional UK Securities Laws

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

- (i) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any 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 Senior Notes in circumstances in which section 21(1) of the FSMA would not, if the Bank was not an authorised person apply to the Bank; and
- (ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to such Senior Notes in, from or otherwise involving the UK.

Republic of France

This Prospectus is not required to be and has not been submitted to the clearance procedure of the Autorité des marchés financiers in France.

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, directly or indirectly, Senior Notes to the public in France (other than to qualified investors as defined below), and it has not distributed or caused to be distributed and will not distribute or cause to be distributed to the public in France (other than qualified investors as defined below), the Prospectus, the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement or any other offering material relating to the Senior Notes, and that such offers, sales and distributions have been and will be made in France pursuant to Article L. 411-2 1° of the French *Code monétaire et financier* only to qualified investors (*investisseurs qualifiés*), other than individuals, as defined in Article 2 of the Prospectus Regulation and Article L.411-2 of the French *Code monétaire et financier*.

Selling Restrictions with respect to German Registered Notes

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that this document cannot be construed as a prospectus for German Registered Notes neither in accordance with the Prospectus Regulation nor under German national laws. Pursuant to Section 2 para. 1 No. 3.c) of the German Capital Investment Act (*Vermögensanlagengesetz*), German Registered Notes will only be offered at a minimum price of at least €200,000 per German Registered Note per investor and provided such investor meets the criteria laid down in Section I (1) (a), (d) (e) or (f) of Annex II to MiFID II.

Italy

The offering of any Senior Notes has not been registered pursuant to Italian securities legislation and, accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that no Senior Notes have been offered, sold or delivered, and will not be offered, sold or delivered, nor may copies of the Prospectus or any other document relating to the Senior Notes be distributed in the Republic of Italy ("**Italy**") except:

- (1) to "**qualified investors**" (*investitori qualificati*) pursuant to Article 2 of the Prospectus Regulation and any applicable provision of Legislative Decree No. 58 of 24 February 1998, as amended (the "**Financial Services Act**") and/or Italian CONSOB regulation; or
- (2) in any other circumstances which are exempted from the rules on public offerings pursuant to Article 1 of the Prospectus Regulation, Article 34-ter of CONSOB Regulation No. 11971 of May 14, 1999, as amended from time to time, and the applicable Italian laws.

Any offer, sale or delivery of any Senior Notes or distribution of copies of the Prospectus and any supplement thereto or any other document relating to the Senior Notes in Italy under (1) or (2) above must:

- (a) be made by investment firms, banks or financial intermediaries permitted to conduct such activities in 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 (the "**Banking Act**"); and
- (b) 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, as amended from time to time) and/or other Italian authority.

Please note that in accordance with Article 100-bis of the Financial Services Act, to the extent it is applicable, where no exemption from the rules on public offerings applies, the subsequent distribution of the Senior Notes on the secondary market in Italy must be made in compliance with 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 Senior Notes being declared null and void and in the liability of the intermediary transferring the financial instruments for any damages suffered by the investors.

The Netherlands

Each Dealer has represented and agreed, and each other Purchaser 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 the Senior Notes in The Netherlands, other than to qualified investors, as defined in the Prospectus Regulation.

In addition to the above, if the Issuer issues Zero Coupon Notes and these Zero Coupon Notes are offered in the Netherlands as part of their initial distribution or immediately thereafter:

- (a) transfer and acceptance of such Zero Coupon Notes may only take place either by and between individuals not acting in the course of their profession or business or through the mediation of either a permit holder (*Toegelaten Instelling*) of Euronext Amsterdam N.V. or the Bank itself in accordance with the Savings Certificate Act of 21 May 1985 (*Wet inzake Spaarbewijzen*); and
- (b) certain identification requirements in relation to the issue and transfer of, and payment on the Zero Coupon Notes have to be complied with pursuant to section 3a of the Savings Certificate Act;

Furthermore, unless such Zero Coupon Notes qualify as commercial paper or certificates of deposit and the transaction is carried out between professional lenders and borrowers:

- (a) (i) each transaction concerning such Zero Coupon Notes must be recorded in a transaction note, stating the name and address of the other party to the transaction, the nature of the transaction and details, including the number and serial number of the Zero Coupon Notes concerned;
- (b) (ii) the obligations referred to under (a) above must be indicated on a legend printed on Zero Coupon Notes that are not listed on a stock market; and
- (c) (iii) any reference to the words “to bearer” in any documents or advertisements in which a forthcoming offering of Zero Coupon Notes is publicly announced is prohibited.

For purposes of this paragraph, “**Zero Coupon Notes**” are Notes to bearer in definitive form that constitute a claim for a fixed sum of money against the Bank and on which interest does not become due prior to maturity or on which no interest is due whatsoever.

Switzerland

- (a) Unless otherwise stated in a Pricing Supplement in respect of Exempt Notes and subject to paragraph (b), (i) the Notes may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act (as amended, the "**FinSA**"), (ii) no application has or will be made to admit the Notes to trading on any trading venue (exchange or multilateral trading facility) in Switzerland, (iii) neither this Prospectus nor in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement any other offering or marketing material relating to the Notes constitutes a prospectus pursuant to the FinSA, and (iv) neither this Prospectus nor the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland; and
- (b) The Bank and the relevant Dealer(s) may agree in respect of any Notes that (i) such Notes may be publicly offered in Switzerland within the meaning of FinSA, and/or (ii) an application may be made by or on behalf of the Issuer to admit such Notes on a trading venue (exchange or multilateral trading facility) in Switzerland, provided that the Bank and the relevant Dealers comply with the applicable requirements of the FinSA in connection with such public offering and/or application for admission to trading, including, without limitation, any requirement to prepare and publish a prospectus in accordance with FinSA, and the listing rules of the relevant trading venue in Switzerland.

PRC

Each Dealer has represented and agreed, and each other Purchaser will be required to represent and agree, that:

- (a) the Notes are not being and may not be offered or sold, directly or indirectly, in the PRC (for such purpose, not including the Hong Kong and Macau Special Administrative Regions or Taiwan) except as permitted by the laws of the PRC;
- (b) this Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any Notes in the PRC to any person to whom it is unlawful to make the offer or solicitation in the PRC;
- (c) no action has been taken by the Issuer or the Dealers which would permit a public offering of any Notes; and
- (d) neither this Prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except as permitted by the laws of the PRC.

Each Purchaser shall be responsible for obtaining all relevant government regulatory approvals/licences, verification and/or registrations themselves, including, but not limited to, any which may be required from the relevant PRC authorities, and complying with all relevant PRC regulations, including, but not limited to, all relevant foreign exchange regulations and/or outbound investment regulations.

Hong Kong

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 Senior Notes (except for Senior Notes which are “structured products” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the “SFO”)) other than (i) “professional investors” as defined in the SFO and any rules made under the SFO; or (ii) 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 (the “C(WUMP)O”) or which do not constitute an offer to the public within the meaning of the C(WUMP)O; 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 Senior Notes, 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 Senior Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made under the SFO.

Japan

No registration pursuant to Article 4, Paragraph 1 of the *Financial Instruments and Exchange Act of Japan* (Law No. 25 of 1948, as amended) (the “FIEA”) has been made or will be made with respect to the Senior Notes. 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 or sell any Senior Notes, directly or indirectly, in Japan or to, or for the benefit of, any Resident of Japan (as defined under Article 6, Item 5 of the Foreign Exchange and Foreign Trade Act of Japan (Act No. 228 of 1949 of Japan, as amended)), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any Resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise under circumstances which will result in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan promulgated by the relevant Japanese governmental and regulatory authorities and in effect at the relevant time.

Singapore

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that this Prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. 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 offered or sold any Senior Notes or caused the Senior Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Senior Notes or cause the Senior Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Senior Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A Securities and Futures Act 2001 (2020 Revised Edition) of Singapore, as modified or amended from time to time (the “SFA”)) pursuant to Section 274 of the SFA, (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 the Senior Notes 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 Section 4A of 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 or securities-based derivatives contracts (each term 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 Senior Notes 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)(i)(B) 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.

Unless otherwise stated in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, all Senior Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded 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).

Belgium

Other than in respect of Senior Notes for which "Prohibition of Sales to Belgian Consumers" is specified as "Not Applicable" in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that an offering of Senior Notes may not be advertised to any individual in Belgium qualifying as a consumer within the meaning of Article I.1 of the Belgian Code of Economic Law, as amended from time to time (a "**Belgian Consumer**"), and that it has not offered, sold or resold, transferred or delivered, and will not offer, sell, resell, transfer or deliver, the Senior Notes, and that it has not distributed, and will not distribute, any prospectus memorandum, information circular, brochure or any similar documents in relation to the Senior Notes, directly or indirectly, to any Belgian Consumer.

General

No action has been or will be taken by the Bank, the Arrangers or the Dealers which would permit a public offering of the Senior Notes, or distribution of this Prospectus or of any other offering material in any jurisdiction where action for that purpose is required. The Dealer Agreement provides that each Dealer will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in each jurisdiction in which it purchases, offers, sells or delivers Senior Notes or has in its possession or distributes the Prospectus or any offer or offering material, in all cases at its own expense.

Selling restrictions may be supplemented or modified with the agreement of the Bank. Any such supplement or modification may be set out in a supplement to this Prospectus, a Drawdown Prospectus or, in the case of Exempt Notes, the applicable Pricing Supplement.

FORM OF FINAL TERMS

This form of Final Terms is for use in connection with the issue of Senior Notes other than Exempt Notes.

[MiFID II PRODUCT GOVERNANCE / TARGET MARKET - Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Senior Notes has led to the conclusion that: (i) the target market for the Senior Notes 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 Senior Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Senior Notes (a "distributor") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Senior Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[UK MiFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Senior Notes has led to the conclusion that: (i) the target market for the Senior Notes is only eligible counterparties, as defined in the Financial Conduct Authority (the "FCA") Handbook Conduct of Business Sourcebook ("COBS"), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018 ("UK MiFIR"); and (ii) all channels for distribution of the Senior Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Senior Notes (a "UK distributor") should take into consideration the manufacturer['s/s'] target market assessment; however, a UK 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 Senior Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS - The Senior Notes 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 (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 [MiFID II / Directive 2014/65/EU (as amended, "MiFID II")]; (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended), 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 Regulation (EU) 2017/1129 (the "Prospectus Regulation"). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Senior Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Senior Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]¹

[PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Senior Notes 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 UK. For these purposes, a retail investor means a person who

¹ Legend to be included on front of the Final Terms if the Senior Notes potentially constitute "packaged" products and no key information document will be prepared or the Issuer wishes to prohibit offers to EEA retail investors for any other reason, in which case the selling restriction should be specified to be "Applicable".

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 domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018, as amended (“EUWA”); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act (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 domestic law of the UK by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA (the “UK PRIIPs Regulation”) for offering or selling the Senior Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Senior Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]²

[NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT 2001 (2020 REVISED EDITION) OF SINGAPORE, as modified or amended from time to time (the “SFA”) - In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the “CMP Regulations 2018”), the Issuer has determined the classification of the Notes as capital market products other than prescribed capital markets products (as defined in the CMP 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).]³⁴

[THESE SENIOR NOTES ARE SUBJECT TO CONVERSION IN WHOLE OR IN PART – BY MEANS OF A TRANSACTION OR SERIES OF TRANSACTIONS AND IN ONE OR MORE STEPS – INTO COMMON SHARES OF NATIONAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE *CANADA DEPOSIT INSURANCE CORPORATION ACT* (“CDIC ACT”) AND TO VARIATION OR EXTINGUISHMENT IN CONSEQUENCE AND SUBJECT TO THE APPLICATION OF THE LAWS OF THE PROVINCE OF QUÉBEC AND THE FEDERAL LAWS OF CANADA APPLICABLE THEREIN IN RESPECT OF THE OPERATION OF THE CDIC ACT WITH RESPECT TO THE SENIOR NOTES.]

² Legend to be included on front of the Final Terms if the Senior Notes potentially constitute “packaged” products and no key information document will be prepared or the Issuer wishes to prohibit offers to UK retail investors for any other reason, in which case the selling restriction should be specified to be “Applicable”.

