

BASE PROSPECTUS



**TEOLLISUUDEN VOIMA OYJ**

*(incorporated with limited liability in Finland)*

**EUR 4,000,000,000**

**Euro Medium Term Note Programme**

---

This Base Prospectus has been approved by the Luxembourg *Commission de Surveillance du Secteur Financier* (the "CSSF"), which is the Luxembourg competent authority for the purpose of the Prospectus Directive (as defined herein) and relevant implementing measures in Luxembourg, as a base prospectus issued in compliance with the Prospectus Directive and relevant implementing measures in Luxembourg for the purpose of giving information with regard to the issue of notes (the "Notes") issued under the EUR 4,000,000,000 Euro Medium Term Note Programme (the "Programme") described in this Base Prospectus during the period of twelve months after the date hereof. Applications have been made for such Notes to be admitted during the period of twelve months after the date hereof to listing on the official list and to trading on the regulated market of the Luxembourg Stock Exchange. The regulated market of the Luxembourg Stock Exchange is a regulated market for the purposes of Directive 2014/65/EU on markets in financial instruments ("MiFID II"). Pursuant to Article 7(7) of the Luxembourg law dated 10 July 2005 on prospectuses for securities, as amended by the Luxembourg law of 3 July 2012, by approving this Base Prospectus, the CSSF assumes no responsibility as to the economic and financial soundness of the transactions contemplated under this Base Prospectus or the quality or the solvency of the Issuer. The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or to be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems, as may be agreed with the Issuer.

Tranches of Notes (as defined in "Terms and Conditions of the Notes") to be issued under the Programme may be rated or unrated. Where a Tranche of Notes is rated, such rating will not necessarily be the same as the rating assigned to the Notes already issued. Where a Tranche of Notes is rated, the applicable rating(s) will be specified in the relevant Final Terms. In general, European regulated investors are restricted from using a rating for regulatory purposes if such rating is not (1) issued by a credit rating agency established in the European Economic Area (the "EEA") and registered under Regulation (EU) No 1060/2009, as amended (the "CRA Regulation") (2) issued by a credit rating agency which is not established in the EEA but will be endorsed by a credit rating agency which is established in the EEA and registered under the CRA Regulation or (3) issued by a credit rating agency which is not established in the EEA but which is certified under the CRA Regulation. The European Securities and Markets Authority ("ESMA") is obliged to maintain on its website, [www.esma.europa.eu/page/List-registered-and-certified-CRAs](http://www.esma.europa.eu/page/List-registered-and-certified-CRAs), a list of credit rating agencies registered and certified in accordance with the CRA Regulation. The ESMA website is not incorporated by reference into, nor does it form part of, this Base Prospectus. This list must be updated within five working days of ESMA's adoption of any decision to withdraw the registration of a credit rating agency under the CRA Regulation. Therefore, such list is not conclusive evidence of the status of the relevant rating agency as there may be delays between certain supervisory measures being taken against a relevant rating agency and the publication of the updated ESMA list.

A security rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

*Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the ability of the Issuer to fulfil its obligations under the Notes are discussed under "Risk Factors" below.*

**Arranger & Dealer**  
**NORDEA**

**Dealers**

**BNP PARIBAS**  
**DANSKE BANK**  
**MIZUHO SECURITIES**  
**NATWEST MARKETS**  
**SEB**

**CRÉDIT AGRICOLE CIB**  
**HANDELSBANKEN CAPITAL MARKETS**  
**MUFG**  
**OP CORPORATE BANK PLC**  
**SWEDBANK AB (PUBL)**

**27 June 2019**

## IMPORTANT NOTICES

**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 Directive 2014/65/EU ("**MiFID II**"); (ii) a customer within the meaning of Directive 2002/92/EC (the "**IMD**"), 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 Directive. Consequently no key information document required by Regulation (EU) No 1286/2014 (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.

**SINGAPORE SFA PRODUCT CLASSIFICATION** – In connection with Section 309B of the Securities and Futures Act (Chapter 289) of Singapore (the "**SFA**") and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "**CMP Regulations 2018**"), unless otherwise specified before an offer of Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are 'prescribed capital markets products' (as defined in the CMP 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).

**MiFID II product governance / target market** – The Final Terms (as defined below) in respect of any Notes will include a legend entitled "MiFID II Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the 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 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 of Notes about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such 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 Product Governance Rules.

Amounts payable on Floating Rate Notes will be calculated by reference to one of CIBOR, EURIBOR, LIBOR, NIBOR, SOFR, SONIA and STIBOR as specified in the relevant Final Terms. As at the date of this Base Prospectus, the administrator of LIBOR is included in ESMA's register of administrators under Article 36 of the Regulation (EU) No. 2016/1011 (the "**Benchmarks Regulation**"). As at the date of this Base Prospectus, the administrators of CIBOR, EURIBOR, NIBOR, SOFR, SONIA and STIBOR are not included in ESMA's register of administrators the Benchmarks Regulation. As far as the Issuer is aware, the transitional provisions in Article 51 of the Benchmarks Regulation apply, such that Finance Denmark, the European Money Markets Institute, Norske Finansielle Referanser AS and the Swedish Bankers' Association are not currently required to obtain authorisation/registration (or, if located outside the European Union, recognition, endorsement or equivalence).

Teollisuuden Voima Oyj (the "**Issuer**") (the "**Responsible Person**") ("**TVO**") accepts responsibility for the information contained in this Base Prospectus and the Final Terms for each Tranche of Notes issued under the Programme and declares that, having taken all reasonable care to ensure that such is the case, the information contained in this Base Prospectus and the Final Terms for each Tranche of Notes issued under the Programme is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Each Tranche of Notes will be issued on the terms set out herein under "*Terms and Conditions of the Notes*" (the "**Conditions**") as completed by a document specific to such Tranche called final terms (the "**Final Terms**") or in a separate prospectus specific to such Tranche (the "**Drawdown Prospectus**") as described under "*Final Terms and Drawdown Prospectuses*" below. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

This Base Prospectus must be read and construed together with any supplements hereto and with any information incorporated by reference herein and, in relation to any Tranche of Notes which is the subject of Final Terms, must be read and construed together with the relevant Final Terms.

The Issuer has confirmed to the Dealers named under "*Subscription and Sale*" below that this Base Prospectus contains all information which is (in the context of the Programme, the issue, offering and sale of the Notes) material; that such information is true and accurate in all material respects and is not misleading in any material respect; that any opinions, predictions or intentions expressed herein are honestly held or made and are not misleading in any material respect; that this Base Prospectus does not omit to state any material fact necessary to make such information, opinions, predictions or intentions (in the context of the Programme, the issue, offering and sale of the Notes) not misleading in any material respect; and that all proper enquiries have been made to verify the foregoing.

#### ***Unauthorised information***

No person has been authorised to give any information or to make any representation not contained in or not consistent with this Base Prospectus or any other document entered into in relation to the Programme or any information supplied by the Issuer or such other information as is in the public domain and, if given or made, such information or representation should not be relied upon as having been authorised by the Issuer or any Dealer.

Neither the Dealers nor any of their respective affiliates have authorised the whole or any part of this Base Prospectus and none of them makes any representation or warranty or accepts any responsibility as to the accuracy or completeness of the information contained in this Base Prospectus. Neither the delivery of this Base Prospectus or any Final Terms nor the offering, sale or delivery of any Note shall, in any circumstances, create any implication that the information contained in this Base Prospectus is true subsequent to the date hereof or the date upon which this Base Prospectus has been most recently amended or supplemented or that there has been no adverse change, or any event reasonably likely to involve any adverse change, in the prospects or financial or trading position of the Issuer since the date thereof or, if later, the date upon which this Base Prospectus has been most recently amended or supplemented or that any other information supplied in connection with the Programme is correct at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

#### ***Restrictions on distribution***

The distribution of this Base Prospectus and any Final Terms and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Base Prospectus or any Final Terms comes are required by the Issuer and the Dealers to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of this Base Prospectus or any Final Terms and other offering material relating to the Notes, see "*Subscription and Sale*". In particular, Notes have not been and will not be registered under the United States Securities Act of 1933 (as amended) (the "**Securities Act**") and Bearer Notes are subject to U.S. tax law requirements. Subject to certain exceptions, Notes may not be offered, sold or, in the case of Bearer Notes, delivered within the United States or to U.S. persons.

Neither this Base Prospectus nor any Final Terms constitutes an offer or an invitation to subscribe for or purchase any Notes and should not be considered as a recommendation by the Issuer, the Dealers or any of them that any recipient of this Base Prospectus or any Final Terms should subscribe for or purchase any Notes. Each recipient of this Base Prospectus or any Final Terms shall be taken to have made its own investigation and appraisal of the condition (financial or otherwise) of the Issuer.

Each potential investor in the Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- (a) have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or incorporated by reference in this Base Prospectus or any applicable supplement;
- (b) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact the Notes will have on its overall investment portfolio;

- (c) have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes where the currency for principal or interest payments is different from the potential investor's currency;
- (d) understand thoroughly the terms of the Notes and be familiar with the behaviour of any relevant indices and financial markets; and
- (e) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

The maximum aggregate principal amount of Notes outstanding at any one time under the Programme will not exceed EUR 4,000,000,000 (and for this purpose, any Notes denominated in another currency shall be translated into euro at the date of the agreement to issue such Notes (calculated in accordance with the provisions of the Dealer Agreement). The maximum aggregate principal amount of Notes which may be outstanding at any one time under the Programme may be increased from time to time, subject to compliance with the relevant provisions of the Dealer Agreement as defined under "*Subscription and Sale*".

### *Certain definitions*

In this Base Prospectus, unless otherwise specified, references to a "**Member State**" are references to a Member State of the European Economic Area, references to "**£**" are to the lawful currency of the United Kingdom and references to "**EUR**", "**euro**" or "**€**" are to the currency introduced at the start of the third stage of European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the euro, as amended and references to "**NOK**" or "**Norwegian Kroner**" are to the lawful currency of the Kingdom of Norway.

Certain figures included in this Base Prospectus have been subject to rounding adjustments; accordingly, figures shown for 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.

### *Offers of Notes*

This Base Prospectus has been prepared on the basis that any offer of Notes in any Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "**Relevant Member State**") will be made pursuant to an exemption under the Prospectus Directive, as implemented in that Relevant Member State, from the requirement to publish a prospectus for offers of Notes. Accordingly any person making or intending to make an offer in that Relevant Member State of Notes which are the subject of an offering contemplated in this Base Prospectus as completed by Final Terms or a Drawdown Prospectus in relation to the offer of those 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 Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, 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 circumstances in which an obligation arises for the Issuer or any Dealer to publish or supplement a prospectus for such offer. The expression "**Prospectus Directive**" means Directive 2003/71/EC (as amended or superseded), and includes any relevant implementing measure in the Relevant Member State.

**In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilising Manager(s) (or persons acting on behalf of any Stabilising Manager(s)) may over allot Notes or effect transactions with a view to supporting the market price of the 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 of Notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilisation action or over-allotment must be conducted by the Stabilising Manager(s) (or persons acting on behalf of any stabilising Manager(s)) in accordance with all applicable laws and rules.**

### *Forward-looking statements*

This Base Prospectus contains certain forward-looking statements that reflect the current views of TVO with respect to the financial condition, results of operations and business of TVO and certain of the plans, intentions, expectations, assumptions, goals and beliefs of TVO regarding such items. These statements

include matters that are not historical fact and generally, but not always, may be identified by the use of words such as "aims", "believes", "expects", "are expected to", "anticipates", "intends", "estimates", "should", "will", "will continue", "may", "is likely to", "plans", "targets" or similar expressions, including variations and the negatives thereof or comparable terminology. Other forward-looking statements can be identified in the context in which the statements are made.

Such forward-looking statements are based on assumptions, present plans, estimates, projections and expectation of TVO and are subject to various risks and uncertainties. Examples of these risks, uncertainties and other factors include, but are not limited to those discussed in section "*Risk Factors*". Prospective investors should be aware that forward-looking statements are not guarantees of future performance and that TVO's actual, financial condition, business, results of operations and the development of the industry in which it operates may differ significantly from those predicted or suggested by the forward-looking statements contained in this Base Prospectus. In addition, even if TVO's financial condition, results of operations, and business and the development of the industry in which it operates are consistent with the forward-looking statements contained in this Base Prospectus, those results or developments may not be indicative of results or developments in any subsequent periods. Should one or more of these or other risks or uncertainties materialise, or should any underlying assumptions prove to be incorrect, the actual financial condition, results of operations or business of TVO or its ability to fulfil its obligations under the Notes could differ materially from those described herein as anticipated, believed, estimated or expected.

The Issuer expressly disclaims any obligation to update forward-looking statements or to adjust them in light of future events or developments, save as required by law or regulation.