³ Relevant Dealer(s) to consider whether it/they have received the necessary product classification from the Issuer prior to the launch of the offer, pursuant to Section 309B of the SFA.

⁴ Notice to be added if the Notes is not “prescribed capital markets products”, pursuant to Section 309B of the SFA.

Final Terms dated []



NATIONAL BANK OF CANADA

(A bank governed by the Bank Act (Canada))

(LEI: BSGEFEIOM18Y80CKCV46)

Issue of [Aggregate Nominal Amount of Tranche] [Title of Senior Notes]
(the “Notes”) under a US\$10,000,000,000 Euro Note Programme
[by the [London Branch] [Montréal Branch] of National Bank of Canada]
(the “Bank”)

PART A - CONTRACTUAL TERMS

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Prospectus dated 15 June 2022 [and the supplement(s) to it dated [●] which [together] constitute[s] a base prospectus ([the Prospectus as so supplemented,] the “**Prospectus**”) for the purposes of the Prospectus Regulation. As used herein, “**Prospectus Regulation**” means Regulation (EU) 2017/1129 (as amended). This document constitutes the Final Terms of the Notes described herein for the purposes of the Prospectus Regulation and must be read in conjunction with the Prospectus. Full information on the Bank and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Prospectus. The Prospectus is available for viewing during normal business hours and copies may be obtained at the registered office of the Bank, 4th Floor, 600 de La Gauchetière Street West, Montréal, Québec, H3B 4L2, Canada, and at the office of the Fiscal Agent, Transfer Agent and Calculation Agent, Citibank, N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom. The Prospectus has been published on the website of the Luxembourg Stock Exchange at www.bourse.lu.]

[The following alternative language applies if the first tranche of an issue which is being increased was issued under a Prospectus with an earlier date.]

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Prospectus dated [15 June 2021 / 11 June 2020 / 6 June 2019] [which are incorporated by reference in the Prospectus dated 15 June 2022. This document constitutes the Final Terms of the Notes described herein for the purposes of Article 8 of the Prospectus Regulation and must be read in conjunction with the Prospectus dated 15 June 2022 [and the supplement(s) to it dated [●], which [together] constitute[s] a base prospectus for the purposes of the Prospectus Regulation (the Prospectus as so supplemented, the “**Prospectus**”), save in respect of the Conditions which are extracted from the Prospectus dated [15 June 2021 / 11 June 2020 / 6 June 2019] [and the supplement(s) to it dated [●]. As used herein, “**Prospectus Regulation**” means Regulation (EU) 2017/1129 (as amended or superseded). Full information on the Bank and the offer of the Notes is only available on the basis of the combination of these Final Terms, the Prospectus [and the supplement(s) to it dated [●]. The Prospectus has been published on the website of the Luxembourg Stock Exchange at www.bourse.lu.]

8. Interest Basis:
(Condition 4)
- [[] per cent. Fixed Rate Note]
[subject to change as indicated in paragraph 9 below]
[[] per cent. to be reset on [] [and []] and every
[] anniversary thereafter Fixed Rate Reset]
[SONIA] [SOFR] [€STR] [] month [[currency]]
[EURIBOR] [CMS] [SARON]] [] +/- [] per cent.
Floating Rate Note]
[subject to change as indicated in paragraph 9 below]
[Zero Coupon Note]
[Range Accrual Note]
[CMS Linked Note]
(further particulars specified below)
9. Change of Interest Basis:
(Condition 4)
- [Not Applicable] [For the period from (and including) the
Interest Commencement Date, up to (but excluding) []
paragraph [14/15] applies and for the period from (and
including) [] up to (and including) the Maturity Date,
paragraph [14/15] applies.
10. Redemption / Payment
Basis:
(Condition 5)
- Subject to early redemption or purchase, redemption at [par]
[] on the Maturity Date
11. Put/Call Options:
(Condition 5)
- [Not Applicable]
[Noteholder Put] (Noteholders' Put not applicable to Bail-inable
Notes)
[Issuer Call]
[(further particulars specified below)]
12. Date [Board] approval for
issuance of Notes obtained:
(Condition 3)
- [] [and [], respectively] [Not Applicable]
13. Bail-inable Notes:
(Condition 3)
- [Yes] [No]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

14. **Fixed Rate Note Provisions** [Applicable] [Applicable from [] [Not
(Condition 4) Applicable]
*(If not applicable, delete the remaining sub-paragraphs
of this paragraph)*
- (i) Fixed Rate[(s)] of Interest: [] per cent. per annum payable in arrear on
each Interest Payment Date
- (ii) Interest Payment Date(s): [] [and []] in each year up to and
including the Maturity Date, commencing [],
subject to adjustment [for payment day purposes only]
[payment day and interest accrual purposes] in
accordance with the Business Day Convention set out
in (iii) below]
- (iii) Business Day
Convention: [Floating Rate Convention/Following Business Day
Convention/Modified Following Business Day
Convention/ Preceding Business Day Convention] [No
Adjustment]
- (iv) Additional Business
Centre(s): [] [TARGET2] [Not Applicable]
- (v) Fixed Coupon
Amount[(s)]: [[] per [] Calculation Amount] [Not Applicable]
- (vi) Broken Amount(s): [] per Calculation Amount, payable on the Interest
Payment Date falling in/on [] [Not Applicable]
- (vii) Day Count Fraction: [Actual/Actual (ICMA)] [30/360] [30E/360] [Actual/365
(Fixed)]
- (viii) Determination Dates: [[] in each year] [Not Applicable]
- (ix) Calculation Agent: [[] shall be the Calculation Agent] [Not
Applicable]
- (x) Range Accrual: [Applicable] [Not Applicable]
*(If not applicable, delete the remaining sub-paragraphs
of this paragraph)*
- Single Range Accrual
Note: [Applicable] [Not Applicable]
- Single Range Accrual
Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON]
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [month[s]] [year[s]]
- Screen Page: []
- Relevant Time: [] [As specified in Condition 4(d)]
- Relevant Financial
Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- CMS Spread: [Applicable] [Not Applicable]
- First Reference Rate: CMS
 - Specified Currency: [] [As set out in item 2 above]
 - Specified Maturity: [] [months[s]] [year[s]]
 - Screen Page: []
 - Relevant Time: []
 - Relevant Financial Centre: []
- Second Reference Rate: CMS
 - Specified Currency: [] [As set out in item 2 above]
 - Specified Maturity: [] [months[s]] [year[s]]
 - Screen Page: []
 - Relevant Time: []
 - Relevant Financial Centre: []
- CMS Spread:
- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- Floor: [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
[[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- Dual Range Accrual Note: [Applicable][Not Applicable]
- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON]
 - Specified Currency: [] [As set out in item 2 above]
 - Specified Maturity: [] [month[s]] [year[s]]
 - Screen Page: []
 - Relevant Time: [] [As specified in Condition 4(d)]
 - Relevant Financial Centre: []
- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]
- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [CMS Spread] [SOFR] [€STR] [SARON]
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [month[s]] [year[s]]
- Screen Page: []
- Relevant Time: [] [As specified in Condition 4(d)]
- Relevant Financial Centre: []
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]
- CMS Spread: [Applicable] [Not Applicable]
- First Reference Rate: CMS
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [months[s]] [year[s]]
- Screen Page: []
- Relevant Time: []
- Relevant Financial Centre: []
- Second Reference Rate: CMS
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [months[s]] [year[s]]
- Screen Page: []
- Relevant Time: []

- Relevant Financial Centre: []
- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]]
15. **Fixed Rate Reset Note Provisions⁵** [Applicable] [Applicable from []] [Not Applicable]
(Condition 4)
- (If not applicable, delete the remaining sub-paragraphs of this paragraph)*
- (i) Initial Rate of Interest: [] per cent. per annum [payable [annually/semi annually/quarterly/monthly] in arrear]
- (ii) Interest Payment Date(s): [] [and [] in each year [from and including [] [until and excluding []]]
- (iii) First Reset Date: []
- (iv) Second Reset Date: []/Not Applicable]
- (v) Anniversary Date: []/Not Applicable]
- (vi) Reset Determination Dates: []
- (vii) Reset Rate: [[Semi-annual]][Annualised]][Mid-Swap Rate]
[Benchmark Gilt Rate]][Reference Bond]
- (viii) Screen Page: []/[Not Applicable]
- (ix) Margin(s): [+/-] [] per cent. per annum
- (x) Fixed Coupon Amount[(s)] in respect of the period from (and including) the Interest Commencement Date up to (but excluding) the First Reset Date: [] per Calculation Amount]

⁵ In case of Fixed Rate Reset Notes, Citibank N.A., London Branch shall not be named as Calculation Agent.

- (xi) Broken Amount(s): [] per Calculation Amount, payable on the Interest Payment Date falling [in/on] []/[Not Applicable]
- (xii) Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]
[30E/360]
[30E/360 (ISDA)]
[Actual/Actual ICMA]
- (xiii) Determination Dates: [[] in each year/Not Applicable]
- (xiv) Calculation Agent: []
- (xv) Relevant Time [11:00a.m.]/[] [Not Applicable]
- (xvi) Mid-Swap Rate Notes: [Applicable] [Not Applicable]
- (If not applicable, delete the remaining sub-paragraphs of this paragraph)*
- Specified Currency: []
 - Fixed Leg Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]
[30E/360]
[30E/360 (ISDA)]
[Actual/Actual ICMA]
 - Specified Fixed Leg: [Annual fixed leg]/[semi-annual fixed leg]/[Quarterly fixed leg]
 - Floating Leg Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]
[30E/360]
[30E/360 (ISDA)]
[Actual/Actual ICMA]
 - Floating Leg Rate Option: []/[Not Applicable]
 - Mid-Swap Maturity: []/[Not Applicable]
16. **Floating Rate Note Provisions**
(Condition 4) [Applicable] [Applicable from []]] [Not Applicable]
- (If not applicable, delete the remaining sub-paragraphs of this paragraph.)*
- (i) Specified Period(s): [] [Not Applicable]
- (ii) Specified Interest Payment Date(s): [[] [and []]] in each year, commencing [] [up to and including []], subject to adjustment in accordance with the Business Day Convention set out in (iv) below / not subject to any adjustment, as the Business Day Convention in (iv) below is specified to be No Adjustment] [Not Applicable]

- (iii) First Interest Payment Date: []
- (iv) Business Day Convention: [Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention] [No Adjustment]
- (v) Additional Business Centre(s): [] [TARGET2] [Not Applicable]
- (vi) Manner in which the Rate(s) of Interest is/are to be determined: [Screen Rate Determination/ISDA Determination⁶]
- (vii) Calculation Agent: [[] shall be the Calculation Agent] [Not Applicable]
- (viii) Screen Rate Determination:
- Benchmark: [SONIA] [SOFR] [€STR][] month] [[currency]]] [EURIBOR] [SARON⁷] [CMS Rate]
 - Applicable CMS Formula: [CMS Reference Rate/ Leveraged CMS Reference Rate: [Standard][Floor/Cap]/ Steepener CMS Reference Rate: [Unleveraged/ Leveraged]] [Not Applicable]
- [CMS Rate:]
- [Reference Currency: []]
- [Designated Maturity: []]
- [Fixed Leg Day Count Fraction: []]
- [Floating Rate Day Count Fraction: []]
- [Floating Leg Rate Option: []]
- [Specified Fixed Leg: []]
- [Specified Frequency: []]
- [Screen Page: []] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*
- [CMS Rate 1:]
- [Reference Currency: []]
- [Designated Maturity: []]
- [Fixed Leg Day Count Fraction: []]
- [Floating Rate Day Count Fraction: []]
- [Floating Leg Rate Option: []]
- [Specified Fixed Leg: []]
- [Specified Frequency: []]

⁶ Where ISDA Determination is specified as the manner in which the Rate of Interest is to be determined, Citibank N.A., London Branch shall not be named as Calculation Agent.

⁷ Where SARON is specified as the relevant benchmark, Citibank N.A., London Branch shall not be named as Calculation Agent.

Screen Page: [] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*

[CMS Rate 2:]

[Reference Currency: []]

[Designated Maturity: []]

[Fixed Leg Day Count Fraction: []]

[Floating Rate Day Count Fraction: []]

[Floating Leg Rate Option: []]

[Specified Fixed Leg: []]

[Specified Frequency: []]

Screen Page: [] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*

Cap: [] per cent per annum [Not Applicable]

Floor: [] per cent per annum [Not Applicable]

Leverage: [] per cent. [Not Applicable]

- Calculation Method: [Compounded Daily Rate] [Compounded Index Rate] *(Only relevant to Floating Rate Notes that reference SONIA)* [Compounded SOFR] [Compounded SOFR Index] *(only relevant to Floating Rate Notes that reference SOFR)*

[Not Applicable]

- Observation Method: [Lag] [Shift] *(in respect of SONIA [or SARON])*

[Lag Convention] [Observation Shift Convention] *(in respect of SOFR)*

[Not Applicable]

- Relevant Time: [] [Not Applicable]

- Interest Determination Date(s): [[] [London Banking Day] [Zurich Banking Day] [TARGET2 Business Day] [U.S. Government Securities Business Day] prior to the end of each Interest Period]

[Second London business day prior to the start of each Interest Period]

[First day of each Interest Period]

[Second day on which the TARGET2 System is open prior to the start of each Interest Period]

[[] Business Day[s] prior to the start of each Interest Period]
- Screen Page [[] Screen Page] [] (*Only relevant to SONIA*).
[Not Applicable]
- Primary Source for Floating Rate: [[] Screen Page] [Reference Banks] (*Only applicable to Benchmarks other than SONIA, SOFR, ESTR and CMS Rate*)

[Not Applicable]
- Reference Banks [[], [], [] and []] [Not Applicable] [as set out in the definition of “Reference Banks” in Condition 4(m)]
- Relevant Financial Centre: [] [London] [Not Applicable]
- Representative Amount: [] [as set out in the definition of “Representative Amount” in Condition 4(m)] [Not Applicable]
- Effective Date: [] [as set out in the definition of “Effective Date” in Condition 4(m)] [Not Applicable]
- Specified Duration: [] [Not Applicable]
- Observation Look-Back Period⁸: [[] London Banking Days] [Zurich Banking Days] [TARGET2 Business Days] [[] U.S. Government Securities Business Days] [Not Applicable]
-
-
- Relevant Number⁹: [] [Not Applicable]

(*only relevant to SONIA where the Calculation Method is Compounded Index Rate. Note that this defaults to 2 if not included in the Final Terms*)

(ix) ISDA Determination: [Applicable] [Not Applicable]

⁸ The ICSDs have a preference of 5 business days for this (where applicable)

⁹ The ICSDs have a preference of 5 business days for this (where applicable)

(If not applicable, delete the remaining sub-paragraphs of this paragraph)

- ISDA Definitions: [2006/2021] ISDA Definitions
 - Floating Rate Option: [] *(Ensure this is a Floating Rate Option included in the Floating Rate Matrix (as defined in the 2021 ISDA Definitions if 2021 ISDA Definitions are applied or that it is a Floating Rate Option subject to the ISDA IBORs Supplement if the 2006 Definitions are applied))*
 - Designated Maturity: [] [Not Applicable] *(This is not required when the Floating Rate Option is an Overnight Floating Rate Option)*
 - Reset Date: []
 - Compounding: [Applicable] [Not Applicable] (If not applicable, delete the remaining items of this subparagraph)
 - Compounding Method: [Compounding with Lookback:
 - Lookback: [] Applicable Business Days
 - [Compounding with Observation Period Shift
 - Observation Period Shift: [[] Observation Period Shift Business Days]
 - Observation Period Shift Additional Business Days: [] [Not Applicable]
 - [Compounding with Lockout
 - Lockout: [] Lockout Period Business Days]
 - Averaging: [Applicable] [Not Applicable] (If not applicable, delete the remaining items of this subparagraph)
 - Averaging Method: Averaging with Lookback
 - [Lookback:] [[] Applicable Business Days]]
 - [Averaging with Observation Period Shift
 - [Observation Period Shift:] [[] Observation Period Shift Business Days]
 - [Observation Period Shift Additional Business Days: []] [Not Applicable]
 - [Averaging with Lockout
 - Lockout: [[] Lockout Period Business Days]
 - Lockout Period Business Days: [] Applicable Business Days]
 - Index Provisions: [Applicable] [Not Applicable] (If not applicable, delete the remaining items of this subparagraph)
 - Index Method: Compounded Index Method with Observation Period Shift
 - Observation Period Shift: [] Observation Period Shift Business Days

	Observation Period Shift Additional Business Days: [] [Not Applicable]
[- Daily Capped Rate and/or Daily Floored Rate:	[Applicable] [Not Applicable] (If not applicable, delete the remaining items of this subparagraph)
	[Daily Capped Rate:] [[] %]
	[Daily Floored Rate:] [[] %]
- Unscheduled Holiday:	[Applicable] [Not Applicable] (Only include where the 2021 ISDA Definitions apply)
- Period End Date/Termination Date adjustment for Unscheduled Holiday:	[Applicable] [Not Applicable] (Only include where the 2021 ISDA Definitions apply)
- Non-Representative:	[Applicable] [Not Applicable] (Only include where the 2021 ISDA Definitions apply)
- [Successor Benchmark:	[] Successor Benchmark Effective Date: [] (Only include where the 2021 ISDA Definitions apply))
(x) Range accrual:	[Applicable] [Not Applicable]
	<i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
-Single Range Accrual Note:	[Applicable] [Not Applicable]
- Dual Range Accrual Reference Rate:	[SONIA] [EURIBOR] [CMS] [SOFR] [€STR]
- Specified Currency:	[] [As set out in item 2 above]
- Specified Maturity:	[] [month[s]] [year[s]]
- Screen Page:	[]
- Relevant Time:	[] [As specified in Condition 4(d)]
- Relevant Financial Centre:	[]
- Rate Cut Off Date:	[] [As provided in Condition 4(e)]
- CMS Spread:	[Applicable] [Not Applicable]
[- First Reference Rate:	CMS
- Specified Currency:	[] [As set out in item 2 above]
- Specified Maturity:	[] [months[s]] [year[s]]
[- Screen Page:]	[]

- Relevant Time: []

- Relevant Financial Centre: []

- Second Reference Rate: CMS

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [months[s]] [year[s]]

- Screen Page: []

- Relevant Time: []

- Relevant Financial Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]

- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]

- Dual Range Accrual Note: [Applicable][Not Applicable]

- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON] []

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [month[s]] [year[s]]

- Screen Page: []

- Relevant Time: [] [As specified in Condition 4(d)]

- Relevant Financial Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]

- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e),
["greater than or equal to"] ["greater than"] shall apply.]

-Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [CMS Spread] [SOFR] [€STR] []

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [month[s]] [year[s]]

- Screen Page: []

- Relevant Time: [] [As specified in Condition 4(d)]

- Relevant Financial Centre: []

- CMS Spread: [Applicable] [Not Applicable]

- First Reference Rate: CMS

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [months[s]] [year[s]]

- Screen Page: []

- Relevant Time: []

- Relevant Financial Centre: []

- Second Reference Rate: CMS

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [months[s]] [year[s]]

- Screen Page: []

- Relevant Time: []

- Relevant Financial Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]

- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e),
["greater than or equal to"] ["greater than"] shall apply.]]

- (xi) Linear Interpolation: [Not Applicable] [Applicable – the Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation]
- (xii) Margin(s): [[+/-] [] per cent. per annum] [Not Applicable]
- (xiii) Multiplier: [] [Not Applicable]
- (xiv) Minimum Rate of Interest: [[] per cent. per annum] [Zero per cent. per annum] [Not Applicable]
- (xv) Maximum Rate of Interest: [[] per cent. per annum] [Not Applicable]
- (xvi) Day Count Fraction: [Actual/365] [Actual/Actual (ISDA)]
[Actual/365 (Fixed)]
[Actual/365 (Sterling)]
[Actual/360] [360/360] [Bond Basis]
[30/360] [30/360 (ISDA)]
[30E/360]
[Actual/Actual (ICMA)]
- (xvii) Benchmark Replacement Provisions: [Condition 4(p) Applicable] [Condition 4(p) Not Applicable]
(only relevant if SOFR is the Reference Rate. If Condition 4(p) is not specified to be applicable, then the Benchmarks Discontinuation provisions of Condition 4(o) will apply.)
- (xviii) Benchmark Discontinuation: [Applicable] [Not Applicable]
17. **Zero Coupon Note Provisions**
(Condition 4) [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- (i) Amortisation Yield: [] per cent. per annum
- (ii) Amortisation Yield compounding basis: [[Compound] [Non-compounded]] [[annually] [semi-annually] [other]]
- (iii) Day Count Fraction in relation to Early Redemption Amounts: [30/360]
[Actual/365 (Sterling)]
[Actual/360]
[Actual/365]
[Act / Act (ICMA) where the Determination Dates are []]

PROVISIONS RELATING TO REDEMPTION

18. **Issuer Call Option**
(Condition 5) [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- (i) Optional Redemption Date(s):

		[[]], subject to adjustment for payment day purposes only in accordance with the Modified Following Business Day Convention]]
	(ii) Optional Redemption Amount(s):	[] per Calculation Amount
	(iii) if redeemable in part:	[Applicable] [Not Applicable]
	(a) Minimum Redemption Amount:	[[] per Calculation Amount] [Not Applicable]
	(b) Maximum Redemption Amount:	[[] per Calculation Amount] [Not Applicable]
	(iv) Notice period:	[]
19.	Noteholder Put Option (Condition 5)	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	(i) Optional Redemption Date(s):	[]
	(ii) Optional Redemption Amount(s):	[] per Calculation Amount
	(iii) Notice period:	[]
20.	Early Redemption for Illegality	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	[(i) Minimum Period:	[] days
	(ii) Maximum Period:	[] days]
21.	Early Redemption for a Disruption Event	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	[(i) Minimum Period:	[] days
	(ii) Maximum Period:	[] days]
	[(iii) Trade Date:	[]
22.	Early Redemption for Special Circumstance	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	[(i) Minimum Period:	[] days
	(ii) Maximum Period:	[] days]
23.	Early Redemption for an Administrator/ Benchmark Event	[Applicable] [Not Applicable]

(If not applicable, delete the remaining sub-paragraphs of this paragraph)

- [(i) Minimum Period: [] days
(ii) Maximum Period: [] days]
24. **Bail-inable Notes - TLAC Disqualification Event Call:** [Applicable] [Not Applicable]
(Condition 5)
25. **Final Redemption Amount** [] per Calculation Amount
26. **Early Redemption Amount**
(Condition 5)
Early Redemption Amount(s)
per Calculation Amount
payable on redemption for
taxation reasons[, TLAC
Disqualification Event][, for
illegality] [, for a Disruption
Event] [, for Special
Circumstance] or on Event of
Default or other early
redemption: [[] per Calculation Amount] [As per Condition 5(i)]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

27. Form of Notes: (Condition 1) **[Bearer Notes:**
[Temporary Global Note exchangeable on or after [] for
a Permanent Global Bearer Note which is exchangeable for
Definitive Bearer Notes on [] days' notice/at any time/in the
limited circumstances specified in the Permanent Global Note]
[Temporary Global Note exchangeable on or after [] for
Definitive Notes on or after []]
[Exchangeable Bearer Note exchangeable for Registered Notes
in [specify global or definitive form]]
[Permanent Global Note exchangeable for Definitive Notes on []
] days' notice/at any time/in the limited circumstances specified
in the Permanent Global Note]]
[Registered Notes:
[Global Registered Note registered in the name of a nominee for
a Common Depositary for Clearstream, Luxembourg and/or
Euroclear exchangeable for Certificates in the limited
circumstances specified in the Global Registered Note]
[Certificates]]
28. Financial Centre(s): [] [Not Applicable]
(Condition 6)