## CONTENTS

	Page
IMPORTANT NOTICES .....	ii
OVERVIEW .....	2
RISK FACTORS .....	6
GENERAL DESCRIPTION OF THE PROGRAMME .....	17
INFORMATION INCORPORATED BY REFERENCE .....	18
FINAL TERMS AND DRAWDOWN PROSPECTUSES .....	20
FORMS OF THE NOTES .....	21
TERMS AND CONDITIONS OF THE NOTES .....	25
FORM OF FINAL TERMS .....	58
OVERVIEW OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM .....	69
USE OF PROCEEDS .....	73
DESCRIPTION OF THE ISSUER .....	74
TAXATION .....	97
SUBSCRIPTION AND SALE .....	100
GENERAL INFORMATION .....	103

## OVERVIEW

*Words and expressions defined in the "Terms and Conditions of the Notes" below or elsewhere in this Base Prospectus have the same meanings in this overview.*

<b>Issuer:</b>	Teollisuuden Voima Oyj.
<b>Risk Factors:</b>	Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the ability of the Issuer to fulfil its obligations under the Notes are discussed under " <i>Risk Factors</i> " below and include market risk, credit risk, liquidity risk and operational risk.
<b>Arranger:</b>	Nordea Bank Abp.
<b>Dealers:</b>	BNP Paribas, Cr�dit Agricole Corporate and Investment Bank, Danske Bank A/S, MUFG Securities (Europe) N.V., Mizuho International plc, Mizuho Securities Europe GmbH, NatWest Markets Plc, Nordea Bank Abp, OP Corporate Bank plc, Skandinaviska Enskilda Banken AB (publ), Svenska Handelsbanken AB (publ), Swedbank AB (publ) and any other Dealer appointed from time to time by the Issuer either generally in respect of the Programme or in relation to a particular Tranche of Notes.
<b>Fiscal Agent:</b>	Deutsche Bank AG, London Branch.
<b>Luxembourg Listing Agent:</b>	Deutsche Bank Luxembourg S.A.
<b>Final Terms or Drawdown Prospectus:</b>	Notes issued under the Programme may be issued either (1) pursuant to this Base Prospectus and relevant Final Terms or (2) pursuant to a Drawdown Prospectus. The terms and conditions applicable to any particular Tranche of Notes will be the Terms and Conditions of the Notes as completed to the extent described in the relevant Final Terms or, as the case may be, the relevant Drawdown Prospectus.
<b>Listing and Trading:</b>	Applications have been made for Notes to be admitted during the period of twelve months after the date hereof to listing on the official list and to trading on the regulated market of the Luxembourg Stock Exchange. The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or to be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems, as may be agreed with the Issuer.
<b>Clearing Systems:</b>	Euroclear and/or Clearstream, Luxembourg.
<b>Initial Programme Amount:</b>	Up to EUR 4,000,000,000 (or its equivalent in other currencies) aggregate principal amount of Notes outstanding at any one time.
<b>Issuance in Series:</b>	Notes will be issued in Series. Each Series may comprise one or more Tranches issued on different issue dates. The Notes of each Series will all be subject to identical terms, except that the issue date and the amount of the first payment of interest may be different in respect of different Tranches. The Notes of each Tranche will all be subject to identical terms in all respects save that a Tranche may comprise Notes of different denominations.
<b>Forms of Notes:</b>	Notes may be issued in bearer form or in registered form.  Each Tranche of Bearer Notes will initially be in the form of either a Temporary Global Note or a Permanent Global Note, in each case as specified in the relevant Final Terms. Each Global Note which is not

intended to be issued in new global note form (a "**Classic Global Note**" or "**CGN**"), as specified in the relevant Final Terms, will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and each Global Note which is intended to be issued in new global note form (a "**New Global Note**" or "**NGN**"), as specified in the relevant Final Terms, will be deposited on or around the relevant issue date with a common safekeeper for Euroclear and/or Clearstream, Luxembourg. Each Temporary Global Note will be exchangeable for a Permanent Global Note or, if so specified in the relevant Final Terms, for Definitive Notes. If the TEFRA D Rules are specified in the relevant Final Terms as applicable, certification as to non-U.S. beneficial ownership will be a condition precedent to any exchange of an interest in a Temporary Global Note or receipt of any payment of interest in respect of a Temporary Global Note. Each Permanent Global Note will be exchangeable for Definitive Notes in accordance with its terms. Definitive Notes will, if interest-bearing, have Coupons attached and, if appropriate, a Talon for further Coupons.

Each Tranche of Registered Notes will be in the form of either Individual Note Certificates or a Global Registered Note, in each case as specified in the relevant Final Terms. Each Global Registered Note will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and registered in the name of a nominee for such depositary or common depositary and will be exchangeable for Individual Note Certificates in accordance with its terms.

Each Note represented by a Global Registered Note will either be: (a) in the case of a Note which is not to be held under the new safekeeping structure ("**New Safekeeping Structure**" or "**NSS**"), registered in the name of a common depositary (or its nominee) for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and the relevant Global Registered Note will be deposited on or about the issue date with the common depositary; or (b) in the case of a Note to be held under the New Safekeeping Structure, be registered in the name of a common safekeeper (or its nominee) for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and the relevant Global Registered Note will be deposited on or about the issue date with the common safekeeper for Euroclear and/or Clearstream, Luxembourg.

<b>Currencies:</b>	Notes may be denominated in euro or in any other currency or currencies, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements. Payments in respect of Notes may, subject to such compliance, be made in any currency or currencies other than the currency in which such Notes are denominated.
<b>Status of the Notes:</b>	Notes will be issued on an unsubordinated basis.
<b>Issue Price:</b>	Notes may be issued at any price on a fully paid basis, as specified in the relevant Final Terms. The price and amount of Notes to be issued under the Programme will be determined by the Issuer and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions.
<b>Maturities:</b>	Any maturity up to 30 years, subject, in relation to specific currencies, to compliance with all applicable legal and/or regulatory and/or central bank requirements.



Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the Financial Services and Markets Act 2000 (the "FSMA") by the Issuer.

<b>Redemption:</b>	Notes may be redeemable at par or at such other Redemption Amount, which shall not be less than par, as may be specified in the relevant Final Terms.
<b>Optional Redemption:</b>	Notes may be redeemed before their stated maturity at the option of the Issuer (either in whole or in part) and/or the Noteholders to the extent (if at all) specified in the relevant Final Terms.
<b>Tax Redemption:</b>	Except as described in " <i>Optional Redemption</i> " above, early redemption will only be permitted for tax reasons as described in Condition 9(b) ( <i>Redemption and Purchase - Redemption for tax reasons</i> ).
<b>Interest:</b>	Notes may be interest-bearing or non-interest bearing. Interest (if any) may accrue at a fixed rate or a floating rate or other variable rate and the method of calculating interest may vary between the issue date and the maturity date of the relevant Series.
<b>Denominations:</b>	No Notes may be issued under the Programme which (a) have a minimum denomination of less than EUR 100,000 (or nearly equivalent in another currency), or (b) carry the right to acquire shares (or transferable securities equivalent to shares) issued by the Issuer or by any entity to whose group the Issuer belongs. Subject thereto, Notes will be issued in such denominations as may be specified in the relevant Final Terms, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.
<b>Negative Pledge:</b>	The Notes will have the benefit of a negative pledge as described in Condition 5 ( <i>Negative Pledge</i> ).
<b>Cross Default:</b>	The Notes will have the benefit of a cross default as described in Condition 13 ( <i>Events of Default</i> ).
<b>Taxation:</b>	All payments in respect of Notes will be made free and clear of withholding taxes of Finland unless the withholding is required by law. In that event, the Issuer will (subject as provided in Condition 12 ( <i>Taxation</i> )) pay such additional amounts as will result in the Noteholders receiving such amounts as they would have received in respect of such Notes had no such withholding been required.
<b>Governing Law:</b>	English law.

<b>Enforcement of Notes in Global Form:</b>	In the case of Global Notes, individual investors' rights against the Issuer will be governed by a Deed of Covenant dated 27 June 2019, a copy of which will be available for inspection at the specified office of the Fiscal Agent.
<b>Ratings:</b>	The rating of certain Series of Notes to be issued under the Programme may be specified in the applicable Final Terms.
<b>Selling Restrictions:</b>	For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of offering material in the United States of America, the European Economic Area and the United Kingdom, see " <i>Subscription and Sale</i> " below.

## RISK FACTORS

*TVO believes that the following factors may affect its ability to fulfil its obligations under the Notes issued under the Programme. All of these factors are contingencies that may or may not occur and TVO is not in a position to express a view on the likelihood of any such contingency occurring.*

*Factors which TVO believes may be material for the purpose of assessing the market risks associated with Notes issued under the Programme are also described below. TVO believes that the factors described below represent the principal risks inherent in investing in the Notes issued under the Programme, but TVO may be unable to pay interest, principal or other amounts on or in connection with any Notes for other reasons and TVO does not represent that the statements below regarding the risks of holding any Notes are exhaustive.*

*Prospective investors should also read the detailed information set out elsewhere in this Base Prospectus including any documents incorporated by reference herein, and reach their own independent views prior to making any investment decision.*

### **Factors that may affect TVO's ability to fulfil its obligations under the Notes issued under the Programme**

#### *Safety and stability of operations*

Throughout their approximately 40 years of commercial operations, TVO's nuclear power plant units Olkiluoto 1 ("**OL1**") and Olkiluoto 2 ("**OL2**") have exhibited high load factors and low incident frequencies (see "*Description of the Issuer – Nuclear Power - Safety and Environmental Issues*") and TVO's management considers this as evidence of the high reliability and safety of the operations, which also have underpinned the financial stability of TVO. However, no assurances can be given that such reliability and safety of operations, as well as financial stability, will continue in the future. If materialised, any incidents that would undermine the safety and stability of TVO's operations could have a material adverse impact on TVO's business and financial position.

#### *Disposal of nuclear waste*

In order to reduce the risk of nuclear irradiation, multi-layered containment systems and sophisticated safety protocols are used by TVO to effectively isolate radioactive materials from the surrounding environment during the process of interim storage, packaging, transport, relocation and encasement of nuclear waste in the final storage repositories. Nevertheless, the risk of radioactive leakage into the environment at various stages of this process, as well as from the final storage facilities themselves, cannot be excluded entirely and, should such risk materialise, it could have a material adverse impact on TVO's business and financial position.

TVO bears full legal and financial responsibility for the management and disposal of nuclear waste produced by the Olkiluoto nuclear power plant units. The future cost of containing the nuclear waste and maintaining the storage facilities over time is to be paid for from the Finnish State Nuclear Waste Management Fund (the "**Fund**") to which the nuclear power producers in Finland make annual contributions. Contributions to the Fund are calculated on the basis of actual estimates of the future cost of the management of such nuclear waste. However, if the amounts provided by the Fund were ever to be insufficient to cover the actual costs of managing the nuclear waste, then TVO would be responsible for its pro-rata share of any such excess costs.

#### *Regulation of nuclear power plants*

The operation of nuclear facilities depends on a number of regulations including, but not limited to, regulations concerning safety, technical specifications and the transport and storage of nuclear material. A failure by TVO to comply with applicable regulations could result in an interruption of its operations and could have a material adverse impact on its business and financial position.

On 20 September 2018, the Finnish Government ("**Finnish Government**" or "**Government**") granted TVO an operating licence under section 20 of the Finnish Nuclear Energy Act (*Ydinenergi laki*, 990/1987, as amended, "**Nuclear Energy Act**") for the nuclear power plant units OL1 and OL2. The operating licence for OL1 and OL2 units is valid until 31 December 2038. The new licence replaced TVO's previous operating licence for OL1 and OL2 units granted on 20 August 1998. Based on the licence decision, the

licence is immediately enforceable regardless of appeals in accordance with section 31 of the Finnish Administrative Judicial Procedure Act (586/1996, as amended).

The Finnish Government made the decision in principle on the OL3 EPR on 17 January 2002, and granted the construction licence for the OL3 EPR on 17 February 2005. On 7 March 2019, the Finnish Government granted TVO an operating licence under section 20 of the Nuclear Energy Act also for the EPR nuclear power plant unit Olkiluoto 3 ("**OL3 EPR**"). The operating licence for OL3 EPR unit is valid until 31 December 2038. Based on the licence decision, the licence is immediately enforceable regardless of appeals in accordance with section 31 of the Finnish Administrative Judicial Procedure Act (586/1996, as amended). Partners to the Olkiluoto and Orjasaari jointly-owned area, partners to the Munakari jointly-owned area, and partners to the Sorkka jointly-owned area have filed an appeal with the Supreme Administrative Court in relation to the Olkiluoto 3 operation license. TVO, the Ministry of Economic Affairs and Employment and STUK have given their statements about the appeal and consider it to be unfounded.

Due to the Fukushima Dai-ichi nuclear power plant accident in Japan in March 2011, a review of nuclear plant safety measures was initiated in Europe by the European Commission. The report by the European Commission released in April 2012 stated that the safety in the nuclear power plants in European Union is at a good level. According to the report, however, national measures are needed especially for preparing for the consequences of extreme conditions. In Finland, STUK started, at the request of the MEE an assessment on how nuclear power plants in Finland have prepared for the impacts that floods and other extreme conditions may have on the functioning of the facilities. According to the final report given by STUK in 2012, the safety of Finnish nuclear power plants, including provisions for severe accidents, earthquakes and extreme weather conditions, has been improved systematically since the plants were commissioned. STUK however, raised some new questions and suggestions for improvements. Such improvements have been implemented for OL1 and OL2 to include reducing the dependence of cooling needed in emergency situations on the electrical systems that are designed to reduce such dependence. In May 2013, TVO signed an agreement for the delivery of emergency diesel generators and associated auxiliary systems. The replacement project of the emergency diesel generators is the largest individual plant modification project ever undertaken in Olkiluoto. The total investment of the replacement project is estimated to be more than EUR 100 million. The project is estimated to continue until 2023. STUK updated its original 2012 Finnish National Action Plan in December 2014.

As a result of the safety assessments and nuclear stress tests undertaken as part of its review of safety measures in the nuclear industry, the European Commission amended the Nuclear Safety Directive (Council Directive 2009/71/EURATOM) with the Nuclear Safety Directive Amendment (Council Directive/2014/87/EURATOM), which came into force in August 2014. The amended directive aims to strengthen the powers and independence of national safety authorities and introduces EU-wide safety objectives. It also establishes a European system of regular peer reviews. The amendments to the Nuclear Energy Act implementing the directive entered into force on 1 January 2018. The legislative amendments are not expected to result in significant changes for TVO or require significant investments by TVO.

TVO's management is currently not aware of any deficiencies in safety measures in the Olkiluoto nuclear power plant units. However, the operation of nuclear power units is complex and requires compliance with a number of regulations including, but not limited to, regulations concerning safety, technical specifications and the transport and storage of nuclear material. A failure by TVO to comply with applicable regulations or any new regulations that may be introduced could result in interruption of its operations and have a material adverse impact on its business and financial position. In addition, no assurance can be given that any new legislation would not adversely affect the Issuer's business and financial position due to significant new investments required, or otherwise.