29. Talons for future Coupons to be attached to Definitive Notes (and dates on which such Talons mature): (Condition 4) [No/Yes. As the Notes have more than 27 coupon payments, talons may be required if, on exchange into definitive form, more than 27 coupon payments are remaining.]
30. English Law: [Applicable] except that, the provisions of Condition 3(b) and the first paragraph of Condition 18(b) are governed by and construed in accordance with the laws of the Province of Québec and the federal laws of Canada applicable therein.
- Each Noteholder or beneficial owner of any Bail-inable Notes is deemed to attorn to the jurisdiction of the Courts of the Province of Québec with respect to the operation of the CDIC Act and the above laws.]]¹⁰
- [Not Applicable]
31. Calculation Agent for purposes of Condition 6(j) RMB Notes) ((if other than the Agent): [[] shall be the Calculation Agent] [Not Applicable]
32. RMB Settlement Centre: [Hong Kong] [] [Not Applicable]
33. Relevant Valuation Time for RMB Notes: [Not Applicable] [[] in []]

THIRD PARTY INFORMATION

[[] has been extracted from []. The Issuer confirms that such information has been accurately reproduced and that, so far as it is aware and is able to ascertain from information published by [], no facts have been omitted which would render the reproduced information inaccurate or misleading.] [Not Applicable]

Signed on behalf of National Bank of Canada:

By: _____
Duly authorised

¹⁰ English law Bail-inable Notes must include Québec law clause and attornment to the jurisdiction of the Québec courts. **Notwithstanding the above, Bail-inable Notes may not be governed by English law unless and until OSFI has approved a form of English law opinion.**

PART B - OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

- (i) Listing/Admission to trading: [Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to [the Official List of the Luxembourg Stock Exchange] *[specify other]* and to trading on [the Luxembourg Stock Exchange's regulated market] *[specify other]* with effect from [].]
- [Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to [the Official List of the Luxembourg Stock Exchange] *[specify other]* and to trading on [the Luxembourg Stock Exchange's regulated market] *[specify other]* with effect from [].]
- [Tranche[s] [] of the Notes [is/are] already admitted to [the Official List of the Luxembourg Stock Exchange] *[specify other]* and to trading on [the Luxembourg Stock Exchange's regulated market] *[specify other]* with effect from [].]
- [Not Applicable]
- (ii) Estimate of total expenses related to admission to trading: []

2. RATINGS

- Ratings: [Programme] [Notes to be issued] [have been/has/is/are expected to be] [rated] [have not been rated]. [The following ratings reflect ratings assigned to Notes of this type issued under the Programme generally]:
- [S&P Canada: []]
- [Moody's Canada: []]
- [Fitch: []]
- [[Other]: []]
- (Need to include a brief explanation of the meaning of the ratings if this has been previously published by the rating provider)*
- [Each of] [S&P Canada / Moody's Canada [and]/ Fitch] is established outside the EU and the UK and has not applied for registration under the Regulation (EC) No. 1060/2009 (as amended) (the "**EU CRA Regulation**") or Regulation (EC) No. 1060/2009 as it forms part of domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018 (the "**UK CRA Regulation**"). [Ratings by S&P Canada are endorsed by S&P Global Ratings Europe Limited and S&P Global Ratings UK Limited[,]/ratings by Moody's Canada are endorsed by Moody's

Deutschland GmbH and Moody's Investors Services Ltd. [and]/ ratings by Fitch are endorsed by Fitch Ratings Ireland Limited and Fitch Ratings Limited, each of which is a credit rating agency established in the EU and registered under the EU CRA Regulation or established in the United Kingdom and registered under the UK CRA Regulation, respectively, each in accordance with the EU CRA Regulation or the UK CRA Regulation, as applicable.]

[ESMA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the EU CRA Regulation. This list must be updated within 5 working days of ESMA's adoption of any decision to withdraw the registration of a credit rating agency under the EU CRA Regulation. The list is located on ESMA's website at <http://www.esma.europa.eu/page/List-registered-and-certified-CRAs>.]

[The FCA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the UK CRA Regulation. The FCA's website address is <https://www.fca.org.uk/markets/credit-rating-agencies/registered-certified-cras>.]

See section headed "Credit Rating Agencies" of the Prospectus for details regarding such ratings.

3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE

[Save for any fees payable to the [Managers/Dealers], so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer. The [Managers/Dealers] and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform other services for, the Issuer and its affiliates in the ordinary course of business.] / [] / [Not Applicable]

4. [YIELD / HISTORICAL INTEREST RATES]

[Indication of yield: [] [Not Applicable]

(Fixed Rate Notes only)]

[Details of historic [SONIA/EURIBOR/CMS/SOFR/€STR/SARON] rates can be obtained from Reuters.

(Floating Rate Notes and CMS Linked Notes only)]

5. OPERATIONAL INFORMATION

ISIN: []

Common Code: []

CFI Code: [[include code], as updated, as set out on the website of the Association of National Numbering Agencies (ANNA) or

alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

FISN:

[[*include code*], as updated, as set out on the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

(If the CFI and/or FISN is not required or requested as at the completion of the Final Terms, it/they should be specified to be "Not Applicable" while if it/they are not available as at the completion of the Final Terms, it/they should be specified to be "Not Available".)

WKN or any other relevant codes: [] [Not Applicable]

Any clearing system(s) other than Euroclear Bank SA/NV and Clearstream Banking S.A., their addresses and the relevant identification number(s):

[] [Not Applicable]

Delivery:

Delivery [against/free of] payment

Names and addresses of additional Paying Agent(s) (if any), Registrar(s) or Transfer Agent(s):

[] [None]

6. DISTRIBUTION

(i) Method of distribution: [Syndicated] [Non-syndicated]

(ii) If syndicated, names of Manager(s): [] [Not Applicable]

(iii) If non-syndicated, name of Dealer(s): [] [Not Applicable]

(iv) Prohibition of Sales to EEA Retail Investors:	[Applicable] [Not Applicable] <i>(If the Notes clearly do not constitute “packaged” products, or the Notes do constitute “packaged” products and a key information document will be prepared in the EEA, “Not Applicable” should be specified. If the Notes may constitute “packaged” products and no key information document will be prepared or if the Issuer wishes to prohibit offers to EEA retail investors for any other reason, “Applicable” should be specified)</i>
(v) Prohibition of Sales to UK Retail Investors:	[Applicable] [Not Applicable] <i>(If the Notes clearly do not constitute “packaged” products, or the Notes do constitute “packaged” products and a key information document will be prepared in the UK, “Not Applicable” should be specified. If the Notes may constitute “packaged” products and no key information document will be prepared or if the Issuer wishes to prohibit offers to UK retail investors for any other reason, “Applicable” should be specified)</i>
(vi) Prohibition of Sales to Belgian Consumers:	[Applicable] [Not Applicable]

7. TEFRA RULES

US selling restrictions (categories of potential investors to which the Notes are offered):

Regulation S Category 2; [TEFRA D Rules applicable] [TEFRA C Rules applicable] [TEFRA Rules not applicable]

8. USE OF PROCEEDS:

[] [The net proceeds of the issue of the Notes will be used to finance or refinance, in whole or in part, future and existing eligible businesses and eligible projects, including the Issuer's own operations, that fall within the Eligible Categories (as defined within the Framework).] [Not Applicable]

9. ESTIMATED NET

[]

PROCEEDS:

10. BENCHMARKS:

Amounts payable under the Notes will be calculated by reference to [] which [is/are] provided by []. As at [], [] [EMMI] [SIX Index AG] [appears/does not appear] on the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority pursuant to Article 36 of Regulation (EU) 2016/1011, as amended from time to time (the “**Benchmarks Regulation**”). [As far as the Issuer is aware, the [Bank of England] as administrator of SONIA the [Federal Reserve Bank of New York] as administrator of SOFR, the [European Central Bank] as administrator of €STR are not required to be registered by virtue of

article 2 of the Benchmarks Regulation] [As far as the Issuer is aware, the transitional provisions in Article 51 of Regulation (EU) 2016/1011 apply, such that ICE Benchmark Administration Limited is not currently required to obtain authorisation or registration (or, if located outside the European Union, recognition, endorsement or equivalence).]]

[Not Applicable]

FORM OF PRICING SUPPLEMENT FOR EXEMPT NOTES

This form of Pricing Supplement is for use in connection with the issue of Exempt Notes, including, but not limited to, issues of German Registered Notes.

NO PROSPECTUS IS REQUIRED IN ACCORDANCE WITH REGULATION (EU) 2017/1129 (AS AMENDED OR SUPERSEDED) FOR THE ISSUE OF NOTES DESCRIBED BELOW.

Notes in italics in this Form of Pricing Supplement are intended for reference purposes only, will not appear in actual Pricing Supplement documents and are not binding on the Issuer.

[MiFID II PRODUCT GOVERNANCE / TARGET MARKET – *[appropriate target legend to be included.]*]

[UK MiFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET – *[appropriate target legend to be included.]*]

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS - The Notes 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 (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 [MiFID II / Directive 2014/65/EU (as amended, “MiFID II”)]; (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended), 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 Regulation (EU) 2017/1129 (the “Prospectus Regulation”). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the “PRIIPs Regulation”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]¹

[PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes 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 UK. 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 domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018, as amended (the “EUWA”); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act (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 domestic law of the UK by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended) as it forms part of domestic law of the UK by virtue of the EUWA (the “UK PRIIPs Regulation”) for offering or selling the Notes or otherwise making them available to retail investors

¹ Legend to be included on front of the Pricing Supplement if the Notes potentially constitute “packaged” products and no key information document will be prepared or the Issuer wishes to prohibit offers to EEA and UK retail investors for any other reason and in which case insert “Applicable” in item 48 below.

in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]²

[NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT 2001 (2020 REVISED EDITION) OF SINGAPORE, as modified or amended from time to time (the “SFA”) - In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the “CMP Regulations 2018”), the Issuer has determined the classification of the Notes as capital market products other than prescribed capital markets products (as defined in the CMP 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).]³⁴

[THESE SENIOR NOTES ARE SUBJECT TO CONVERSION IN WHOLE OR IN PART – BY MEANS OF A TRANSACTION OR SERIES OF TRANSACTIONS AND IN ONE OR MORE STEPS – INTO COMMON SHARES OF NATIONAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE CANADA DEPOSIT INSURANCE CORPORATION ACT (“CDIC ACT”) AND TO VARIATION OR EXTINGUISHMENT IN CONSEQUENCE AND SUBJECT TO THE APPLICATION OF THE LAWS OF THE PROVINCE OF QUÉBEC AND THE FEDERAL LAWS OF CANADA APPLICABLE THEREIN IN RESPECT OF THE OPERATION OF THE CDIC ACT WITH RESPECT TO THE NOTES.]

[GERMAN REGISTERED NOTES MAY ONLY BE OFFERED AT A MINIMUM PRICE OF AT LEAST €200,000 PER NOTE PER INVESTOR AND PROVIDED THE INVESTOR IS A PROFESSIONAL CLIENT MEETING THE CRITERIA LAID DOWN IN SECTION I (1) (A), (D) (E) OR (F) OF ANNEX II TO [DIRECTIVE 2014/65/EU, AS AMENDED] [MiFID II].]

Pricing Supplement dated []



NATIONAL BANK OF CANADA

(A bank governed by the Bank Act (Canada))

(LEI: BSGEFEIOM18Y80CKCV46)

**Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]
under a US\$10,000,000,000 Euro Note Programme**

² Legend to be included on front of the Pricing Supplement if the Notes potentially constitute “packaged” products and no key information document will be prepared or the Issuer wishes to prohibit offers to UK retail investors for any other reason, in which case the selling restriction should be specified to be “Applicable”.

³ Relevant Dealer(s) to consider whether it/they have received the necessary product classification from the Issuer prior to the launch of the offer, pursuant to Section 309B of the SFA.

⁴ Notice to be added if the Notes is not “prescribed capital markets products”, pursuant to Section 309B of the SFA.

[(Insert any specific additional risk factors, if appropriate)]

[PART A - CONTRACTUAL TERMS

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the 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 Notes in any other circumstances

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Prospectus dated 15 June 2022 [and the supplement[s] to it dated [●]] (the “**Prospectus**”). This document constitutes the Pricing Supplement of the Notes described herein and must be read in conjunction with such Prospectus [as so supplemented]. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Prospectus [as so supplemented]. References in the Conditions to “Final Terms” shall be deemed to be references to this Pricing Supplement. The Prospectus [and the supplement[s] to it dated [●]], together with the documents incorporated by reference therein are available for viewing during normal business hours and copies may be obtained at the registered office of the Issuer, 4th Floor, 600 de La Gauchetière Street West, Montréal, Québec, H3B 4L2, Canada, and at the office of the Fiscal Agent, Transfer Agent and Calculation Agent, Citibank, N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom.]

[The following alternative language applies if the first tranche of an issue which is being increased was issued under a Prospectus with an earlier date.]

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Prospectus dated [15 June 2021 / 11 June 2020 / 6 June 2019] which are incorporated by reference in the Prospectus dated 15 June 2022. This document constitutes the Pricing Supplement of the Notes and must be read in conjunction with the Prospectus dated 15 June 2022 [and the supplement(s) to it dated ●] (the “**Prospectus**”), save in respect of the Conditions which are extracted from the Prospectus dated [15 June 2021 / 11 June 2020 / 6 June 2019]. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement, the Prospectus [and the supplement(s) to it dated ●]. References in the Conditions to “Final Terms” shall be deemed to be references to this Pricing Supplement. The Prospectus [and the supplement[s] to it dated [●]], together with the documents incorporated by reference therein are available for viewing during normal business hours and copies may be obtained at the registered office of the Issuer, 4th Floor, 600 de La Gauchetière Street West, Montréal, Québec, H3B 4L2, Canada, and at the office of the Fiscal Agent, Transfer Agent and Calculation Agent, Citibank, N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom.]

[Include whichever of the following apply or specify as “Not Applicable” (N/A). Note that the numbering should remain as set out below, even if “Not Applicable” is indicated for individual paragraphs (in which case the sub-paragraphs which are not applicable can be deleted). Italics denote guidance for completing the Pricing Supplement.]

1. Issuer: National Bank of Canada
2. Branch of Account for Notes: [Montréal] [London] / *[specify other]*

3. [(i)] Series Number: []
- [(ii)] Tranche Number: [] *(Not to be completed for German Registered Notes.)*
- [(iii)] Date on which the Notes will be consolidated and form a single Series: [Not Applicable] [The Notes shall be consolidated, form a single series and be interchangeable for trading purposes with the [describe Notes] on [insert date/the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph 27 below [which is expected to occur on or about [insert date]]].] *(Not to be completed for German Registered Notes.)*
4. Specified Currency or Currencies: []
5. Aggregate Nominal Amount:
- [(i)] Series: *[Insert total principal amount [of outstanding Tranches, including the Tranche which is the subject of the Pricing Supplement]]*
- [(ii)] Tranche: [] *[(Not to be completed for German Registered Notes.)]*
6. Issue Price: [] per cent. of the Aggregate Nominal Amount [plus accrued interest from [insert date (in the case of fungible issues only, if applicable)]]
7. (i) Specified Denominations: [] *[(In the case of German Registered Notes the Nominal Amount equals the Specified Denomination.)]*
- [N.B. – where Bearer Notes with multiple denominations are being used, the following sample wording should be followed:*
- [[] [and integral multiples of [] in excess thereof up to and including []. No Notes in definitive form will be issued with a denomination above [].]*
- (ii) Calculation Amount: *[If there is only one Specified Denomination and no integral multiples in excess thereof, insert the Specified Denomination. If there is more than one Specified Denomination and no integral multiples in excess thereof, insert the highest common factor of the Specified Denominations. If there are integral multiples in excess of the Specified Denominations, insert the highest common factor of the integral multiples and the Specified Denominations.] [Note: There must be a common factor in the case of integral multiples in excess of the Specified Denomination(s) or two or more Specified Denominations.]*
8. (i) Issue Date: []
- (ii) Trade Date: []
- (iii) Interest Commencement Date: [Specify / Issue Date] [Not Applicable]

9. [(i)] Maturity Date: [[]], subject to adjustment for payment day purposes only in accordance with the Modified Following Business Day Convention]] [Interest Payment Date falling in or nearest to [] []](Specify date or (for Floating Rate Notes) Interest Payment Date falling in the relevant month and year)
- [(ii)] Extended Maturity Date: []]
10. Interest Basis: [[] per cent. Fixed Rate Note]
[subject to change as indicated in paragraph 12 below]
[[] per cent. to be reset on [] [and []] and every [] anniversary thereafter Fixed Rate Reset]
[SONIA] [SOFR Observation Shift] [SOFR Index] [€STR]
[EURIBOR]/[CMS]/[SARON]/[Other (specify reference rate)]]
+/- [] per cent. Floating Rate Note]
[subject to change as indicated in paragraph 12 below]
[Zero Coupon Note]
[Index-Linked Interest Note]
[Dual Currency Interest Note]
[Range Accrual Note]
[CMS Linked Note]
[Other (specify)]
(further particulars specified below)
11. Redemption/Payment Basis: [Subject to early redemption or purchase, redemption at [par] on the Maturity Date]
[Index-Linked Redemption Note] [Index-Linked Redemption Note not applicable to Bail-inable Notes]
[Dual Currency Redemption Note]
[Partly Paid Note] [Partly Paid Notes not applicable to Bail-inable Notes]
[Instalment Note] (Instalment Note not applicable to Bail-inable Notes)
[Other (specify)]
12. Change of Interest or Redemption/ Payment Basis: [Specify details of any provision for convertibility of Notes into another interest or redemption/payment basis]
13. Put/Call Options: [Not Applicable]
[Noteholder Put] (Noteholder Put not applicable to Bail-inable Notes)
[Issuer Call]
[(further particulars specified below)]

14. Date [Board] approval for issuance of Notes obtained: [] [and [], respectively] [Not Applicable]
(N.B. Only relevant where Board (or similar) authorisation is required for a particular Tranche of Notes)
15. Bail-inable Notes: [Yes] [No]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16. **Fixed Rate Note Provisions** [Applicable] [Applicable from []] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- (i) Fixed Rate[(s)] of Interest: [] per cent. per annum [payable [annually/ semi-annually/quarterly/ monthly] in arrear]
- (ii) Interest Payment Date(s): [] [and []] in each year up to and including the Maturity Date, commencing [], subject to adjustment [for payment day purposes only] [payment day and interest accrual purposes] in accordance with the Business Day Convention set out in (iii) below
(N.B. This will need to be amended in the case of long or short coupons. See "Broken Amounts")
- (iii) Business Day Convention: [Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention] [No Adjustment]
- (iv) Additional Business Centre(s): [] [TARGET2] [Not Applicable]
- (v) Fixed Coupon Amount[(s)]: [[] per [] Calculation Amount] [Not Applicable]
- (vi) Broken Amount(s): [[] per Calculation Amount, payable on the Interest Payment Date falling [in / on] []] [Not Applicable]
- (vii) Day Count Fraction: [Actual/Actual (ICMA)] [30/360] [30E/360] [Actual/365 (Fixed)]
[Specify whether Actual/Actual (ICMA), 30/360 or Actual/365 (Fixed) applies to interest to be calculated for a period other than a full year (see Condition 4(a) for description)]
- (viii) Determination Dates: [] in each year *[insert Interest Payment Dates ignoring issue date or maturity date in the case of long or short first or last coupon]* [Not Applicable] *(N.B. only relevant where Day Count Fraction is Actual/Actual (ICMA))* *[N.B. Actual/Actual (ICMA) is normally appropriate for Fixed Rate Notes denominated in all currencies other than U.S. dollars]*
- (ix) Calculation Agent: [[] shall be the Calculation Agent] [Not Applicable]
- (x) Range Accruals: [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)

- Single Range Accrual Note: [Applicable] [Not Applicable]
- Single Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON] []
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [month[s]] [year[s]]
- Screen Page: []
- Relevant Time: [] [As specified in Condition 4(d)]
- Relevant Financial Centre: []
- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- CMS Spread: [Applicable] [Not Applicable]
- First Reference Rate: CMS
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [months[s]] [year[s]]
- Screen Page: []
- Relevant Time: []
- Relevant Financial Centre: []
- Second Reference Rate: CMS
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [months[s]] [year[s]]
- Screen Page: []
- Relevant Time: []
- Relevant Financial Centre: []
- CMS Spread:
- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]
- Dual Range Accrual Note: [Applicable][Not Applicable]

- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON] []
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [month[s]] [year[s]]
- Screen Page: []
- Relevant Time: [] [As specified in Condition 4(d)]
- Relevant Financial Centre: []
- Rate Cut Off Date: [] [As specified in Condition 4(e)]
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]
- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [CMS Spread] [SOFR] [€STR] [SARON] []
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [month[s]] [year[s]]
- Screen Page: []
- Relevant Time: [] [As specified in Condition 4(d)]
- Relevant Financial Centre: []
- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
- [For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]
- CMS Spread: [Applicable] [Not Applicable]
- First Reference Rate: CMS
- Specified Currency: [] [As set out in item 2 above]
- Specified Maturity: [] [months[s]] [year[s]]
- Screen Page: []

- Relevant Time:	[]
- Relevant Financial Centre:	[]]
- Second Reference Rate:	CMS
- Specified Currency:	[] [As set out in item 2 above]
- Specified Maturity:	[] [months[s]] [year[s]]
- Screen Page:	[]
- Relevant Time:	[]
- Relevant Financial Centre:	[]]
- Rate Cut Off Date:	[] [As specified in Condition 4(e)]
- Cap:	[[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
	[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor:	[[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
	[For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]]
(xi) Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Not Applicable/give details]
17. Fixed Rate Reset Note Provisions⁵	[Applicable] [Applicable from []] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
(i) Initial Rate of Interest:	[] per cent. per annum [payable [annually/semi annually/quarterly/monthly] in arrear]
(ii) Interest Payment Date(s):	[] [and []] in each year [from and including []] [until and excluding []]
(iii) First Reset Date:	[]
(iv) Second Reset Date:	[[]/Not Applicable]
(v) Anniversary Date:	[[]/Not Applicable]
(vi) Reset Determination Dates:	[]
(vii) Reset Rate:	[[Semi-annual][Annualised][Mid-Swap Rate] [Benchmark Gilt Rate][Reference Bond]

⁵ In case of Fixed Rate Reset Notes, Citibank N.A., London Branch shall not be named as Calculation Agent.

- (viii) Screen Page: []/[Not Applicable]
- (ix) Fixed Leg: [[Semi-annual]/[Annual] calculated on a[n Actual/365]/[30/360]/[] day count fraction]/[Not Applicable]
- (x) Floating Leg: [[3]/[6]/[]-month [EURIBOR]/[] rate calculated on an[Actual/365]/[Actual/360]/[] day count fraction]/[Not Applicable]
- (xi) Margin(s): [+/-] [] per cent. per annum
- (xii) Fixed Coupon Amount[(s)] in respect of the period from (and including) the Interest Commencement Date up to (but excluding) the First Reset Date: [[] per Calculation Amount]
- (xiii) Broken Amount(s): [[] per Calculation Amount, payable on the Interest Payment Date falling [in/on] []/[Not Applicable]
- (xiv) Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]
[30E/360]
[30E/360 (ISDA)]
[Actual/Actual ICMA]
- (xv) Determination Dates: [[] in each year/Not Applicable]
- (xvi) Calculation Agent: []
- (xvii) Relevant Time [11:00a.m.]/[] [Not Applicable]
- (xvi) Mid-Swap Rate Notes: [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- Specified Currency: []
 - Fixed Leg Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]
[30E/360]
[30E/360 (ISDA)]
[Actual/Actual ICMA]
 - Specified Fixed Leg: [Annual fixed leg]/[semi-annual fixed leg]/[Quarterly fixed leg]
 - Floating Leg Day Count Fraction: [Actual/365]
[Actual/365 (fixed)]
[Actual/360]
[30/360]

[30E/360]
 [30E/360 (ISDA)]
 [Actual/Actual ICMA]

- Floating Leg Rate Option: []/[Not Applicable]
- Mid-Swap Maturity: []/[Not Applicable]

18. Floating Rate Note Provisions

[Applicable] [Applicable from []] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)

- (i) Specified Period(s): [] [Not Applicable]
- (ii) Specified Interest Payment Date(s): [[] [and [] in each year, commencing [] up to and including []], subject to adjustment in accordance with the Business Day Convention set out in (iv) below / not subject to any adjustment, as the Business Day Convention in (iv) below is specified to be No Adjustment] [Not Applicable]
- (iii) First Interest Payment Date: []
- (iv) Business Day Convention: [Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention/other *(give details)*] [No Adjustment]
- (v) Additional Business Centre(s): [] [TARGET2] [Not Applicable]
- (vi) Manner in which the Rate(s) of Interest is/are to be determined: [Screen Rate Determination/ISDA Determination⁶/other *(give details)*]
- (vii) Calculation Agent: [] shall be the Calculation Agent
- (viii) Screen Rate Determination: [Applicable] [Not Applicable]
 - Benchmark: [SONIA] [SOFR] [€STR][] month [currency]] [EURIBOR] [SARON⁷] [CMS Rate⁸]
 - Applicable CMS Formula: [CMS Reference Rate/ Leveraged CMS Reference Rate: [Standard][Floor/Cap]/ Steeper CMS Reference Rate: [Unleveraged/ Leveraged]] [Not Applicable]
 [CMS Rate:]
 [Reference Currency: []]
 Designated Maturity: []

⁶ Where ISDA Determination is specified as the manner in which the Rate of Interest is to be determined, Citibank N.A., London Branch shall not be named as Calculation Agent.