#### *Political risks*

Construction of a new nuclear power plant requires a decision in principle which is made by the Finnish Government, and such a decision also requires ratification by the Finnish Parliament ("**Finnish Parliament**" or "**Parliament**") by a simple majority in accordance with sections 11 and 15 of the Nuclear Energy Act. Once such ratification has been obtained, a construction licence can be approved by the Finnish Government in accordance with section 18 of the Nuclear Energy Act. Furthermore, in order to operate a nuclear power plant, an operating licence granted by the Finnish Government is required in accordance with section 20 of the Nuclear Energy Act. If due to a political decision, the licence to construct or operate a nuclear facility is cancelled or the licence to operate a nuclear facility is denied, the holder of the cancelled

licence or the applicant whose licence to operate the nuclear facility has been denied, is entitled to a reasonable compensation from the State of Finland for the direct expenses incurred in the construction of the facility in accordance with section 27 of the Nuclear Energy Act. TVO's management is not aware of any plans to change Finnish legislation concerning the licensing and compensation procedure. However, no assurance can be given that such changes will not occur in the future or that other laws or regulations, including tax laws, that could have a material impact on TVO's business and financial position, will not be passed.

#### *Nuclear fuel procurement*

Procurement of nuclear fuel involves the following three main elements: the purchase of raw uranium; uranium enrichment services; and nuclear fuel manufacture. Throughout its history, TVO has followed a policy of maintaining relationships with a number of suppliers of the aforesaid elements. This policy, the aim of which has been to diversify supply sources and to ensure competitive pricing for each element has, in the management's opinion, resulted in reliable and cost-efficient fuel procurement. Management does not currently foresee any major difficulties in obtaining nuclear fuel. However, the cost at which uranium is available changes according to fluctuations in the world markets and is influenced by fluctuations in the price of other fuels, such as oil. Most of these services are procured under long term contracts, however, no assurance can be given that developments in the demand and supply for nuclear fuel and related services will not result in procurement problems for TVO and, as a result, have a material adverse impact on TVO's business and financial position.

#### *Risks related to the Olkiluoto 3 EPR project*

TVO is in the process of constructing a third nuclear power plant unit, OL3 EPR, at the Olkiluoto site (see "*Description of the Issuer - Nuclear Power - Olkiluoto 3 EPR*"). OL3 EPR was commissioned as a turnkey project from a consortium formed by Areva GmbH, Areva NP SAS ("**Areva NP**") and Siemens AG (together, the "**Supplier**"). The members of the consortium are jointly and severally liable for the obligations under the contract for the construction of OL3 EPR between the Supplier and TVO (the "**Plant Contract**"). Under the Plant Contract, the Supplier guaranteed a completion date of 30 April 2009, however, several delays in the completion of OL3 EPR throughout the duration of the project were reported. Due to the delays in the construction of the OL3 EPR project, TVO was party to arbitration proceedings under the Rules of the International Chamber of Commerce (the "**ICC**") with respect to costs and losses incurred in relation thereto.

In March 2018, Areva NP, Areva GmbH, Areva group parent company Areva SA, Siemens AG and TVO signed a global settlement agreement and certain ancillary agreements (the "**GSA**"). In addition to settling all on-going legal actions related to the OL3 EPR project, the GSA is aimed at securing the provision of adequate and competent technical and human resources as well as funds for completion and start-up of the OL3 EPR until the end of the applicable guarantee periods. For more details on the GSA, see "*Description of the Issuer—Arbitration and Other Proceedings*".

When entering into the GSA, the regular electricity production at the OL3 EPR was scheduled to start in May 2019. According to the schedule provided by the Supplier in November 2018, nuclear fuel was planned to be loaded into the reactor in June 2019, the first connection to the grid was scheduled to take place in October 2019, and the start of regular electricity production of the OL3 EPR nuclear power plant unit was scheduled to take place in January 2020.

According to a stock exchange release published by TVO on 10 April 2019, the Supplier is expected to update the schedule for OL3 EPR project and deliver a new schedule to TVO by the end of June 2019. Based on the information provided by the Supplier, nuclear fuel will not be loaded to the reactor before the end of August 2019 at the earliest.

Furthermore, according to a stock exchange release published by TVO on 19 June 2019, based on the information provided by the Supplier, the schedule review is expected to be completed in July 2019.

The GSA includes an incentive and penalty payment mechanism under which incentives and penalties may be payable by TVO or the Supplier, respectively. However, as the estimated completion of the project is expected to extend beyond the end of 2019, the Supplier is not expected to be entitled to receive any incentive payment. In the event that the Supplier fails to complete the OL3 EPR project by the end of 2019, it has agreed to pay penalties to TVO from such delay. The amount of such penalties depends on the actual

completion date of the project and, in any case, is limited to a maximum of EUR 400 million. In addition, the GSA sets up several funding mechanisms to secure the completion of the OL3 EPR covering all guarantee periods, including a trust funded by Areva NP, Areva GmbH and Areva SA to secure the financing of the costs of completion and start-up of the OL3 EPR. In the event that the Supplier fails to complete the OL3 EPR project by 30 June 2021, TVO has a right to terminate the Plant Contract upon notice.

As the OL3 EPR project is still on-going, no assurance can be given that the parties will meet their respective obligations under the Plant Contract and the GSA. A failure by one or more of the Supplier consortium companies, or TVO, to meet their respective obligations could further delay the start of regular electricity production and result in additional costs for TVO and subject it to new legal proceedings. If materialised, such failure could have a material adverse impact on TVO's business and financial position.

*Risks related to major adverse events or circumstances that could disrupt TVO's power production or otherwise have a material adverse effect on TVO's business or financial position*

TVO is subject to the risk that its power production could be disrupted due to major external adverse events outside of the control of TVO, such as (but not limited to) significant changes in, or cancellation of, its operating or other (e.g., environmental licences) licences related to one or more of its nuclear power plants; changes in laws or regulations governing the operation of nuclear power plants in Finland generally or one or more of TVO's nuclear plants specifically; issues related to the availability of nuclear power plant equipment, nuclear fuel and service providers in relation to TVO's nuclear power plants or disputes related to the equipment, nuclear fuel or services provided (including possible financial distress of such providers); or catastrophic events in relation to one or more of TVO's nuclear power plants, such as fires, explosions, floods, terrorist activities, pandemics, and other similar destructive or disruptive events. As discussed in "*Description of the Issuer - Operating Model of TVO*", TVO operates based on a cost-price principle (the "**Mankala Principle**") and, under its Articles of Association, TVO supplies electricity to its shareholders at cost. Each of the shareholders of each series of TVO's shares bears their share of the variable and fixed annual costs related to the nuclear power plant unit or other units represented by such series of shares, as specified in the Articles of Association. In the event that there would be a material disruption in the actual or scheduled deliveries of electricity to TVO's shareholders as a result of any major adverse event, such as those described above; a failure to start or a significant further delay in starting regular power production by any new nuclear power plant unit; a failure to operate any of TVO's existing or new nuclear power plant units in a commercially acceptable manner due to a substantially lower than anticipated power production capacity in relation to such unit(s), substantially higher than anticipated electricity price being charged by TVO from its shareholders for electricity generated by such unit or for any other reason, or TVO incurring material unexpected liabilities or costs in relation to any of the above or otherwise, such events could have a material adverse impact on the viability of the operating principle of TVO or on its business or financial position. In the event any such risk materialises, or otherwise, TVO's shareholders be requested to provide additional financing to TVO in order to cover any liabilities or costs, that go beyond those allocated to the shareholders pursuant to the Articles of Association. In accordance with the practice adopted by TVO and its shareholders in respect thereof and the existing EUR 250 million commitment of the series B shareholders, as described under "*Description of the Issuer – Operating Model of TVO*", no assurance can be given that the shareholders would be prepared to provide such additional financing to TVO and a decision by the shareholders not to provide such additional financing together with a failure of TVO to secure such additional financing from third parties could have a material adverse impact on its business and financial position and could result in the insolvency of TVO. See "*Financial risks – Financing, refinancing and liquidity risk*" below.

## **Financial risks**

### *Financing, refinancing and liquidity risk*

According to TVO's financing policy, TVO is required to maintain diversified funding sources and a diversified financing structure in terms of its debt maturity profile. TVO's financing policy also prescribes that management should maintain all of TVO's debt in euro and, where debt is not incurred in euro, to hedge it with appropriate instruments in such a manner as to ensure that TVO manages its exchange rate risk. In the past, TVO has been able to obtain adequate financing and hedging arrangements, and refinancing of maturing debt has not constituted a difficulty or significantly increased its financing costs. However, no assurance can be given that TVO will be able to successfully obtain additional financing for its investment needs or to manage its debt maturities and refinance or renegotiate its existing debt as it matures, due to

changes in market conditions affecting generally the availability of financing, or due to developments specific to TVO or its operations, which could adversely affect TVO's business and financial position.

TVO manages its liquidity by invoicing its shareholders on a monthly basis for its fixed and variable costs, as specified in its Articles of Association (see "*Description of the Issuer – Operating Model of TVO*"). TVO's liquidity and financial position are materially dependent on its shareholders making timely payments and no assurance can be given that the failure of a shareholder to make such payments would not adversely affect TVO's liquidity and financial position. In addition to the monthly payments received from its shareholders, TVO finances its operations, including investments, through various types of loan financing from third parties, including loans under the Programme, and has also received a number of equity capital injections and/or subordinated loans from its shareholders in the past (see "*Description of the Issuer – Operating Model of TVO*"). Other than the existing EUR 250 million commitment of the series B shareholders described under "*Description of the Issuer - Operating Model of TVO*", the shareholders of TVO have no obligation to inject additional capital or otherwise finance TVO beyond payment for TVO's annual fixed and variable costs, as set forth in the Articles of Association of TVO, and no assurance can be given that they would provide such additional capital or other financing or that additional financing would be available from third parties in the future to finance TVO's operations or to refinance TVO's debt, if required, which could have a material adverse impact on TVO's business and financial position and could result in the insolvency of TVO.

#### *Interest rate risk*

TVO has maintained an interest rate structure whereby it seeks to find an optimum balance by avoiding significant fluctuation in interest expenses by managing the duration of the debt portfolio by entering into different types of financing contracts and derivative contracts such as interest rate swaps and interest rate collar structures. Although TVO has managed interest rate risks within the target levels, no assurance can be given that TVO will be able to manage such interest rate risk successfully in the future.

#### *Counterparty risks*

As part of TVO's financing activities, it enters into contractual arrangements with various financing institutions which expose TVO to counterparty risks. Credit risk exposures relating to financial derivative instruments are often volatile. Financial contracts are limited to those with high-credit-quality counterparts active on the financial markets. Credit risk exposures are spread across a wide range of financial institutions. TVO monitors credit and counterparty exposure to ensure that the risks are maintained at an acceptable level. However no assurance can be given that TVO will not sustain losses as a result of default, litigation or other actions by one or more of its counterparties in the future.

#### *Role of TVO's shareholders*

TVO's business model is such that it receives regular monthly payments from its shareholders for the coverage of the fixed and variable costs, in accordance with, and as defined in TVO's Articles of Association (see "*Description of the Issuer - Operating Model of TVO*"). As invoicing is based on actual costs, or reliable estimates of the following month's costs, and fixed costs are payable one month in advance, TVO has no need to maintain large liquidity buffers. TVO has never experienced any payment delays from its shareholders, or any material differences between invoiced amounts and costs actually incurred. Pursuant to TVO's Articles of Association, shareholders are obliged to stay up to date in their payments, in accordance with invoices sent by TVO. A failure by a shareholder to meet a monthly payment would entitle TVO to cut off that shareholder's supply of electricity from OL1 and OL2. However, as TVO's financial situation is materially dependent on its shareholders making timely payments to TVO, no assurance can be given that the inability of a shareholder to meet its payment obligations towards TVO would not have a material adverse impact on TVO's business and financial position. Consequently, if the financial position of the shareholders is adversely affected by the global economic downturn, or for other reasons, or there is

any change in the identity of the shareholders, this in turn could have a material adverse impact on TVO's business and financial position.

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

***The Notes may not be a suitable investment for all investors***

Some Notes are complex financial instruments. Sophisticated institutional investors generally do not purchase complex financial instruments as stand-alone investments. They purchase complex financial instruments as a way to reduce risk or enhance yield with an understood, measured, appropriate addition of risk to their overall portfolios. A potential investor should not invest in Notes which are complex financial instruments unless it has the expertise (either alone or with a financial adviser) to evaluate how the Notes will perform under changing conditions, the resulting effects on the value of the Notes and the impact this investment will have on the potential investor's overall investment portfolio.

**Risks related to the structure of a particular issue of Notes**

A wide range of Notes may be issued under the Programme. A number of these Notes may have features which contain particular risks for potential investors. Set out below is a description of the most common such features:

***Notes subject to optional redemption by the Issuer***

An optional redemption feature of Notes is likely to limit their market value. During any period when the Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This may also be true prior to any redemption period. The Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the 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 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.

***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 or LIBOR. The market values of those 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 Notes, but may also reflect an increase in prevailing interest rates, which further adversely affects the market value of these Notes.

***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. Where the Issuer has the right to effect such a conversion, this will affect the secondary market and the market value of the Notes since the Issuer may be expected to convert the rate when it is likely to produce a lower overall cost of borrowing. If the Issuer converts from a fixed rate to a floating rate in such circumstances, 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 Notes. If the Issuer converts from a floating rate to a fixed rate in such circumstances, the fixed rate may be lower than then prevailing rates on its Notes.

***The market continues to develop in relation to SONIA and SOFR as reference rates for Floating Rate Notes***

On 29 November 2017, the Bank of England and the FCA announced that the Bank of England's Working Group on Sterling Risk-Free Rates had been mandated with implementing a broad-based transition to the Sterling Overnight Index Average ("**SONIA**") over the following four years across sterling bond, loan and derivatives markets, so that SONIA is established as the primary sterling interest rate benchmark by the end of 2021. Investors 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 particular, market participants and relevant working groups are exploring alternative reference rates based on SONIA, including term SONIA reference rates (which seek to measure the market's forward expectation of an average SONIA rate over a designated term). The market or a significant part thereof may adopt an application of SONIA that differs significantly from that set out in the Conditions and used in relation to Floating Rate Notes that reference a SONIA rate issued under this Programme.