⁷ Where SARON is specified as the relevant benchmark, Citibank N.A., London Branch shall not be named as Calculation Agent.

⁸ Where CMS Rate is specified as the relevant benchmark, Citibank N.A., London Branch shall not be named as Calculation Agent.

Fixed Leg Day Count Fraction: []
 Floating Rate Day Count Fraction: []
 Floating Leg Rate Option: []
 Specified Fixed Leg: []
 Specified Frequency: []
 Screen Page: []] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*

[CMS Rate 1:]

[Reference Currency: []
 Designated Maturity: []
 Fixed Leg Day Count Fraction: []
 Floating Rate Day Count Fraction: []
 Floating Leg Rate Option: []
 Specified Fixed Leg: []
 Specified Frequency: []
 Screen Page: [] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*

[CMS Rate 2:]

[Reference Currency: []
 Designated Maturity: []
 Fixed Leg Day Count Fraction: []
 Floating Rate Day Count Fraction: []
 Floating Leg Rate Option: []
 Specified Fixed Leg: []
 Specified Frequency: []
 Screen Page: []] *(In case of CMS Linked Notes, specify relevant screen page(s) and any applicable headings and captions)*

Cap: [] per cent per annum [Not Applicable]
 Floor: [] per cent per annum [Not Applicable]
 Leverage: [] per cent. [Not Applicable]

- Calculation Method: [Compounded Daily Rate] [Compounded Index Rate] [Not Applicable] *(Only relevant to Floating Rate Notes that reference SONIA or SARON)*

- Observation Method: [Lag] [Shift] *(in respect of SONIA [or SARON])*
 [Lag Convention] [Observation Shift Convention] [SOFR Index Convention] *(in respect of SOFR)*

[Not Applicable]

- Relevant Time: [] [Not Applicable]

- Interest Determination Date(s): [[] [London Banking Day] [Zurich Banking Day] [TARGET2 Business Day] [U.S. Government Securities Business Day] prior to the end of each Interest Period]
- [Second London business day prior to the start of each Interest Period]
- [First day of each Interest Period]
- [Second day on which the TARGET2 System is open prior to the start of each Interest Period]
- [[] Business Day[s] prior to the start of each Interest Period]
- (The second TARGET2 Business Day prior to the start of each Interest Period if EURIBOR)*
- Screen Page [[] Screen Page] [Not Applicable]
- Primary Source for Floating Rate: [] (Specify relevant screen page or "Reference Banks")
- (In the case of a CMS Linked Note, specify relevant screen page and any applicable headings and captions)*
- Reference Banks: [[], [], [] and [] (Specify four)]
- [Not Applicable] [as set out in the definition of "Reference Banks" in Condition 4(o)]
- Relevant Financial Centre: [] (Specify the financial centre most closely connected to the Benchmark) [Not Applicable]
- Representative Amount: [] [as set out in the definition of "Representative Amount" in Condition 4(o)] (Specify if screen or Reference Bank quotations are to be given in respect of a transaction of a specified notional amount) [Not Applicable]
- Effective Date: [] [as set out in the definition of "Effective Date" in Condition 4(o)] (Specify if quotations are not to be obtained with effect from commencement of the Interest Period) [Not Applicable]

- Specified Duration: [] (*Specify period for quotation if not duration of Interest Period*)
- Observation Look-back Period⁹: [[] London Banking Days] [TARGET2 Business Days] [Zurich Banking Day] (*Specify number*) [Not Applicable] [[] U.S. Government Securities Business Days] (*to be completed for SOFR Observation Shift Convention and SOFR Index Convention as well as SONIA and SARON*)
- Relevant Number¹⁰: [] [Not Applicable]
(*only relevant to SONIA where the Calculation Method is Compounded Index Rate. Note that this defaults to 2 if not included in the Pricing Supplement*)
- Benchmark Replacement Provisions: [Condition 4(p) Applicable] [Condition 4(p) Not Applicable]
(*for German Registered Notes*):
[Condition 4(r) Applicable] [Condition 4(r) Not Applicable]
(*only relevant if SOFR Compounded Rate. If Condition 4(p) is not specified to be applicable, then the benchmark discontinuation provisions of Condition 4(o) will apply*)
(*for German Registered Notes: only relevant if SOFR Compounded Rate. If Condition 4(r) is not specified to be applicable, then the benchmark discontinuation provisions of Condition 4(q) will apply*)
- (ix) ISDA Determination: [Applicable] [Not Applicable]
(*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
 - ISDA Definitions: [2006 ISDA Definitions] [2021 ISDA Definitions] [Not Applicable]
 - Floating Rate Option: [] (*If “2021 ISDA Definitions” is selected, ensure this is a Floating Rate Option included in the Floating Rate Matrix (as defined in the 2021 ISDA Definitions)*)
 - Designated Maturity: [] [Not Applicable] (*This is not required when the Floating Rate Option is a risk free rate*)
 - Reset Date: []
 - Compounding: [Applicable/Not Applicable]
(*If not applicable, delete the remaining items of this subparagraph*)
 - Compounding Method: [Compounding with Lookback
Lookback: [] Applicable Business Days
[Compounding with Observation Period Shift]

⁹ The ICSDs have a preference of 5 business days for this (where applicable)

¹⁰ The ICSDs have a preference of 5 business days for this (where applicable)

- Observation Period Shift: [] Observation Period Shift Business Days
- Observation Period Shift Additional Business Days: [] [Not Applicable]
- [Compounding with Lockout
- Lockout: [] Lockout Period Business Days]
- [Not Applicable]
- Averaging: [Applicable/Not Applicable]
(If not applicable, delete the remaining items of this subparagraph)
 - Averaging Method: [Averaging with Lookback
Lookback: [] Applicable Business Days]
[Averaging with Observation Period Shift
Observation Period Shift: [] Observation Period Shift Business Days
Observation Period Shift Additional Business Days: [] [Not Applicable]]
[Averaging with Lockout
Lockout: [] Lockout Period Business Days
Lockout Period Business Days: [] [Applicable Business Days]]
[Not Applicable]
 - Index Provisions: [Applicable/Not Applicable]
(If not applicable, delete the remaining items of this subparagraph)
 - Index Method: [Compounded Index Method with Observation Period Shift
Observation Period Shift: [] Observation Period Shift Business Days
Observation Period Shift Additional Business Days: [] [Not Applicable]]
 - (x) Range accrual: [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
 - Single Range Accrual Note: [Applicable] [Not Applicable]
 - Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [SOFR] [€STR] [SARON]
 - Specified Currency: [] [As set out in item 2 above]

- Relevant Financial Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]

- Floor: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

[For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]

- Dual Range Accrual Reference Rate: [SONIA] [EURIBOR] [CMS] [CMS Spread] [SOFR] [€STR] [SARON] []

[- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [month[s]] [year[s]]

- Screen Page: []

- Relevant Time: [] [As specified in Condition 4(d)]

- Relevant Financial Centre: []

[- CMS Spread: [Applicable] [Not Applicable]

- First Reference Rate: CMS

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [months[s]] [year[s]]

- Screen Page: []

- Relevant Time: []

- Relevant Financial Centre: []

- Second Reference Rate: CMS

- Specified Currency: [] [As set out in item 2 above]

- Specified Maturity: [] [months[s]] [year[s]]

- Screen Page: []

- Relevant Time: []

- Relevant Financial Centre: []

- Rate Cut Off Date: [] [As specified in Condition 4(e)]

- Cap: [[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]

	[For the purposes of the definition of "N1" in Condition 4(e), ["less than or equal to"] ["less than"] shall apply.]
- Floor:	[[] per cent. per annum [in respect of the Interest Period ending []]] [Not Applicable]
	[For the purposes of the definition of "N1" in Condition 4(e), ["greater than or equal to"] ["greater than"] shall apply.]]
(xi) Linear Interpolation:	[Not Applicable] [Applicable – the Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation]
(xii) Margin(s):	[[+/-] [] per cent. per annum] [Not Applicable]
(xiii) Multiplier:	[] [Not Applicable]
(xiv) Minimum Rate of Interest:	[[] per cent. per annum] [Zero per cent. per annum] [Not Applicable]
(xv) Maximum Rate of Interest:	[[] per cent. per annum] [Not Applicable]
(xvi) Day Count Fraction:	[Actual/365] [Actual/Actual (ISDA)] [Actual/365 (Fixed)] [Actual/365 (Sterling)] [Actual/360] [360/360] [Bond Basis] [30/360] [30/360 (ISDA)] [30E/360] [Actual/Actual (ICMA)] []
(xvii) Benchmark Discontinuation:	[Applicable] [Not Applicable]
(xviii) Fall back provisions, rounding provisions and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[]
19. Zero Coupon Note Provisions	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
(i) Amortisation Yield:	[] per cent. per annum
(ii) Amortisation Yield compounding basis:	[[Compound] [Non-compounded]] [[annually] [semi-annually] [other]]

- (iii) Any other formula/basis of determining "**Amortised Face Amount**" (as described in Condition 5(h)) or other amounts payable: []
- (iv) Day Count Fraction: []
20. **Index-Linked Interest/ Other Variable-Linked Interest Note Provisions** [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- (i) Index/Formula/other variable: *[give or annex details]*
- (ii) Calculation Agent responsible for calculating Rate(s) of Interest and/or Interest Amounts: [Citibank, N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom]
- (iii) Provisions for determining Coupon where calculation by reference to Index and/or Formula and/or other variable: []
- (iv) Determination Date(s): []
- (v) Provisions for determining Coupon where calculation by reference to Index and/or Formula and/or other variable is impossible or impracticable or otherwise disrupted: []
- (vi) Interest Period(s): []
- (vii) Specified Interest Payment Dates: []
- (viii) Business Day Convention: [Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention/other *(give details)*]
- (ix) Additional Business Centre(s): []
- (x) Minimum Rate of Interest: [[] per cent. per annum] [Not Applicable]
- (xi) Maximum Rate of Interest: [[] per cent. per annum] [Not Applicable]
- (xii) Day Count Fraction: []

- (xiii) Benchmark Discontinuation: [Applicable] [Not Applicable]
- (xiv) Other terms or special conditions: *(Note any additional disclosure requirements under the Principal Protected Notes Regulation (Canada))*
21. **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: [insert name and address]
- (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: []

PROVISIONS RELATING TO REDEMPTION

22. **Issuer Call Option** [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- (i) Optional Redemption Date(s): [[], subject to adjustment for payment day purposes only in accordance with the Modified Following Business Day Convention]
- (ii) Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s): [] per Calculation Amount
- (iii) If redeemable in part: [Applicable] [Not Applicable]
- (a) Minimum Redemption Amount: [[] per Calculation Amount] [Not Applicable]
- (b) Maximum Redemption Amount: [[] per Calculation Amount] [Not Applicable]