The Secured Overnight Financing Rate ("**SOFR**") is published by the Federal Reserve Bank of New York (the "**Federal Reserve**") and is intended to be a broad measure of the cost of borrowing cash overnight collateralised by Treasury securities. The Federal Reserve notes on its publication page for SOFR that the Federal Reserve may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. Because SOFR is published by the Federal Reserve based on data received from other sources, the Issuer has no control over its determination, calculation or publication. There can be no guarantee that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in Floating Rate Notes linked to SOFR. If the manner in which SOFR is calculated is changed, that change may result in a reduction of the amount of interest payable on such Notes and the trading prices of such Notes. The Federal Reserve began to publish SOFR in April 2018. The Federal Reserve has also begun publishing historical indicative SOFR rates going back to 2014. Investors should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR. Also, since SOFR is a relatively new market index, Notes linked to SOFR may have no established trading market when issued, and an established trading market may never develop or may not be very liquid. Market terms for debt securities indexed to SOFR, such as the spread over the index reflected in interest rate provisions, may evolve over time, and trading prices of the Notes linked to SOFR may be lower than those of later-issued indexed debt securities as a result.

The Issuer may in future also issue Notes referencing SONIA or SOFR that differ materially in terms of interest determination when compared with any previous SONIA or SOFR referenced Notes issued by it under the Programme. The development of Compounded Daily SONIA and SOFR as interest reference rates for the Eurobond markets, as well as continued development of SONIA and SOFR-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 any SONIA or SOFR-referenced Notes issued under the Programme from time to time.

Furthermore, interest on Notes which reference Compounded Daily SONIA or Weighted Average SOFR 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 which reference Compounded Daily SONIA or Weighted Average SOFR 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 IT 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 any of the events described in Condition 13 (*Events of Default*), 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 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 or SOFR reference rates in the Eurobond markets may differ materially compared with the application and adoption of SONIA or SOFR in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of SONIA or SOFR 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 SONIA or SOFR.

Further, if SONIA or SOFR do not prove to be widely used in securities like the Notes, the trading price of such Notes linked to SONIA or SOFR may be lower than those of notes linked to indices that are more widely used. Investors in such Notes may not be able to sell such Notes at all or may not be able to sell

such 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.

#### ***Notes issued at a substantial discount or premium***

The market values of securities issued at a substantial discount or premium from their principal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing securities. Generally, the longer the remaining term of the securities, the greater the price volatility as compared to conventional interest-bearing securities with comparable maturities.

#### **Risks related to Notes generally**

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

#### ***Modification and waivers***

The Conditions of the Notes contain provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the majority.

#### ***Conflicts may arise between the interests of the Calculation Agent and the interests of the Noteholders***

Potential conflicts of interest may exist between the Calculation Agent (if any) and Noteholders, including with respect to certain determinations and judgements that such Calculation Agent makes pursuant to the Conditions that may influence amounts receivable by the Noteholders during the term of the Notes and upon their redemption.

The Issuer may appoint a Dealer as Calculation Agent in respect of an issuance of Notes under the Programme. In such a case the Calculation Agent is likely to be a member of an international financial group that is involved, in the ordinary course of its business, in a wide range of banking activities out of which conflicting interests may arise. Whilst such a Calculation Agent will, where relevant, have information barriers and procedures in place to manage conflicts of interest, it may in its other banking activities from time to time be engaged in transactions involving an index or related derivatives which may affect amounts receivable by Noteholders during the term and on the maturity of the Notes or the market price, liquidity or value of the Notes and which could be deemed to be adverse to the interests of the Noteholders.

#### ***Change of law***

In January 2018, the Finnish Ministry of Finance published its proposal to implement the EU directive (2016/1164) laying down rules against tax avoidance practices that directly affect the functioning of the internal market. In November 2018, changes to the Finnish Business Income Tax Act (360/1968, as amended) were approved by the Finnish Parliament concerning the implementation of the EU directive (2016/1164). Among other things, the amendment imposes limitations on deductibility of interest expenses. The changes entered into force as of 1 January 2019. The Finnish Business Income Tax Act applies to all companies regulated by the act, including energy companies operating according to the Mankala Principle.

As TVO is not making any profit due to the operation of the Mankala Principle, it is currently not paying any corporate tax in Finland. TVO has proposed changes to the Finnish Ministry of Finance in respect of its implementation of the directive into Finnish law. These changes seek for an exemption applicable to non-profit nuclear companies, by using a so-called "infrastructure exception". In addition, the Finnish Parliament stated in November 2018 that the Government should proceed immediately with the European Commission to investigate the possibility to exclude investments made by non-profit nuclear companies from the scope of the directive. The Ministry of Finance continues the preparation of the exception in accordance with a statement from the Finnish Parliament, but there can be no certainty that such changes would be implemented partly, or in full, in the final law.

If the infrastructure exception will not be implemented in Finland as stated by the Finnish Parliament, TVO may have to pay corporate taxes in the future in spite of the operation of the Mankala Principle, which would increase its production costs and adversely affect its cost-competitiveness and, therefore, potentially have a material adverse impact on TVO's business and financial position. The amount of taxes is dependent

on the amount of annual un-deductable interest expenses of TVO. However, even if the infrastructure exception was not accepted, TVO currently expects that it will not have to pay any corporate taxes in 2019.

The conditions of the Notes are based on English law in effect as at the date of this Base Prospectus. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the date of this Base Prospectus.

***There are risks that certain benchmark rates may be administered differently or discontinued in the future, including the potential phasing-out of LIBOR after 2021, which may adversely affect the trading market for, value of and return on, Notes based on such benchmarks***

LIBOR, the Euro Interbank Offered Rate ("EURIBOR") and other rates and indices which are deemed to be "benchmarks" are the subject of recent international, national and other regulatory guidance and proposals for reform. Some of these reforms are already effective while others are still to be implemented. These reforms may cause such benchmarks to perform differently from the past or disappear entirely, or have other consequences that cannot be predicted.

The Benchmarks Regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds was published in the Official Journal of the EU on 29 June 2016 and became applicable from 1 January 2018. The 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. It will, among other things, (i) require benchmark administrators to be authorised or registered (or, if non-EU-based, to be subject to an equivalent regime or otherwise recognised or endorsed) and (ii) prevent certain uses by EU supervised entities (such as the Issuer) of benchmarks of administrators that are not authorised or registered (or, if non-EU based, not deemed equivalent or recognised or endorsed).

The Benchmarks Regulation could have a material impact on any Notes linked to a rate or index deemed to be a benchmark, in particular, if the methodology or other terms of a benchmark are changed in order to comply with the requirements of the Benchmarks Regulation. Such changes could, among 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, national or other proposals for reform, or the general increased regulatory scrutiny of benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements.

Such factors may have the following effects on certain benchmarks: (i) discourage market participants from continuing to administer or contribute to such benchmark; (ii) trigger changes in the rules or methodologies used in the benchmarks or (iii) lead to the disappearance of the benchmark.

Furthermore, LIBOR is the subject of ongoing regulatory reforms. Following the implementation of any of these reforms, the manner of administration of LIBOR may change, with the result that it may perform differently than in the past or be eliminated entirely, or there could be other consequences that cannot be predicted. For example, on 27 July 2017, the FCA, which regulates LIBOR, announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021 (the "**FCA Announcement**"). Further, on 12 July 2018 the FCA announced that LIBOR may cease to be a regulated benchmark under the Benchmarks Regulation. The FCA Announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. At this time, it is not possible to predict the effect of any establishment of alternative reference rates or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere. Uncertainty as to the nature of such alternative reference rates or other reforms may adversely affect the trading market for LIBOR-linked securities. The potential elimination of benchmarks, such as LIBOR, the establishment of alternative reference rates or changes in the manner of administration of a benchmark could also require adjustments to the terms of benchmark-linked securities and may result in other consequences, such as interest payments that are lower than, or that do not otherwise correlate over time with, the payments that would have been made on those securities if the relevant benchmark was available in its current form.

If the Issuer (in consultation with the Calculation Agent) determines that a Benchmark Event (as defined in the Terms and Conditions of the Notes) has occurred, then the Issuer shall use reasonable endeavours to appoint an Independent Adviser for the purposes of determining a Successor Rate or an Alternative Benchmark Rate (as further described in Condition 7(j) (*Benchmark Replacement*)) and, if applicable, an

Adjustment Spread. If the Issuer is unable to appoint an Independent Adviser or if the Independent Adviser and the Issuer cannot agree upon, or cannot select, the Successor Rate or Alternative Benchmark Rate, the Issuer may (acting in good faith and in a commercially reasonable manner) determine the replacement rate, provided that if the Issuer is unable or unwilling to determine the Successor Rate or Alternative Benchmark Rate, the further fallbacks described in the Terms and Conditions of the Notes shall apply. This may result in effective application of a fixed rate of interest for Notes initially designated to be Floating Rate Notes. In addition, due to the uncertainty concerning the availability of Successor Rates and Alternative Benchmark Rates and the involvement of an Independent Adviser, the relevant fallback provisions may not operate as intended at the relevant time.

The use of a Successor Rate or an Alternative Benchmark Rate may result in interest payments that are substantially lower than or that do not otherwise correlate over time with the payments that could have been made on the Notes if the relevant benchmark remained available in its current form. Furthermore, if the Issuer is unable to appoint an Independent Adviser or if the Issuer fails to agree a Successor Rate or an Alternative Benchmark Rate or Adjustment Spread, if applicable with the Independent Adviser, the Issuer may have to exercise its discretion to determine (or to elect not to determine) an Alternative Benchmark Rate or Adjustment Spread, if applicable in a situation in which it is presented with a conflict of interest. In addition, while any Adjustment Spread may be expected to be designed to eliminate or minimise any potential transfer of value between counterparties, the application of the Adjustment Spread to the Notes may not do so and may result in the Notes performing differently (which may include payment of a lower interest rate) than they would do if the Reference Rate were to continue to apply in its current form.

Any of the above changes or any other consequential changes to benchmarks as a result of EU, United Kingdom, or other international, national, or other proposals for reform or other initiatives or investigations, or any further uncertainty in relation to the timing and manner of implementation of such changes could have a material adverse effect on the trading market for, value of and return on any Notes linked to such benchmark.

Investors should consult their own independent advisers and make their own assessment about the potential risks imposed by the Benchmarks Regulation reforms, investigations and licensing issues in making any investment decision with respect to the Notes linked to a benchmark.

Moreover, 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 Notes linked to a benchmark or could have a material adverse effect on the value or liquidity of, and the amount payable under, such Notes. Investors should consider these matters when making their investment decision with respect to such Notes.

***Bearer Notes where denominations involve integral multiples: definitive Bearer Notes***

In relation to any issue of bearer Notes which have denominations consisting of a minimum specified denomination plus one or more higher integral multiples of another smaller amount, it is possible that such Notes may be traded in amounts that are not integral multiples of such minimum specified denomination. In such a case a holder who, as a result of trading such amounts, 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 bearer Note in respect of such holding (should definitive bearer Notes be printed) and would need to purchase a principal amount of Notes such that its holding amounts to a specified denomination. If definitive bearer Notes are issued, holders should be aware that definitive bearer Notes which have a denomination that is not an integral multiple of the minimum specified denomination may be illiquid and difficult to trade.

**Risks related to the market generally**

Set out below is a brief description of the principal market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk:

***The secondary market generally***

Notes may have no established trading market when issued, and one may never develop. If a market does develop, it may not be very liquid. Therefore, investors may not be able to sell their Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary

market. This is particularly the case for 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. These types of Notes generally would have a more limited secondary market and more price volatility than conventional debt securities. Illiquidity may have a material adverse effect on the market value of Notes.

***Exchange rate risks and exchange controls***

The Issuer will pay principal and interest on the 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 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 Notes, (2) the Investor's Currency equivalent value of the principal payable on the Notes and (3) the Investor's Currency equivalent market value of the Notes. Finnish 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.

***Interest rate risks***

Investment in Fixed Rate Notes involves the risk that subsequent changes in market interest rates may adversely affect the value of the Fixed Rate Notes.

***Credit ratings may not reflect all risks***

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

***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) Notes are legal investments for it, (2) Notes can be used as collateral for various types of borrowing and (3) other restrictions apply to its purchase or pledge of any Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

### **GENERAL DESCRIPTION OF THE PROGRAMME**

The Programme is a EUR 4,000,000,000 Euro Medium Term Note Programme under which the Issuer may, from time to time, issue Notes including, without limitation, Fixed Rate Notes, Floating Rate Notes, Zero Coupon Notes and other Notes subject to compliance with all applicable legal and/or regulatory and/or central bank requirements. The applicable terms of any Notes will be agreed between the Issuer and the relevant dealers prior to the issue of the Notes and will be set out in the Final Terms of the Notes endorsed on, or attached to, the Notes.

Notes that have a maturity of less than one year and that qualify as money market instruments will be subject to all applicable legal, regulatory and central bank requirements relating to money market instruments, as well as any other requirements governing Notes that have a maturity of less than one year and that qualify as money market instruments.

## INFORMATION INCORPORATED BY REFERENCE

The following information shall be deemed to be incorporated by reference in, and to form part of, this Base Prospectus:

- (a) audited consolidated financial statements of the Issuer, included in the Report of the Board of Directors and Financial Statements 2018, in respect of the year ended 31 December 2018 prepared in accordance with the International Financial Reporting Standards as adopted by the European Union ("**IFRS**").

1. Acquisition of tangible and intangible assets and shares	p. 14
2. Key Figures of TVO Group	p. 22
3. Income Statement	p. 24
4. Consolidated Statement of Comprehensive Income	p. 24
5. Balance Sheet	p. 25
6. Statement of Changes on Total Equity	p. 26
7. Cash Flows Statement	p. 27
8. Notes to Consolidated Financial Statements	p. 28-77
9. Auditors Report	p. 95 - 100

- (b) audited consolidated financial statements of the Issuer, included in the Report of the Board of Directors and Financial Statements 2017, in respect of the year ended 31 December 2017 prepared in accordance with the IFRS.

1. Acquisition of tangible and intangible assets and shares	p. 15
2. Key Figures of TVO Group	p. 22
3. Income Statement	p. 24
4. Consolidated Statement of Comprehensive Income	p. 24
5. Balance Sheet	p. 25
6. Statement of Changes on Total Equity	p. 26
7. Cash Flows Statement	p. 27
8. Notes to Consolidated Financial Statements	p. 28 - 75
9. Auditors Report	p. 94 - 101

- (c) the unaudited consolidated financial statements of the Issuer, in respect of the three-months ended 31 March 2019 prepared in accordance with the IFRS.