	(iv) Notice period (if other than as set out in Condition 5(k)):	[] <i>(If setting notice periods which are different to those provided in the terms and conditions, issuers are advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems (which requires a minimum five business days' notice period) and custodians, as well as any other notice requirements which may apply, for example, as between the issuer and its fiscal agent or any trustee.)</i>
23.	Noteholder Put Option	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	(i) Optional Redemption Date(s):	[]
	(ii) Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s):	[] per Calculation Amount
	(iii) Notice period (if other than as set out in Condition 5(k)):	[] <i>(If setting notice periods which are different to those provided in the terms and conditions, issuers are advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems (which requires a minimum 15 business days' notice period) and custodians, as well as any other notice requirements which may apply, for example, as between the issuer and its fiscal agent or any trustee.)</i>
24.	Early Redemption for Illegality	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	[(i) Minimum Period:	[] days
	(ii) Maximum Period:	[] days]
25.	Early Redemption for a Disruption Event	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>
	[(i) Minimum Period:	[] days
	(ii) Maximum Period:	[] days]
	[(iii) Trade Date:	[]
26.	Early Redemption for Special Circumstance	[Applicable] [Not Applicable] <i>(If not applicable, delete the remaining sub-paragraphs of this paragraph)</i>

- [(i) Minimum Period: [] days
- [(ii) Maximum Period: [] days]
27. **Early Redemption for an Administrator/ Benchmark Event** [Applicable] [Not Applicable]
(If not applicable, delete the remaining sub-paragraphs of this paragraph)
- [(i) Minimum Period: [] days
- [(ii) Maximum Period: [] days]
28. **Bail-inable Notes – TLAC Disqualification Event Call** [Applicable] [Not Applicable]
29. **Final Redemption Amount** [] per Calculation Amount
- In cases where the Final Redemption Amount is Index-Linked or other variable-linked:
- (i) Index/Formula/variable: *[give or annex details]*
- (ii) Calculation Agent responsible for calculating the Final Redemption Amount: *[insert name and address]*
- (iii) Provisions for determining Final Redemption Amount where calculated by reference to Index and/or Formula and/or other variable: []
- (iv) Determination Date(s): []
- (v) Provisions for determining Final Redemption Amount where calculation by reference to Index and/or Formula and/or other variable is impossible or impracticable or otherwise disrupted: []
- (vi) Payment Date: []
- (vii) Minimum Final Redemption Amount: [] per Calculation Amount
- (viii) Maximum Final Redemption Amount: [] per Calculation Amount

30. **Early Redemption Amount**

Early Redemption Amount(s)
per Calculation Amount
payable on redemption for
taxation reasons or [TLAC
Disqualification Event[, for
illegality] [, for a Disruption
Event] [, for Special
Circumstance] on Event of
Default and/or the method of
calculating the same):

[[] per Calculation Amount / as per Condition 5(i)] /
other / see Appendix]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

31. Form of Notes:

[Bearer Notes:

[Temporary Global Note exchangeable on or after (*Specify Exchange Date*) for a Permanent Global Bearer Note which is exchangeable for Definitive Bearer Notes on [] days' notice/at any time/in the limited circumstances specified in the Permanent Global Note]

[Temporary Global Note exchangeable on or after (*Specify Exchange Date*) for Definitive Notes on or after [] (*Specify Exchange Date*)]

[Exchangeable Bearer Note exchangeable for Registered Notes in [specify global or definitive form]]

[Permanent Global Note exchangeable for Definitive Notes on [] days' notice/at any time/in the limited circumstances specified in the Permanent Global Note]

[If item 6(i) provides for a Specified Denomination and higher integral multiples, the option to exchange into Definitive Notes on []days' notice/at any time must be disapplied]]

[Registered Notes:

[Global Registered Note registered in the name of a nominee for a Common Depositary for Clearstream, Luxembourg and/or Euroclear exchangeable for Certificates in the limited circumstances specified in the Global Registered Note]

[Certificates]

[German Registered Notes in definitive form] (*German Registered Notes, as they do not qualify as securities pursuant to Article 2 no. 1 of the German Securities Prospectus Act (Wertpapierprospektgesetz), have been included as additional information only and for the purpose of describing the Programme. Therefore, this document cannot be construed as a prospectus for German Registered Notes. Pursuant to Section 2 para. 1 No. 3.c) of the German Capital Investment Act (Vermögensanlagengesetz), German Registered Notes will only be offered at a minimum price of at least €200,000 per German Registered Note per investor and provided such investor meets the criteria laid down in Section I (1) (a), (d) (e) or (f) of Annex II to MiFID II and will be exempted from the prospectus requirements under the German Capital Investment Act.*)]

32. Financial Centre(s) or other special provisions relating to Payment Dates: [Not Applicable/give details.
Note that this item relates to the place of payment, and not interest period end dates, to which items 16(iv) and 18(ix) relate]
33. Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature): [Yes/No. *If yes, give details*]
34. 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]
35. Details relating to Instalment Notes: amount of each instalment ("**Instalment Amount**"), date on which each payment is to be made ("**Instalment Date**"): [Not Applicable/give details]
36. Redenomination, renominatisation and reconventioning provisions: [Not Applicable/The provisions annexed to this Pricing Supplement apply]
37. Consolidation provisions: [Not Applicable/The provisions annexed to this Pricing Supplement apply]
38. Calculation Agent for purposes of Condition 6(j) RMB Notes) ((if other than the Agent): [[] shall be the Calculation Agent] [Not Applicable]
39. RMB Settlement Centre: [Hong Kong] [] [Not Applicable]
40. Relevant Valuation Time for RMB Notes: [Not Applicable] [[] in []]
41. Other final terms: [Not Applicable/give details]
[Insert additional steps that may only be taken following approval by an Extraordinary Resolution in accordance with Condition 10(a)]

DISTRIBUTION

42. (i) Method of distribution: [Syndicated] [Non-syndicated]
 [(ii)] If syndicated, names of Manager(s): [Not Applicable] [] (give names)
(Include names and addresses of entities agreeing to underwrite the issue on a firm commitment basis and names and addresses of the entities agreeing to place the issue without a firm commitment or on a "best efforts" basis if such entities are not the same as Managers.)
- [(iii)] Stabilisation Manager(s) (if any): [Not Applicable] [] (give name(s))
43. If non-syndicated, name of Dealer(s): [Not Applicable] [] (give name(s))
44. US selling restrictions: Regulation S Category 2; [TEFRA D Rules applicable] [TEFRA C Rules applicable] [TEFRA Rules not applicable]
45. Additional selling restrictions: [Not Applicable] []
(including any modifications to those contained in the Prospectus noted above)
46. [Governing Law and Jurisdiction]⁴ [English Law]⁵: [Laws of the Province of Québec and the federal laws of Canada applicable therein.]
[in case of English law governed Senior Notes, insert:
 Applicable[except that, the provisions of Condition 3(b) and the first paragraph of Condition 18(b) are governed by and construed in accordance with the laws of the Province of Québec and the federal laws of Canada applicable therein.
 Each Noteholder or beneficial owner of any Bail-inable Notes is deemed to attorn to the jurisdiction of the Courts of the Province of Québec with respect to the operation of the CDIC Act and the above laws]]⁶
[in case of German Registered Notes, insert:
 Governing Law: Laws of the Federal Republic of Germany
 Place of Jurisdiction. The competent courts in Frankfurt am Main shall have non-exclusive jurisdiction (*nicht-ausschließlicher Gerichtsstand*) over any action or other legal proceedings arising out of or in connection with this Registered Note.]
[in case German Registered Notes are bail-inable, add:

⁴ Include this if the Senior Notes are governed by the laws of the Province of Québec and the federal laws of Canada applicable therein, or are German Registered Notes.

⁵ Include this if the Senior Notes are governed by English law.

⁶ English law Bail-inable Notes must include Québec law clause and attornment to the jurisdiction of the Québec courts. **Notwithstanding the above, Bail-inable Notes may not be governed by English law unless and until OSFI has approved a form of English law opinion.**

Each holder or beneficial owner of an interest in Bail-inable Notes is deemed to be bound by the laws of the Province of Québec and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Bail-inable Notes and is deemed to attorn to the jurisdiction of the courts in the Province of Québec in Canada.

47.	The aggregate principal amount of Notes issued has been translated into U.S. dollars at the rate of [], producing a sum of:	[Not Applicable] [U.S.\$[]]
48.	Additional tax disclosure (or amendments to disclosure in the Prospectus):	[Not Applicable] []
49.	Prohibition of Sales to EEA Retail Investors:	[Applicable] [Not Applicable] <i>(If the Notes clearly do not constitute “packaged” products, or the Notes do constitute “packaged” products and a key information document will be prepared in the EEA, “Not Applicable” should be specified. If the Notes may constitute “packaged” products and no key information document will be prepared or if the Issuer wishes to prohibit offers to EEA retail investors for any other reason, “Applicable” should be specified)</i>
50.	Prohibition of Sales to UK Retail Investors:	[Applicable] [Not Applicable] <i>(If the Notes clearly do not constitute “packaged” products, or the Notes do constitute “packaged” products and a key information document will be prepared in the UK, “Not Applicable” should be specified. If the Notes may constitute “packaged” products and no key information document will be prepared or if the Issuer wishes to prohibit offers to UK retail investors for any other reason, “Applicable” should be specified)</i>
51.	Prohibition of Sales to Belgian Consumers:	[Applicable] [Not Applicable]

THIRD PARTY INFORMATION

[[] has been extracted from []. The Issuer confirms that such information has been accurately reproduced and that, so far as it is aware and is able to ascertain from information published by [], no facts have been omitted which would render the reproduced information inaccurate or misleading.] [Not Applicable]

[PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the final terms required for the issue [and] [the admission to trading on [specify relevant stock exchange/market] of the Notes described herein pursuant to the U.S.\$10,000,000,000 Euro Note Programme of National Bank of Canada.]

Signed on behalf of National Bank of Canada:

By: _____

Duly authorised

PART B - OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

Listing/Admission to trading:

[Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to trading on [the Luxembourg Stock Exchange's Euro MTF Market and listed on the official list of the Luxembourg Stock Exchange] [the Luxembourg Stock Exchange's regulated market] *(This option may only be applicable to money market instruments with a maturity of less than twelve months)* [other] with effect from [].]

[Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on [the Luxembourg Stock Exchange's Euro MTF Market] [the Luxembourg Stock Exchange's regulated market] *(This option may only be applicable to money market instruments with a maturity of less than twelve months)* and listed on the official list of the [Luxembourg Stock Exchange] [other] with effect from [].]

[Not Applicable.]

[Tranche[s] [] of the Notes [is/are] already admitted to trading on *[specify relevant market]* from [].]

2. RATINGS

Ratings:

The [Programme] [Notes to be issued] [have been/has/is/are expected to be] [rated] [have not been rated]. [The following ratings reflect ratings assigned to Notes of this type issued under the Programme generally]:

[S&P Canada: []]

[Moody's Canada: []]

[Fitch: []]

[[Other]: []]

[Each of] [S&P Canada / Moody's Canada [and]/ Fitch] is established outside the EU and the UK and has not applied for registration under the Regulation (EC) No. 1060/2009 (as amended) (the "**EU CRA Regulation**") or Regulation (EC) No. 1060/2009 as it forms part of domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018 (the "**UK CRA Regulation**"). [Ratings by S&P Canada are endorsed by S&P Global Ratings Europe Limited and S&P Global Ratings UK Limited[,]/ratings by Moody's Canada are endorsed by Moody's Deutschland GmbH and Moody's Investors Services Ltd. [and]/ratings by Fitch are endorsed by Fitch Ratings Ireland Limited and Fitch Ratings Limited, each of which is a credit rating agency established in the EU and registered under the EU CRA Regulation

or established in the United Kingdom and registered under the UK CRA Regulation, respectively, each in accordance with the EU CRA Regulation or the UK CRA Regulation, as applicable.]