1. Acquisition of tangible and intangible assets and shares	p. 5
2. Key Figures of TVO Group	p. 8
3. Income Statement	p. 10
4. Consolidated Statement of Comprehensive Income	p. 10

- |   |            |
|---|------------|
| 5. Balance Sheet                              | p. 11      |
| 6. Statement of Changes on Total Equity       | p. 12      |
| 7. Cash Flows Statement                       | p. 13      |
| 8. Notes to Consolidated Financial Statements | p. 14 - 20 |
- (d) the terms and conditions set out on pages 24-57 (inclusive) of the base prospectus dated 11 June 2010 relating to the Programme under the heading "*Terms and Conditions of the Notes*".
  - (e) the terms and conditions set out on pages 20-44 (inclusive) of the Base Prospectus dated 15 June 2012 relating to the Programme under the heading "*Terms and Conditions of the Notes*".
  - (f) the terms and conditions set out on pages 20-45 (inclusive) of the Base Prospectus dated 14 June 2013 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (g) the terms and conditions set out on pages 20-47 (inclusive) of the Base Prospectus dated 11 June 2014 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (h) the terms and conditions set out on pages 20-47 (inclusive) of the Base Prospectus dated 12 June 2015 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (i) the terms and conditions set out on pages 21-48 (inclusive) of the Base Prospectus dated 2 June 2016 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (j) the terms and conditions set out on pages 22-48 (inclusive) of the Base Prospectus dated 4 July 2017 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (k) the terms and conditions set out on pages 23-48 (inclusive) of the Base Prospectus dated 29 June 2018 relating to the Programme under the heading "Terms and Conditions of the Notes".
  - (l) the Articles of Association of the Issuer as at the date of this Base Prospectus and available from the Finnish Trade Register maintained by the Finnish Patent and Registration office.

Copies of the documents specified above as containing information incorporated by reference in this Base Prospectus, and this Base Prospectus itself, may be inspected, free of charge, at Olkiluoto, FI-27160 Eurajoki, Finland and will be available for viewing on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)). The parts of the documents incorporated by reference which are not specified in paragraphs (a) to (h) above are either not relevant for the investor or covered in another part of the Base Prospectus.

If the documents incorporated by reference into this Base Prospectus themselves incorporate any information or other documents therein, either expressly or implicitly, such information or other documents will not form part of this Base Prospectus for the purposes of the Prospectus Directive except where such information or other documents are specifically incorporated by reference to the Base Prospectus.



## **FINAL TERMS AND DRAWDOWN PROSPECTUSES**

In this section the expression "necessary information" means, in relation to any Tranche of 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 Issuer and of the rights attaching to the Notes. In relation to the different types of Notes which may be issued under the Programme the Issuer has endeavoured to include in this Base Prospectus all of the necessary information except for information relating to the Notes which is not known at the date of this Base Prospectus and which can only be determined at the time of an individual issue of a Tranche of Notes.

Any information relating to the Notes which is not included in this Base Prospectus and which is required in order to complete the necessary information in relation to a Tranche of Notes will be contained either in the relevant Final Terms or in a Drawdown Prospectus. Such information will be contained in the relevant Final Terms unless any of such information constitutes a significant new factor relating to the information contained in this Base Prospectus in which case such information, together with all of the other necessary information in relation to the relevant series of Notes, may be contained in a Drawdown Prospectus.

For a Tranche of Notes which is the subject of Final Terms, those Final Terms will, for the purposes of that Tranche only, complete this Base Prospectus and must be read in conjunction with this Base Prospectus. The terms and conditions applicable to any particular Tranche of Notes which is the subject of Final Terms are the Conditions completed by the relevant Final Terms.

The terms and conditions applicable to any particular Tranche of 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 Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

Each Drawdown Prospectus will be constituted by a single document containing the necessary information relating to the Issuer and the relevant Notes.

## FORMS OF THE NOTES

### **Bearer Notes**

Each Tranche of Notes in bearer form ("**Bearer Notes**") will initially be in the form of either a temporary global note in bearer form (the "**Temporary Global Note**"), without interest coupons, or a permanent global note in bearer form (the "**Permanent Global Note**"), without interest coupons, in each case as specified in the relevant Final Terms. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "**Global Note**") which is not intended to be issued in new global note ("**NGN**") form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Tranche of the Notes with a depositary or a common depositary for Euroclear Bank SA/NV, with offices at 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium ("**Euroclear**") and/or Clearstream Banking, S.A., with offices at 42 Avenue JF Kennedy, L-1855 Luxembourg ("**Clearstream, Luxembourg**") and/or any other relevant clearing system and each Global Note which is intended to be issued in NGN form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Tranche of the Notes with a common safekeeper for Euroclear and/or Clearstream, Luxembourg.

On 13 June 2006 the European Central Bank (the "**ECB**") announced that Notes in NGN form are in compliance with the "Standards for the use of European Union securities settlement systems in ESCB credit operations" of the central banking system for the euro (the "**Eurosystem**"), provided that certain other criteria are fulfilled. At the same time the ECB also announced that arrangements for Notes in NGN form will be offered by Euroclear and Clearstream, Luxembourg as of 30 June 2006 and that debt securities in global bearer form issued through Euroclear and Clearstream, Luxembourg after 31 December 2006 will only be eligible as collateral for Eurosystem operations if the NGN form is used.

In the case of each Tranche of Bearer Notes, the relevant Final Terms will also specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (the "**TEFRA C Rules**") or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (the "**TEFRA D Rules**") are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

### ***Temporary Global Note exchangeable for Permanent Global Note***

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for a Permanent Global Note", then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused. In addition, interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of first exchange) the prompt delivery (free of charge to the bearer) of such Permanent Global Note, duly authenticated and, in the case of a NGN effectuated, to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against:

- (i) presentation and (in the case of final exchange) surrender of the Temporary Global Note to or to the order of the Fiscal Agent; and
- (ii) receipt by the Fiscal Agent of a certificate or certificates of non-U.S. beneficial ownership,

within 7 days of the bearer requesting such exchange.

The principal amount of the Permanent Global Note shall be equal to the aggregate of the principal amounts specified in the certificates of non-U.S. beneficial ownership; *provided, however, that* in no circumstances shall the principal amount of the Permanent Global Note exceed the initial principal amount of the Temporary Global Note.

The Permanent Global Note will be exchangeable in whole, but not in part, for Bearer Notes in definitive form ("**Definitive Notes**"):

- (i) on the expiry of such period of notice as may be specified in the relevant Final Terms; or
- (ii) at any time, if so specified in the relevant Final Terms; or
- (iii) if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note", then if (a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business or (b) any of the circumstances described in Condition 13 (*Events of Default*) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

***Temporary Global Note exchangeable for Definitive Notes***

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA C Rules are applicable or that neither the TEFRA C Rules or the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole but not in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes.

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. Interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever the Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

***Permanent Global Note exchangeable for Definitive Notes***

If the relevant Final Terms specifies the form of Notes as being "Permanent Global Note exchangeable for Definitive Notes", then the Notes will initially be in the form of a Permanent Global Note which will be exchangeable in whole, but not in part, for Definitive Notes:

- (i) on the expiry of such period of notice as may be specified in the relevant Final Terms; or
- (ii) at any time, if so specified in the relevant Final Terms; or
- (iii) if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note", then if (a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business or (b) any of the circumstances described in Condition 13 (*Events of Default*) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Permanent Global Note to the bearer of the Permanent Global Note

against the surrender of the Permanent Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

#### ***Terms and Conditions applicable to the Notes***

The terms and conditions applicable to any Definitive Note will be endorsed on that Note and will consist of the terms and conditions set out under "*Terms and Conditions of the Notes*" below and the provisions of the relevant Final Terms which complete those terms and conditions.

The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*" below.

#### ***Legend concerning United States persons***

In the case of any Tranche of Bearer Notes having a maturity of more than 365 days, the Notes in global form, the Notes in definitive form and any Coupons and Talons appertaining thereto will bear a legend to the following effect:

"Any United States 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."

#### **Registered Notes**

Each Tranche of Registered Notes will be in the form of either individual note certificates in registered form ("**Individual Note Certificates**") or a global note in registered form (a "**Global Registered Note**"), in each case as specified in the relevant Final Terms.

In a press release dated 22 October 2008, "*Evolution of the custody arrangement for international debt securities and their eligibility in Eurosystem credit operations*", the ECB announced that it had assessed the new holding structure and custody arrangements for registered notes which the ICSDs had designed in cooperation with market participants and that Notes to be held under the new structure (the "**New Safekeeping Structure**" or "**NSS**") would be in compliance with the "*Standards for the use of EU securities settlement systems in ESCB credit operations*" of the central banking system for the euro (the "**Eurosystem**"), subject to the conclusion of the necessary legal and contractual arrangements. The press release also stated that the new arrangements for Notes to be held in NSS form will be offered by Euroclear and Clearstream, Luxembourg as of 30 June 2010 and that registered debt securities in global registered form issued through Euroclear and Clearstream, Luxembourg after 30 September 2010 will only be eligible as collateral in Eurosystem operations if the New Safekeeping Structure is used.

Each Note represented by a Global Registered Note will either be: (a) in the case of a Note which is not to be held under the New Safekeeping Structure, registered in the name of a common depositary (or its nominee) for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and the relevant Global Registered Note will be deposited on or about the issue date with the common depositary and will be exchangeable for Individual Notes Certificates in accordance with its terms; or (b) in the case of a Note to be held under the New Safekeeping Structure, be registered in the name of a common safekeeper (or its nominee) for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and the relevant Global Registered Note will be deposited on or about the issue date with the common safekeeper for Euroclear and/or Clearstream, Luxembourg and will be exchangeable for Individual Notes Certificates in accordance with its terms.

If the relevant Final Terms specifies the form of Notes as being "Individual Note Certificates", then the Notes will at all times be in the form of Individual Note Certificates issued to each Noteholder in respect of their respective holdings.

If the relevant Final Terms specifies the form of Notes as being "Global Registered Note exchangeable for Individual Note Certificates", then the Notes will initially be in the form of a Global Registered Note which will be exchangeable in whole, but not in part, for Individual Note Certificates:

- (i) on the expiry of such period of notice as may be specified in the relevant Final Terms; or

- (ii) at any time, if so specified in the relevant Final Terms; or
- (iii) if the relevant Final Terms specifies "in the limited circumstances described in the Global Registered Note", then if (a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business or (b) any of the circumstances described in Condition 13 (*Events of Default*) occurs.

Whenever the Global Registered Note is to be exchanged for Individual Note Certificates, the Issuer shall procure that Individual Note Certificates will be issued in an aggregate principal amount equal to the principal amount of the Global Registered Note within five business days of the delivery, by or on behalf of the registered holder of the Global Registered Note to the Registrar of such information as is required to complete and deliver such Individual Note Certificates (including, without limitation, the names and addresses of the persons in whose names the Individual Note Certificates are to be registered and the principal amount of each such person's holding) against the surrender of the Global Registered Note at the specified office of the Registrar.

Such exchange will be effected in accordance with the provisions of the Agency Agreement and the regulations concerning the transfer and registration of Notes scheduled thereto and, in particular, shall be effected without charge to any holder, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such exchange.

***Terms and Conditions applicable to the Notes***

The terms and conditions applicable to any Individual Note Certificate will be endorsed on that Individual Note Certificate and will consist of the terms and conditions set out under "Terms and Conditions of the Notes" below and the provisions of the relevant Final Terms which complete those terms and conditions.

The terms and conditions applicable to any Global Registered Note will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*" below.

## TERMS AND CONDITIONS OF THE NOTES

*The following is the text of the terms and conditions which, as completed by the relevant Final Terms, will be endorsed on each Note in definitive form issued under the Programme. In the case of any Tranche of Notes which are being admitted to trading on a regulated market in a Member State, the relevant Final Terms shall not amend or replace any information in this Base Prospectus. Subject to this, to the extent permitted by applicable law and/or regulation, the Final Terms in respect of any Tranche of Notes may supplement, amend or replace any information in this Base Prospectus.*

*The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.*

### 1. Introduction

- (i) *Programme:* Teollisuuden Voima Oyj (the "**Issuer**" or "**TVO**") has established a Euro Medium Term Note Programme (the "**Programme**") for the issuance of up to EUR 4,000,000,000 in aggregate principal amount of notes (the "**Notes**").
- (ii) *Series:* Notes issued under the Programme are issued in series (each a "**Series**") and each Series may comprise one or more tranches (each a "**Tranche**") of Notes.
- (iii) *Final Terms or Drawdown Prospectus:* The terms and conditions applicable to any particular Tranche of Notes are these terms and conditions (the "**Conditions**"), as completed by a document specific to such Tranche called final terms (the "**Final Terms**") or as completed, amended and/or replaced in a separate prospectus specific to such Tranche (the "**Drawdown Prospectus**"). In the event of any inconsistency between these Conditions and the relevant Final Terms, the relevant Final Terms or Drawdown Prospectus shall prevail. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in these Conditions to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus.
- (iv) *Agency Agreement:* The Notes are the subject of an issue and paying agency agreement dated 27 June 2019 (the "**Agency Agreement**") between the Issuer, Deutsche Bank AG, London Branch as fiscal agent (the "**Fiscal Agent**", which expression includes any successor fiscal agent appointed from time to time in connection with the Notes), Deutsche Bank Luxembourg S.A. as registrar (the "**Registrar**", which expression includes any successor registrar appointed from time to time in connection with the Notes), the paying agents named therein (together with the Fiscal Agent, the "**Paying Agents**", which expression includes any successor or additional paying agents appointed from time to time in connection with the Notes) and the transfer agents named therein (together with the Registrar, the "**Transfer Agents**", which expression includes any successor or additional transfer agents appointed from time to time in connection with the Notes). In these Conditions references to the "**Agents**" are to the Paying Agents and the Transfer Agents and any reference to an "**Agent**" is to any one of them.
- (v) *Deed of Covenant:* The Notes may be issued in bearer form ("**Bearer Notes**"), or in registered form ("**Registered Notes**"). Registered Notes are constituted by a deed of covenant dated 27 June 2019 (the "**Deed of Covenant**") entered into by the Issuer.
- (vi) *The Notes:* All subsequent references in these Conditions to "Notes" are to the Notes which are the subject of the relevant Final Terms. Copies of the relevant Final Terms are available for viewing at Olkiluoto, FI-27160 Eurajoki, Finland and copies may be obtained from Olkiluoto, FI-27160 Eurajoki, Finland.
- (vii) *Summaries:* Certain provisions of these Conditions are summaries of the Agency Agreement and the Deed of Covenant and are subject to their detailed provisions. Noteholders and the holders of the related interest coupons, if any, (the "**Couponholders**" and the "**Coupons**", respectively) are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement and the Deed of Covenant applicable to them. Copies

of the Agency Agreement and the Deed of Covenant are available for inspection by Noteholders during normal business hours at the Specified Offices of each of the Agents, the initial Specified Offices of which are set out below.