[ESMA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the EU CRA Regulation. This list must be updated within 5 working days of ESMA's adoption of any decision to withdraw the registration of a credit rating agency under the EU CRA Regulation. The list is located on ESMA's website at <http://www.esma.europa.eu/page/List-registered-and-certified-CRAs>.]

[The FCA is obliged to maintain on its website a list of credit rating agencies registered in accordance with the UK CRA Regulation. The FCA's website address is <https://www.fca.org.uk/markets/credit-rating-agencies/registered-certified-cras>.]

See section headed "Credit Rating Agencies" of the Prospectus for details regarding such ratings.

3. USE OF PROCEEDS

Use of Proceeds:

[] [The net proceeds of the issue of the Notes will be used to finance or refinance, in whole or in part, future and existing eligible businesses and eligible projects, including the Issuer's own operations, that fall within the Eligible Categories (as defined within the Framework).] [Not Applicable]

(Only required if the use of proceeds is different to that stated as default in the Prospectus)

[4. U.S. TAX CONSIDERATIONS]

[The Issuer has determined that the Notes are [not] Specified Notes for purposes of Section 871(m) of the U.S. Internal Revenue Code of 1986, as amended. [Additional information regarding the application of Section 871(m) to the Notes will be available [at [●]].]. [As at the date of this Pricing Supplement, the Issuer has not determined whether the Notes are Specified Notes for purposes of Section 871(m) of the U.S. Internal Revenue Code of 1986; however, indicatively it considers that they will [not] be Specified Notes for these purposes. This is indicative information only, subject to change, and if the Issuer's final determination is different then it will give notice of such determination. Additional information regarding the application of Section 871(m) to the Notes will be available [at [●]].]¹¹ *[The Notes will not be Specified Notes if they*

¹¹ This formulation to be used if the Issuer has not made a determination regarding whether the Notes are Specified Notes as of the date of the Pricing Supplement.

do not reference any U.S. equity or any index that contains any component U.S. equity or otherwise provide direct or indirect exposure to U.S. equities. If the Notes reference a U.S. equity or an index that contains a component U.S. equity or otherwise provide direct or indirect exposure to U.S. equities, further analysis would be required to determine if the Notes will be Specified Notes. If the Notes are Specified Notes, or if additional disclosure with respect to the 871(m) determination is required, include the “Additional information” sentence and specify where additional information may be found.]

[5. REASONS FOR THE OFFER, ESTIMATED NET PROCEEDS AND TOTAL EXPENSES

[(i) Reasons for the offer: []

[(ii)] Estimated net proceeds: []

[(iii)] Estimated total expenses: []]

[6. PERFORMANCE OF THE INDEX/FORMULA/OTHER VARIABLE AND OTHER INFORMATION CONCERNING THE UNDERLYING

[Include details of where past and future performance and volatility of the index/formula can be obtained.]

[Where the underlying is an index composed by the Issuer of a member of its group, include the name of the index and a description.]

[[Where the underlying is an index provided by a legal entity acting in association with, or on behalf, the issuer, include the name of the index, and (i) a description, or (ii) include wording below:

[The complete set of rules of the index and information on the performance of the index are freely accessible on [the Issuer’s] [or/and] [index provider’s] website, and the governing rules (including methodology of the index for the selection and the rebalancing of the components of the index, description of market disruption events and adjustment rules) are based on predetermined and objective criteria.]

[Where the underlying is an index but the index is not composed by the Issuer of a member of its group, include the name of the index and details of where the information about the index can be obtained.]

[Where the underlying is an index basket, include details of the relevant weightings of each index in the basket.]

[]

[The Issuer intends to provide post-issuance transaction information regarding the Notes to be admitted to trading and the

performance of the underlying assets. Such [information/reports] will be provided by the Issuer [*insert method/location, frequency, and/or any other relevant detail*].] [The Issuer does not intend to provide post-issuance transaction information regarding the Notes to be admitted to trading and the performance of the underlying assets.]

7. OPERATIONAL INFORMATION

ISIN: []

Common Code: []

CFI Code: [*include code*], as updated, as set out on the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

FISN: [*include code*], as updated, as set out on the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

(If the CFI and/or FISN is not required or requested as at the completion of the Final Terms, it/they should be specified to be "Not Applicable" while if it/they are not available as at the completion of the Final Terms, it/they should be specified to be "Not Available".)

WKN or any other relevant codes: [] [Not Applicable]

Any clearing system(s) other than Euroclear Bank SA/NV and Clearstream Banking S.A., their addresses and the relevant identification number(s): [Not Applicable/give name(s) and number(s) [and address(es)]]

Delivery: Delivery [against/free of] payment

Name(s) and address(es) of Initial Paying (s), Registrar(s) and Transfer Agent(s): []

Names and addresses of additional Paying Agent(s) (if any), Registrar(s) or Transfer Agent(s): [None/specify]

8. ADDITIONAL INFORMATION [] [Not Applicable]

GENERAL INFORMATION

Approval, Listing on the Official List and Admission to Trading on the Regulated Market or the Euro MTF Market

Application has been made to the CSSF to approve this document as a base prospectus for the Bank. Application has been made to the Luxembourg Stock Exchange to approve this document as (i) an 'alleviated prospectus' for the purposes of Part III of the Prospectus Law in respect of money market instruments having a maturity of less than twelve months and (ii) a base prospectus for the Bank for the purposes of Part IV of the Prospectus Law in respect of Exempt Notes (other than money market instruments mentioned in (i) above and German Registered Notes) to be admitted to the Euro MTF Market. Application has also been made to the Luxembourg Stock Exchange for Senior Notes issued under the Programme to be listed on the Official List and admitted to trading on the Regulated Market or the Euro MTF Market. The Regulated Market is a regulated market for the purposes of MiFID II whilst the Euro MTF Market is not a regulated market for the purposes of MiFID II.

Listing on Other Stock Exchanges and Admission to Other Markets

Senior Notes may also be listed or admitted to trading on such other or further stock exchange(s) or market(s) as may be agreed between the Issuer and the relevant Dealer(s) in relation to such issue. The Bank may also issue unlisted Senior Notes and/or Senior Notes not admitted to trading on any market.

Passporting

The Issuer may, on or after the date of this Prospectus, make applications for one or more certificates of approval under Article 25 of the Prospectus Regulation, to be issued by the CSSF to the competent authority in any Relevant Member State.

This Prospectus has not been submitted to the clearance procedures of the *Autorité des marchés financiers* of France.

Authorisation

The Bank has obtained all necessary consents, approvals and authorisations in connection with the issue and performance of the Senior Notes and from time to time in connection with a particular issue of Senior Notes, will obtain such necessary consents, approvals and authorisations as may be necessary for the issue and performance of the relevant Senior Notes. The renewal of the Programme and the issue of Senior Notes thereunder was authorised by a Resolution of the Board of Directors of the Bank passed on 25 May 2022.

Legending

Each Bearer Note (other than a temporary Global Note) with an original maturity of more than 365 days, Receipt, Coupon and Talon where TEFRA D Rules is specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement, will bear the following legend substantially to the following effect: "Any U.S. person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code".

The following legend will appear on Senior Notes identified as Bail-inable Notes in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement:

"THE NOTES ARE SUBJECT TO CONVERSION IN WHOLE OR IN PART – BY MEANS OF A TRANSACTION OR SERIES OF TRANSACTIONS AND IN ONE OR MORE STEPS – INTO COMMON SHARES OF NATIONAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE *CANADA DEPOSIT INSURANCE CORPORATION ACT* ("**CDIC ACT**") AND TO VARIATION OR EXTINGUISHMENT IN CONSEQUENCE AND SUBJECT TO THE APPLICATION OF THE LAWS OF THE PROVINCE OF QUÉBEC AND THE FEDERAL LAWS OF CANADA APPLICABLE THEREIN IN RESPECT OF THE OPERATION OF THE CDIC ACT WITH RESPECT TO THE NOTES."

Legal and Arbitration Proceedings

Other than as disclosed under the section "Litigation" on page 112, under the subsection entitled "Notice of Assessment" in Note 24 on page 213 and under the subsection entitled "Contingent Liabilities – Litigation" in Note 26 on page 216 of the 2021 Annual Report incorporated by reference in this Prospectus, neither the Bank nor any of its subsidiaries is or has been involved in any governmental, legal and arbitration proceedings relating to claims or amounts that are material in the context of the issue of the Senior Notes or that may have, or have had in the recent past, significant effects on the Bank's financial position or profitability, nor, so far as the Bank is aware, are any such proceedings pending or threatened during the 12 months before the date of this Prospectus.

No Significant Change / No Material Adverse Change

As at the date hereof, there has been no significant change in the financial performance or financial position of the Bank or the Bank and its subsidiaries taken as a whole since 30 April 2022, being the date of the latest interim unaudited interim consolidated financial statements of the Bank, and there has been no material adverse change in the prospects of the Bank and its subsidiaries taken as a whole since 31 October 2021, being the date of the latest annual audited published consolidated financial statements of the Bank.

Clearing Systems

Senior Notes have been accepted for clearance through the Clearstream, Luxembourg and Euroclear systems. The Common Code and the International Securities Identification Number (ISIN) for each Series of Senior Notes will be set out in the applicable Final Terms or, in the case of Exempt Notes, applicable Pricing Supplement. The applicable Final Terms or, in the case of Exempt Notes, applicable Pricing Supplement, shall specify any other clearing system as shall have accepted the relevant Senior Notes for clearance together with any further appropriate information (including address). The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210, Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy, L-1855, Luxembourg. The address of any other alternative clearing system and associated securities identification numbers will be specified in the applicable Final Terms or, in the case of Exempt Notes, the applicable Pricing Supplement.

Documents Available for Inspection

For the 12 months following the date of this Prospectus and so long as any Senior Notes remain outstanding, physical copies of the following documents may be inspected during normal business hours at the specified office of each of the Paying Agents during normal business hours and on the website of the Bank:

- (a) charter and by-laws of the Bank;
- (b) this Prospectus (together with any supplements thereto);
- (c) latest Annual Information Form;

- (d) latest audited consolidated financial statements of the Bank;
- (e) latest quarterly report to shareholders of the Bank; and
- (f) each Final Terms (in the case of the relevant Senior Notes).

For so long as any relevant Exempt Notes are outstanding, copies of the Pricing Supplement (in respect of Exempt Notes other than Exempt Notes listed and admitted to trading on the Euro MTF Market, which will only be applicable available for inspection by the holder of such Senior Notes and such holder must produce evidence satisfactory to the Bank and the Paying Agent as to its holding of Senior Notes and identity), and copies of the Agency Agreement will be available for inspection, at the specified offices of each of the Paying Agents during normal business hours.

The Bank does not publish non-consolidated financial statements.

The Prospectus, any Supplement, any Drawdown Prospectus, the Final Terms noted above and the documents incorporated by reference in this Prospectus (see “Documents Incorporated by Reference”) will also be available on the website of the Luxembourg Stock Exchange at www.bourse.lu and the Prospectus will remain publicly available for at least 10 years.

Independent Auditor

Deloitte LLP is the independent auditor of the Bank and expressed an unmodified opinion on the consolidated financial statements as at 31 October 2021 and 2020, which were prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. Deloitte LLP is a member of the Ordre des comptables professionnels agréés du Québec. Deloitte LLP is on the Register of Third Country Auditors maintained by the CSSF in accordance with the European Commission Decision of 29 January 2011 (Decision 2011/30/EU).

Yield

In relation to any Tranche of Fixed Rate Notes other than Exempt Notes, an indication of the yield in respect of such Senior Notes will be specified in the applicable Final Terms. The yield is calculated at the Issue Date of the Senior Notes on the basis of the relevant Issue Price. The yield indicated will be calculated as the yield to maturity as at the Issue Date of the Senior Notes and will not be an indication of future yield.

Price and Amount of Senior Notes

The price and amount of Senior Notes to be issued under the Programme will be determined by the Issuer and the relevant Dealer at the time of issue in accordance with prevailing market conditions.

Legal Entity Identifier (LEI)

The Legal Entity Identifier (LEI) of the Bank is BSGEFEIOM18Y80CKCV46.

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REGISTRAR

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