## 2. Interpretation

(i) *Definitions:* In these Conditions the following expressions have the following meanings:

"**Accrual Yield**" has the meaning given in the relevant Final Terms;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Adjustment Spread**" means either a spread (which may be positive or negative) or a formula or methodology for calculating a spread, which the Issuer, following consultation with the Independent Adviser and acting in good faith, determines should be applied to the relevant Successor Rate or the relevant Alternative Benchmark Rate (as applicable), as a result of the replacement of the Reference Rate with the relevant Successor Rate or the relevant Alternative Benchmark Rate (as applicable), and is the spread, formula or methodology which:

- (i) in the case of a Successor Rate, is recommended or formally provided as an option for parties to adopt, in relation to the replacement of the Reference Rate with the Successor Rate by any Relevant Nominating Body; or
- (ii) in the case of a Successor Rate for which no such recommendation has been made, or option provided, or in the case of an Alternative Benchmark Rate, the spread, formula or methodology which the Issuer, following consultation with the Independent Adviser and acting in good faith, determines to be appropriate as a result of the replacement of the Reference Rate with the Successor Rate or Alternative Benchmark Rate (as applicable);

"**Benchmark Event**" has the meaning given in Condition 7(j);

"**Business Day**" means:

- (i) in relation to any sum payable in euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre; and
- (ii) in relation to any sum payable in a currency other than euro, a day on which commercial banks and foreign exchange markets settle payments generally in London, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre;

"**Business Day Convention**", in relation to any particular date, has the meaning given in the relevant Final Terms and, if so specified in the relevant Final Terms, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

- (i) "**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;
- (ii) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;
- (iii) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

- (iv) **"FRN Convention", "Floating Rate Convention" or "Eurodollar Convention"** means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Final Terms as the Specified Period after the calendar month in which the preceding such date occurred *provided, however, that:*
- (A) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;
  - (B) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and
  - (C) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred; and
- (v) **"No Adjustment"** means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

**"Calculation Agent"** means the Fiscal Agent or such other Person specified in the relevant Final Terms as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Final Terms;

**"Calculation Amount"** has the meaning given in the relevant Final Terms;

**"CIBOR"** means, in respect of Danish Kroner and for any specified period, the interest rate benchmark known as the Copenhagen interbank offered rate which is calculated and published by a designated distributor (currently NASDAQ OMX Copenhagen) in accordance with the requirements from time to time of the Danish Bankers' Association based on estimated interbank borrowing rates for Danish Kroner for a number of designated maturities which are provided by a panel of contributor banks (details of historic CIBOR rates can be obtained from the designated distributor);

**"Coupon Sheet"** means, in respect of a Note, a coupon sheet relating to the Note;

**"Day Count Fraction"** means, in respect of the calculation of an amount for any period of time (the **"Calculation Period"**), such day count fraction as may be specified in these Conditions or the relevant Final Terms and:

- (i) if **"Actual/Actual (ICMA)"** is so specified, means:
- (a) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and
  - (b) where the Calculation Period is longer than one Regular Period, the sum of:
    - (A) the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and
    - (B) the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (a) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year;



- (ii) if "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);
- (iii) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;
- (iv) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;
- (v) if "**30/360**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows

$$\text{Day Count Fraction} = \frac{[360x(Y_2 - Y_1)] + [30x(M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y<sub>1</sub>" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"Y<sub>2</sub>" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"M<sub>1</sub>" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"M<sub>2</sub>" is the calendar month, expressed as number, in which the day immediately following the last day included in the Calculation Period falls;

"D<sub>1</sub>" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D<sub>1</sub> will be 30; and

"D<sub>2</sub>" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D<sub>1</sub> is greater than 29, in which case D<sub>2</sub> 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:

$$\text{Day Count Fraction} = \frac{[360x(Y_2 - Y_1)] + [30x(M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y<sub>1</sub>" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"Y<sub>2</sub>" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"M<sub>1</sub>" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"M<sub>2</sub>" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"D<sub>1</sub>" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D<sub>1</sub> will be 30; and

"D<sub>2</sub>" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D<sub>2</sub> will be 30; and

(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:

$$\text{Day Count Fraction} = \frac{[360x(Y_2 - Y_1)] + [30x(M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y<sub>1</sub>" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"Y<sub>2</sub>" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"M<sub>1</sub>" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"M<sub>2</sub>" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"D<sub>1</sub>" is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D<sub>1</sub> will be 30; and

"D<sub>2</sub>" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D<sub>2</sub> will be 30,

*provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;*

**"Early Redemption Amount (Tax)"** means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Final Terms;

**"Early Termination Amount"** means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, these Conditions;

**"EURIBOR"** means, in respect of any specified currency and any specified period, the interest rate benchmark known as the Euro zone interbank offered rate which is calculated and published by a designated distributor (currently Thomson Reuters) in accordance with the requirements from time to time of the European Money Markets Institute (or any other person which takes over the administration of that rate) based on estimated interbank borrowing rates for a number of designated currencies and maturities which are provided, in respect of each such currency, by a panel of contributor banks (details of historic EURIBOR rates can be obtained from the designated distributor);

**"Extraordinary Resolution"** has the meaning given in Schedule 2 to the Agency Agreement;

**"Final Redemption Amount"** means, in respect of any Note, its principal amount or such higher amount as may be specified in the relevant Final Terms;

**"First Interest Payment Date"** means the date specified in the relevant Final Terms;

**"Fixed Coupon Amount"** has the meaning given in the relevant Final Terms;

**"Guarantee"** means, in relation to any Indebtedness of any Person, any obligation of another Person to pay such Indebtedness including (without limitation):

- (i) any obligation to purchase such Indebtedness;
- (ii) any obligation to lend money, to purchase or subscribe shares or other securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness;
- (iii) any indemnity against the consequences of a default in the payment of such Indebtedness; and
- (iv) any other agreement to be responsible for such Indebtedness;

**"Holder"**, in the case of Bearer Notes, has the meaning given in Condition 3(b) (*Form, Denomination, Title and Transfer - Title to Bearer Notes*) and, in the case of Registered Notes, has the meaning given in Condition 3(d) (*Form, Denomination, Title and Transfer - Title to Registered Notes*);

**"Indebtedness"** means any indebtedness of any Person for money borrowed or raised including (without limitation) any indebtedness for or in respect of:

- (i) amounts raised by acceptance under any acceptance credit facility;
- (ii) amounts raised under any note purchase facility;
- (iii) the amount of any liability in respect of leases or hire purchase contracts which would, in accordance with applicable law and generally accepted accounting principles, be treated as finance or capital leases;
- (iv) the amount of any liability in respect of any purchase price for assets or services the payment of which is deferred for a period in excess of 60 days; and
- (v) amounts raised under any other transaction (including, without limitation, any forward sale or purchase agreement) having the commercial effect of a borrowing;

**"Independent Adviser"** means an independent financial institution of international repute or other independent financial adviser of recognised standing with relevant experience in the international capital markets, in each case appointed by the Issuer at its own expense;

**"Interest Amount"** means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

**"Interest Commencement Date"** means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Final Terms;

**"Interest Determination Date"** shall mean the date specified as such in the Final Terms or if none is so specified:

- (i) if the Reference Rate is LIBOR (other than the Sterling or Euro LIBOR), the second London business day prior to the start of each Interest Period;
- (ii) if the Reference Rate is Sterling LIBOR, the first day of each Interest Period;
- (iii) if the Reference Rate is Euro LIBOR or EURIBOR, the second day on which TARGET2 is open prior to the start of each Interest Period;
- (iv) if the Reference Rate is NIBOR, the second Oslo business day prior to the start of each Interest Period;
- (v) if the Reference Rate is CIBOR, the second Copenhagen business day prior to the start of each Interest Period; or

- (vi) if the Reference Rate is STIBOR, the second Stockholm business day prior to the start of each Interest Period.

**"Interest Payment Date"** means the First Interest Payment Date and any date or dates specified as such in the provisions of the relevant Final Terms and, if a Business Day Convention is specified in the relevant Final Terms:

- (i) as the same may be adjusted in accordance with the relevant Business Day Convention; or
- (ii) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Final Terms as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

**"Interest Period"** means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date;

**"ISDA Benchmarks Supplement"** means the Benchmarks Supplement (as amended and updated as at the date of issue of the first Tranche of the Notes of the relevant Series (as specified in the relevant Final Terms)) published by the International Swaps and Derivatives Association, Inc;

**"ISDA Definitions"** means the 2006 ISDA Definitions (as amended and updated as at the date of issue of the first Tranche of the Notes of the relevant Series (as specified in the relevant Final Terms) and, if specified in the relevant Final Terms, as supplemented by any applicable supplement to the ISDA Definitions including but not limited to the ISDA Benchmarks Supplement) as published by the International Swaps and Derivatives Association, Inc.;

**"Issue Date"** has the meaning given in the relevant Final Terms;

**"LIBOR"** means, in respect of any specified currency and any specified period, the interest rate benchmark known as the London interbank offered rate which is calculated and published by a designated distributor (currently Thomson Reuters) in accordance with the requirements from time to time of ICE Benchmark Administration Limited (or any other person which takes over the administration of that rate) based on estimated interbank borrowing rates for a number of designated currencies and maturities which are provided, in respect of each such currency, by a panel of contributor banks (details of historic LIBOR rates can be obtained from the designated distributor);

**"Margin"** has the meaning given in the relevant Final Terms;

**"Material Subsidiary"** means:

- (i) on the basis of the most recent audited consolidated accounts of the Issuer, any Subsidiary whose total consolidated assets represent at least 5 per cent. of the total consolidated assets of the Issuer; or
- (ii) any other Subsidiary to which is transferred either (A) all or substantially all of the assets of another Subsidiary which immediately prior to the transfer was a Material Subsidiary or (B) sufficient assets of the Issuer that such Subsidiary would have been a Material Subsidiary had the transfer occurred on or before the date of the most recent audited consolidated accounts of the Issuer, and

a report by the auditors to the Issuer that in their opinion a Subsidiary is or is not or was or was not at any particular time a Material Subsidiary shall, in the absence of manifest error, be conclusive and binding on all parties;

**"Maturity Date"** has the meaning given in the relevant Final Terms;

**"Maximum Redemption Amount"** has the meaning given in the relevant Final Terms;

**"Minimum Redemption Amount"** has the meaning given in the relevant Final Terms;

**"NIBOR"** means, in respect of Norwegian Kroner and for any specified period, the interest rate benchmark known as the Norwegian interbank offered rate which is calculated and published by a designated distributor (currently Thomson Reuters) in accordance with the requirements from time to time of the Norwegian association for banks, insurance companies and financial institutions, Finance Norway – FNO based on estimated interbank borrowing rates for Norwegian Kroner for a number of designated maturities which are provided by a panel of contributor banks (details of historic NIBOR rates can be obtained from the designated distributor);

**"Noteholder"**, in the case of Bearer Notes, has the meaning given in Condition 3(b) (*Form, Denomination, Title and Transfer - Title to Bearer Notes*) and in the case of Registered Notes, has the meaning given in Condition 3(d) (*Form, Denomination, Title and Transfer - Title to Registered Notes*);

**"Optional Redemption Amount (Call)"** means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

**"Optional Redemption Amount (Put)"** means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Final Terms;

**"Optional Redemption Date (Call)"** has the meaning given in the relevant Final Terms;

**"Optional Redemption Date (Put)"** has the meaning given in the relevant Final Terms;

**"Payment Business Day"** means:

- (i) if the currency of payment is euro, any day which is:
  - (A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and
  - (B) in the case of payment by transfer to an account, a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or
- (ii) if the currency of payment is not euro, any day which is:
  - (A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and
  - (B) in the case of payment by transfer to an account, a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

**"Permitted Security Interest"** means:

- (i) any Security Interest over or affecting any asset of any company which becomes a Subsidiary of the Issuer after the issue of the Notes, where such Security Interest is created prior to the date on which such company becomes a Subsidiary of the Issuer, if:
  - (A) such Security Interest was not created in contemplation of the acquisition of such company; and
  - (B) the amount thereby secured has not been increased in contemplation of, or since the date of, the acquisition of such company;

- (ii) any Security Interest over or affecting any asset acquired by the Issuer or a Subsidiary of the Issuer after the issue of the Notes, where such Security Interest is created prior to the date of the acquisition of such asset, if:
  - (A) such Security Interest was not created in contemplation of the acquisition of such asset; and
  - (B) the amount thereby secured has not been increased in contemplation of, or since the date of, the acquisition of such asset; and/or
- (iii) any Security Interest granted that secures Project Finance Indebtedness only;

**"Person"** means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state or agency of a state or other entity, whether or not having separate legal personality;

**"Principal Financial Centre"** means, in relation to any currency, the principal financial centre for that currency *provided, however, that:*

- (i) in relation to euro, it means the principal financial centre of such Member State of the European Union as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent; and
- (ii) in relation to New Zealand dollars, it means either Wellington or Auckland; in each case as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent;

**"Project Finance Indebtedness"** means any Indebtedness incurred by a debtor to finance the ownership, acquisition, construction, development and/or operation of an asset, assets or portfolio of assets in respect of which the person or persons to whom such Indebtedness is, or may be, owed have no recourse whatsoever for the repayment of or payment of any sum relating to such Indebtedness other than:

- (i) recourse to such debtor for amounts limited to the aggregate cash flow or net cash flow (other than historic cash flow or historic net cash flow) from such asset, assets or portfolio of assets; and/or
- (ii) recourse to such debtor generally, which recourse is limited to a claim for damages (other than liquidated damages and damages required to be calculated in a specified way) for breach of an obligation, representation or warranty (not being a payment obligation, representation or warranty or an obligation, representation or warranty to procure payment by another or an obligation, representation or warranty to comply or to procure compliance by another with any financial ratios or other test of financial condition) by the Person against whom such recourse is available; and/or
- (iii) if such debtor has been established specifically for the purpose of constructing, developing, owning and/or operating the relevant asset, assets or portfolio of assets and such debtor owns no other significant assets and carries on no other business, recourse to all of the assets and undertaking of such debtor and the shares in the capital of such debtor;

**"Put Option Notice"** means a notice which must be delivered to a Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder pursuant to the provisions of the Agency Agreement;

**"Put Option Receipt"** means a receipt issued by a Paying Agent to a depositing Noteholder upon deposit of a Note with such Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

**"Rate of Interest"** means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Final Terms or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Final Terms;

**"Redemption Amount"** means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put), the Early Termination Amount or such other amount in the nature of a redemption amount as may be specified in the relevant Final Terms;

**"Reference Banks"** has the meaning given in the relevant Final Terms or, if none, four major banks selected by the Issuer in the market that is most closely connected with the Reference Rate;

**"Reference Price"** has the meaning given in the relevant Final Terms;

**"Reference Rate"** shall mean (i) LIBOR, (ii) EURIBOR, (iii) NIBOR, (iv) SOFR, (v) SONIA, (vi) CIBOR or (vii) STIBOR, in each case for the relevant currency and for the relevant period, as specified in the relevant Final Terms;

**"Regular Period"** means:

- (i) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;
- (ii) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where **"Regular Date"** means the day and month (but not the year) on which any Interest Payment Date falls; and
- (iii) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where **"Regular Date"** means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period;

**"Relevant Date"** means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Centre of the currency of payment by the Fiscal Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

**"Relevant Financial Centre"** shall mean (i) London, in the case of a determination of LIBOR, (ii) Brussels, in the case of a determination of EURIBOR, (iii) Oslo, in the case of a determination of NIBOR, (iv) Copenhagen, in the case of a determination of CIBOR, (v) Stockholm, in the case of a determination of STIBOR, or (vi) in relation to Notes determined in any other currency, such financial centre or centres as may be specified in relation to the relevant currency and for the purposes of the definition of **"Business Day"** in the ISDA Definitions;

**"Relevant Indebtedness"** means any Indebtedness which is in the form of or represented by any bond, note, debenture, debenture stock, loan stock, certificate or other debt instrument which is, or is capable of being, listed, quoted or traded on any stock exchange or in any regulated securities market;

**"Relevant Margin"** means in the case of Notes in relation to which Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable, the margin(s) specified in the relevant Final Terms;

**"Relevant Nominating Body"** means, in respect of a benchmark or screen rate (as applicable): (i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or (ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the

benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof;

**"Relevant Screen Page"** means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Final Terms, or such other page, section or other part as may replace it on that information service or such 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 rates or prices comparable to the Reference Rate;

**"Relevant Time"** shall mean (i) in the case of LIBOR, 11.00 a.m., (ii) in the case of EURIBOR, 11.00 a.m., (iii) in the case of NIBOR, 11.00 a.m., (iv) in the case of CIBOR, 11.00 a.m., or (v) in the case of STIBOR, 11.00 a.m., in each case in the Relevant Financial Centre, or such other time, as specified in the relevant Final Terms;

**"Reserved Matter"** means any proposal:

- (i) to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes or to alter the method of calculating the amount of any payment in respect of the Notes on redemption or maturity or the date for any such payment;
- (ii) to effect the exchange or substitution of the Notes for, or the conversion of the Notes into, shares, bonds or other obligations or securities of the Issuer or any other person or body corporate formed or to be formed;
- (iii) to change the currency in which amounts due in respect of the Notes are payable;
- (iv) to change the quorum required at any Meeting or the majority required to pass an Extraordinary Resolution; or
- (v) to amend this definition;

**"Security Interest"** means any mortgage, charge, pledge, lien or other security interest including, without limitation, anything analogous to any of the foregoing under the laws of any jurisdiction;

**"Specified Currency"** has the meaning given in the relevant Final Terms;

**"Specified Denomination(s)"** has the meaning given in the relevant Final Terms;

**"Specified Office"** has the meaning given in the Agency Agreement;

**"Specified Period"** has the meaning given in the relevant Final Terms;

**"Subsidiary"** means, in relation to any Person (the **"first Person"**) at any particular time, any other Person (the **"second Person"**):

- (i) whose affairs and policies the first Person controls or has the power to control, whether by ownership of share capital, contract, the power to appoint or remove members of the governing body of the second Person or otherwise; or
- (ii) whose financial statements are, in accordance with applicable law and generally accepted accounting principles, consolidated with those of the first Person;

**"Successor Rate"** means the reference rate (and related alternative screen page or source, if available) that the Independent Adviser (with the Issuer's agreement) determines is a successor to or replacement of the Reference Rate (as applicable) which is formally recommended by any Relevant Nominating Body;

**"Talon"** means a talon for further Coupons;



"**TARGET2**" means the Trans-European Automated Real-time Gross settlement Express Transfer payment system which utilises a single shared platform and which was launched on 19 November 2007;

"**TARGET Settlement Day**" means any day on which TARGET2 is open for the settlement of payments in euro;

"**Treaty**" means the Treaty on establishing the European Communities, as amended;

"**Zero Coupon Note**" means a Note specified as such in the relevant Final Terms.

(b) *Interpretation:* In these Conditions:

- (i) if the Notes are Zero Coupon Notes, references to Coupons and Couponholders are not applicable;
- (ii) if Talons are specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Coupons shall be deemed to include references to Talons;
- (iii) if Talons are not specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Talons are not applicable;
- (iv) any reference to principal shall be deemed to include the Redemption Amount, any additional amounts in respect of principal which may be payable under Condition 12 (*Taxation*), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions;
- (v) any reference to interest shall be deemed to include any additional amounts in respect of interest which may be payable under Condition 12 (*Taxation*) and any other amount in the nature of interest payable pursuant to these Conditions;
- (vi) references to Notes being "outstanding" shall be construed in accordance with the Agency Agreement;
- (vii) if an expression is stated in Condition 2 to have the meaning given in the relevant Final Terms, but the relevant Final Terms gives no such meaning or specifies that such expression is "not applicable" then such expression is not applicable to the Notes; and
- (viii) any reference to the Agency Agreement shall be construed as a reference to the Agency Agreement as amended and/or supplemented up to and including the Issue Date of the Notes.

### 3. **Form, Denomination, Title and Transfer**

- (a) *Bearer Notes:* Bearer Notes are in the Specified Denomination(s) with Coupons and, if specified in the relevant Final Terms, Talons attached at the time of issue. In the case of a Series of Bearer Notes with more than one Specified Denomination, Bearer Notes of one Specified Denomination will not be exchangeable for Bearer Notes of another Specified Denomination.
- (b) *Title to Bearer Notes:* Title to Bearer Notes and the Coupons will pass by delivery. In the case of Bearer Notes, "**Holder**" means the holder of such Bearer Note and "**Noteholder**" and "**Couponholder**" shall be construed accordingly.
- (c) *Registered Notes:* Registered Notes are in the Specified Denomination(s), which may include a minimum denomination specified in the relevant Final Terms and higher integral multiples of a smaller amount specified in the relevant Final Terms.
- (d) *Title to Registered Notes:* The Registrar will maintain the register in accordance with the provisions of the Agency Agreement. A certificate (each, a "**Note Certificate**") will be issued to each Holder of Registered Notes in respect of its registered holding. Each Note Certificate will be numbered serially with an identifying number which will be recorded in the Register. In the case of Registered Notes, "**Holder**" means the person in whose name such Registered Note is for the

time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "Noteholder" shall be construed accordingly.

- (e) *Ownership:* The Holder of any Note or Coupon shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing thereon or, in the case of Registered Notes, on the Note Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such Holder. No person shall have any right to enforce any term or condition of any Note under the Contracts (Rights of Third Parties) Act 1999.
- (f) *Transfers of Registered Notes:* Subject to paragraphs (i) (*Closed periods*) and (j) (*Regulations concerning transfers and registration*) below, a Registered Note may be transferred upon surrender of the relevant Note Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as the Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; *provided, however, that* a Registered Note may not be transferred unless the principal amount of Registered Notes transferred and (where not all of the Registered Notes held by a Holder are being transferred) the principal amount of the balance of Registered Notes not transferred are Specified Denominations. Where not all the Registered Notes represented by the surrendered Note Certificate are the subject of the transfer, a new Note Certificate in respect of the balance of the Registered Notes will be issued to the transferor.
- (g) *Registration and delivery of Note Certificates:* Within five business days of the surrender of a Note Certificate in accordance with paragraph (f) (*Transfers of Registered Notes*) above, the Registrar will register the transfer in question and deliver a new Note Certificate of a like principal amount to the Registered Notes transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) by uninsured first class mail (airmail if overseas) to the address specified for the purpose by such relevant Holder. In this paragraph, "**business day**" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.
- (h) *No charge:* The transfer of a Registered Note will be effected without charge by or on behalf of the Issuer or the Registrar or any Transfer Agent but against such indemnity as the Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.
- (i) *Closed periods:* Noteholders may not require transfers to be registered during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Registered Notes.
- (j) *Regulations concerning transfers and registration:* All transfers of Registered Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Registered Notes scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar to any Noteholder who requests in writing a copy of such regulations.

#### 4. **Status**

The Notes constitute direct, general, unconditional and unsubordinated obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

#### 5. **Negative Pledge**

So long as any Note remains outstanding, the Issuer shall not, and the Issuer shall procure that none of its respective Subsidiaries (if any) will, create or permit to subsist any Security Interest other

than a Permitted Security Interest upon the whole or any part of its present or future undertaking, assets or revenues (including uncalled capital) to secure any Relevant Indebtedness or Guarantee of Relevant Indebtedness without (a) at the same time or prior thereto securing the Notes equally and rateably therewith or (b) providing such other security or other arrangement (whether or not it includes the giving of a Security Interest) for the Notes as may be approved by an Extraordinary Resolution of Noteholders.

#### 6. **Fixed Rate Note Provisions**

- (a) *Application:* This Condition 6 (*Fixed Rate Note Provisions*) is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Final Terms as being applicable.
- (b) *Accrual of interest:* The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments - Bearer Notes*) and Condition 11 (*Payments - Registered Notes*), as applicable. Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).
- (c) *Fixed Coupon Amount:* The amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.
- (d) *Calculation of interest amount:* The amount of interest payable in respect of each Note for any period for which a Fixed Coupon Amount is not specified shall be calculated by applying the Rate of Interest to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of such Note divided by the Calculation Amount. For this purpose a "sub-unit" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

#### 7. **Floating Rate Note Provisions**

- (a) *Application:* This Condition 7 (*Floating Rate Note Provisions*) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable.
- (b) *Accrual of interest:* The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments - Bearer Notes*) and Condition 11 (*Payments - Registered Notes*), as applicable. Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).
- (c) (i) *Screen Rate Determination (other than Floating Rate Notes referencing SONIA or SOFR):* If Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined and the Reference Rate is specified in the relevant Final Terms as being a Reference Rate other than SONIA or SOFR, the Rate of Interest applicable to the Notes for each Interest Period will be determined by the Calculation Agent on the following basis:

- (A) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;
- (B) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;
- (C) if, in the case of (A) above, such rate does not appear on that page or, in the case of (B) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable, the Issuer will:
  - (1) request the principal Relevant Financial Centre office of each of the Reference Banks to provide a quotation of the Reference Rate at approximately the Relevant Time on the Interest Determination Date to prime banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and
  - (2) determine the arithmetic mean of such quotations; and
- (D) if fewer than two such quotations are provided as requested, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in the Principal Financial Centre of the Specified Currency, selected by the Issuer, at approximately 11.00 a.m. (local time in the Principal Financial Centre of the Specified Currency) on the first day of the relevant Interest Period for loans in the Specified Currency to leading European banks for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time,

and the Rate of Interest for such Interest Period shall be the sum of the Margin and the rate or (as the case may be) the arithmetic mean so determined; *provided, however, that* if the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest applicable to the Notes during such Interest Period will be the sum of the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period.

(ii) *Screen Rate Determination (Floating Rate Notes referencing SONIA or SOFR):*

- (A) If Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined and the Reference Rate is specified in the relevant Final Terms as being SONIA, the Rate of Interest for each Interest Period will, subject as provided below, be Compounded Daily SONIA plus or minus (as specified in the relevant Final Terms) the Relevant Margin, all as determined by the Calculation Agent.

For the purposes of this Condition 7(c)(ii)(A):

**"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 Interest Determination Date in question, as follows, and the resulting percentage will be rounded, if necessary, to the fourth decimal place, with 0.00005 being rounded upwards:

$$\left[ \prod_{i=1}^{d_0} \left( 1 + \frac{SONIA_{i-PLSD} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

"d" means, for any Interest Period, the number of calendar days in such Interest Period;

"do" means, for any Interest Period, the number of London Banking Days in such Interest Period;

"i" means, for any Interest Period, a series of whole numbers from one to do, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day in such Interest Period;

**"Interest Determination Date"** means the date specified as such in the relevant Final Terms and which date shall not be specified in the relevant Final Terms as less than three London Banking Days prior to the Interest Payment Date without the prior consent of the Calculation Agent;

**"London Banking Day"** or **"LBD"** means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"ni" means, for any London Banking Day "i", the number of calendar days from, and including, such London Banking Day "i" up to, but excluding, the following London Banking Day;

**"Observation Period"** means, in respect of an Interest Period, the period from, and including, the date falling "p" London Banking Days prior to the first day of such Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date which is "p" London Banking Days prior to the Interest Payment Date for such Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, for any Interest Period, the number of London Banking Days included in the Observation Look-back Period specified in the relevant Final Terms;

**"SONIAi"** means, in respect of any London Banking Day, "i", a reference rate equal to the daily Sterling Overnight Index Average (**"SONIA"**) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the Relevant Screen Page (or if the Relevant Screen Page is unavailable, as otherwise is published by such authorised distributors) on the London Banking Day immediately following such London Banking Day; and

**"SONIAi-pLBD"** means, in respect of any London Banking Day "i" falling in the relevant Interest Period, the SONIA rate for the London Banking Day falling "p" London Banking Days prior to the relevant London Banking Day "i".

If, subject to Condition 7(j), in respect of any London Banking Day in the relevant Observation Period, the SONIA rate is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such SONIA rate shall be: (i) the Bank of England's Bank Rate (the **"Bank Rate"**) prevailing at close of business on the relevant London Banking Day; plus (ii) the mean of the spread of the SONIA rate to the Bank Rate over the previous five days on which a SONIA 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).

In the event that the Rate of Interest cannot be determined in accordance with the foregoing provisions, subject to Condition 7(j), the Rate of Interest shall be (i) that determined as at the last preceding Interest Determination Date (though substituting, where a different Relevant Margin is to be applied to the

relevant Interest Period from that which applied to the last preceding Interest Period, the Relevant Margin relating to the relevant Interest Period, in place of the Relevant Margin relating to that last preceding Interest Period) or (ii) if there is no such preceding Interest Determination Date, the initial Rate of Interest which would have been applicable to such Series of Notes for the first Interest Period had the Notes been in issue for a period equal in duration to the scheduled first Interest Period but ending on (and excluding) the Interest Commencement Date (but applying the Relevant Margin applicable to the first Interest Period).

If the relevant Series of Notes become due and payable in accordance with Condition 13, the final Interest Determination Date shall, notwithstanding any Interest Determination Date specified in the relevant Final Terms, be deemed to be the date on which such Notes became 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.

- (B) If Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined and the Reference Rate is specified in the relevant Final Terms as being SOFR, the Rate of Interest for each Interest Period will, subject as provided below, be Weighted Average SOFR plus or minus (as specified in the relevant Final Terms) the Relevant Margin, all as determined by the Calculation Agent.

For the purposes of this Condition 7(c)(ii)(B):

**"Weighted Average SOFR"** means the arithmetic mean of the SOFR in effect for each SOFR Reset Date during the relevant Interest Period, calculated by multiplying the relevant SOFR by the number of calendar days such SOFR is in effect, determining the sum of such products and dividing such sum by the number of calendar days in the relevant Interest Period, *provided however* that the last four SOFR Reset Days of such Interest Period shall be a **"Suspension Period"**. During a Suspension Period, the SOFR for each day during that Suspension Period will be the value for the SOFR Reset Date immediately prior to the first day of such Suspension Period.

**"SOFR"** means, with respect to any SOFR Reset Date:

- (1) the Secured Overnight Financing Rate published at 5:00 p.m. (New York time) on the New York Federal Reserve's Website on such SOFR Reset Date for trades made on the related SOFR Determination Date;
- (2) if the rate specified in (1) above does not so appear, and a SOFR Index Cessation Event and SOFR Index Cessation Date have not both occurred, the Secured Overnight Financing Rate published on the New York Federal Reserve's Website for the first preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the New York Federal Reserve's Website;
- (3) if the rate specified in (1) above does not so appear, and a SOFR Index Cessation Event and SOFR Index Cessation Date have both occurred, the rate that was recommended as the replacement for the Secured Overnight Financing Rate by 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 for the purpose of recommending a replacement for the Secured Overnight Financing Rate (which rate may be produced by the Federal Reserve Bank of New York or other designated administrator, and which rate may include any adjustments or spreads) or, if no such rate has been recommended within one U.S.

Government Securities Business Day of the SOFR Index Cessation Date, the Overnight Bank Funding Rate (published on the New York Federal Reserve's Website at or around 5:00 p.m. (New York time) on the relevant New York City Banking Day) for any SOFR Reset Date falling on or after the SOFR Index Cessation Date (it being understood that the Overnight Bank Funding Rate for any such SOFR Reset Date will be for trades made on the related SOFR Determination Date); or

- (4) if the Calculation Agent is required to use the Overnight Bank Funding Rate in paragraph (3) above and an OBFR Index Cessation Event and an OBFR Index Cessation Date have both occurred, then for any SOFR Reset Date falling on or after the later of the SOFR Index Cessation Date and the OBFR Index Cessation Date, the short-term interest rate target set by the Federal Open Market Committee, as published on the Federal Reserve's Website and as prevailing on such SOFR Reset Date, or if the Federal Open Market Committee has not set a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Market Committee, as published on the Federal Reserve's Website and as prevailing on such SOFR Reset Date (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range).

**"Federal Reserve's Website"** means the website of the Board of Governors of the Federal Reserve System, currently at <http://www.federalreserve.gov>, or any successor website of the Board of Governors of the Federal Reserve System.

**"New York Federal Reserve's Website"** means the website of the Federal Reserve Bank of New York, currently at <http://www.newyorkfed.org/>, or any successor website of the Federal Reserve Bank of New York.

**"New York City Banking Day"** means any day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in New York City.

**"OBFR Index Cessation Event"** means the occurrence of one or more of the following events:

- (1) a public statement by the Federal Reserve Bank of New York (or a successor administrator of the Overnight Bank Funding Rate) announcing that it has ceased, or will cease, to publish or provide the Overnight Bank Funding Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide an Overnight Bank Funding Rate; or
- (2) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of the Overnight Bank Funding Rate) has ceased, or will cease, to provide the Overnight Bank Funding Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide the Overnight Bank Funding Rate.

**"OBFR Index Cessation Date"** means, in respect of an OBFR Index Cessation Event, the date on which the Federal Reserve Bank of New York (or any successor administrator of the Overnight Bank Funding Rate), ceases to publish the Overnight Bank Funding Rate, or the date as of which the Overnight Bank Funding Rate may no longer be used.

**"SIFMA"** means the Securities Industry and Financial Markets Association or any successor thereto.

**"SOFR Determination Date"** means, with respect to any SOFR Reset Date and with respect to (x) the Secured Overnight Financing Rate and (y) the

Overnight Bank Funding Rate: (i) in the case of (x), the first U.S. Government Securities Business Day immediately preceding such SOFR Reset Date; and (ii) in the case of (y), the first New York City Banking Day immediately preceding such SOFR Reset Date.

**"SOFR Index Cessation Date"** means, in respect of a SOFR Index Cessation Event, the date on which the Federal Reserve Bank of New York (or any successor administrator of the Secured Overnight Financing Rate), ceases to publish the Secured Overnight Financing Rate, or the date as of which the Secured Overnight Financing Rate may no longer be used.

**"SOFR Index Cessation Event"** means the occurrence of one or more of the following events:

- (1) a public statement by the Federal Reserve Bank of New York (or a successor administrator of the Secured Overnight Financing Rate) announcing that it has ceased, or will cease, to publish or provide the Secured Overnight Financing Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide a Secured Overnight Financing Rate; or
- (2) the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of the Secured Overnight Financing Rate) has ceased, or will cease, to provide the Secured Overnight Financing Rate permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to publish or provide the Secured Overnight Financing Rate.

**"SOFR Reset Date"** each U.S. Government Securities Business Day during the relevant Interest Period, provided however that if both a SOFR Index Cessation Event and a SOFR Index Cessation Date have occurred, it shall mean: (i) in respect of the period from, and including, the first day of the Interest Period in which the SOFR Index Cessation Date falls (such Interest Period, the **"Affected Interest Period"**) to, but excluding, the SOFR Index Cessation Date (such period, the **"Partial SOFR Period"**), each U.S. Government Securities Business Day during the Partial SOFR Period; (ii) in respect of the period from, and including, the SOFR Index Cessation Date to, but excluding, the Interest Payment Date in respect of the Affected Interest Period (such period, the **"Partial Fallback Period"**), each New York City Banking Day during the Partial Fallback Period; and (iii) in respect of each Interest Period subsequent to the Affected Interest Period, each New York City Banking Day during the relevant Interest Period.

**"U.S. Government Securities Business Day"** means any day except for a Saturday, Sunday or a day on which SIFMA recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

- (d) *ISDA Determination:* If ISDA Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "ISDA Rate" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:
  - (i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Final Terms;



- (ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Final Terms; and
  - (iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on the London inter-bank offered rate (LIBOR) for a currency, the first day of that Interest Period or (B) in any other case, as specified in the relevant Final Terms.
- (e) *Maximum or Minimum Rate of Interest:* If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Final Terms, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified.
- (f) *Calculation of Interest Amount:* The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of each Note for such Interest Period. The Interest Amount will be calculated by applying the Rate of Interest for such Interest Period to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of the relevant Note divided by the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.
- (g) *Calculation of other amounts:* If the relevant Final Terms specifies that any other amount is to be calculated by the Calculation Agent, the Calculation Agent will, as soon as practicable after the time or times at which any such amount is to be determined, calculate the relevant amount. The relevant amount will be calculated by the Calculation Agent in the manner specified in the relevant Final Terms.
- (h) *Publication:* The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Paying Agents and each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given to the Noteholders. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. If the Calculation Amount is less than the minimum Specified Denomination the Calculation Agent shall not be obliged to publish each Interest Amount but instead may publish only the Calculation Amount and the Interest Amount in respect of a Note having the minimum Specified Denomination.
- (i) *Notifications etc:* All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Paying Agents, the Noteholders and the Couponholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.
- (j) *Benchmark replacement:*  
  
Notwithstanding the foregoing provisions of this Condition 7 but subject, where the Reference Rate specified in the relevant Final Terms is SOFR, to the operation of the fallback provisions specified in the definition of SOFR in Condition 7(c)(ii), if the Issuer (in consultation with the Calculation Agent (or the person specified in the relevant Final Terms as the party responsible for calculating the Rate of Interest and the Interest Amount(s))) determines that a Benchmark Event has occurred, when any Rate of Interest (or the relevant component part thereof) remains to be determined by reference to the Reference Rate (as applicable), then the following provisions shall apply:

- (i) the Issuer shall use reasonable endeavours to appoint an Independent Adviser for the determination (with the Issuer's agreement) of a Successor Rate or, alternatively, if the Independent Adviser and the Issuer agree that there is no Successor Rate, an alternative rate (the "**Alternative Benchmark Rate**") and, in either case, an alternative screen page or source (the "**Alternative Relevant Screen Page**") and an Adjustment Spread (if applicable) no later than three (3) Business Days prior to the relevant Interest Determination Date or last SOFR Determination Date (as applicable) relating to the next succeeding Interest Period (as applicable) (the "**IA Determination Cut-off Date**") for purposes of determining the Rate of Interest (or the relevant component part thereof) applicable to the Notes for all future Interest Periods (subject to the subsequent operation of this Condition 7(j));
- (ii) the Alternative Benchmark Rate shall be such rate as the Independent Adviser and the Issuer acting in good faith agree has replaced the Reference Rate in customary market usage for the purposes of determining floating rates of interest or reset rates of interest in respect of eurobonds denominated in the Specified Currency, or, if the Independent Adviser and the Issuer agree that there is no such rate, such other rate as the Independent Adviser and the Issuer acting in good faith agree is most comparable to the Reference Rate, and the Alternative Relevant Screen Page shall be such page of an information service as displays the Alternative Benchmark Rate;
- (iii) if the Issuer is unable to appoint an Independent Adviser, or if the Independent Adviser and the Issuer cannot agree upon, or cannot select a Successor Rate or an Alternative Benchmark Rate and Alternative Relevant Screen Page prior to the IA Determination Cut-off Date in accordance with sub-paragraph (ii) above, then the Issuer (acting in good faith and in a commercially reasonable manner) may determine which (if any) rate has replaced the Reference Rate in customary market usage for purposes of determining floating rates of interest or reset rates of interest in respect of eurobonds denominated in the Specified Currency, or, if it determines that there is no such rate, which (if any) rate is most comparable to the Reference Rate, and the Alternative Benchmark Rate shall be the rate so determined by the Issuer and the Alternative Relevant Screen Page shall be such page of an information service as displays the Alternative Benchmark Rate; provided, however, that if this subparagraph (iii) applies and the Issuer is unable or unwilling to determine an Alternative Benchmark Rate and Alternative Relevant Screen Page prior to the Interest Determination Date relating to the next succeeding Interest Period (as applicable) in accordance with this sub-paragraph (iii), the Reference Rate applicable to such Interest Period (as applicable) shall be equal to the Reference Rate for a term equivalent to the relevant Interest Period published on the Relevant Screen Page as at the last preceding Interest Determination Date (though substituting, where a different Relevant Margin is to be applied to the Interest Period from that which applied to the last preceding Interest Period (as applicable), the Relevant Margin relating to the Interest Period, in place of the margin relating to that last preceding Interest Period). For the avoidance of doubt, this paragraph shall apply to the relevant next succeeding Interest Period, and any subsequent Interest Periods are subject to the subsequent operation of, and to adjustment as provided in, the first paragraph of this Condition 7(j);
- (iv) if a Successor Rate or an Alternative Benchmark Rate and an Alternative Relevant Screen Page is determined in accordance with the preceding provisions, such Successor Rate or Alternative Benchmark Rate and Alternative Relevant Screen Page shall be the benchmark and the Relevant Screen Page in relation to the Notes for all future Interest Periods (as applicable) (subject to the subsequent operation of this Condition 7(j));
- (v) If the Issuer, following consultation with the Independent Adviser and acting in good faith, determines that (A) an Adjustment Spread is required to be applied to the Successor Rate or Alternative Benchmark Rate and (B) 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 Alternative Benchmark Rate for each subsequent determination of a relevant Rate of Interest and Interest Amount(s) (or a component part thereof) by reference to such Successor Rate or Alternative Benchmark Rate;

- (vi) if a Successor Rate or an Alternative Benchmark Rate and/or Adjustment Spread is determined in accordance with the above provisions, the Independent Adviser (with the Issuer's agreement) or the Issuer (as the case may be), may also specify changes to the Day Count Fraction, Relevant Screen Page, Relevant Time, Business Day Convention, Business Day, Additional Business Centre, Interest Determination Date, Relevant Financial Centre, Reference Banks, Principal Financial Centre and/or the definition of Reference Rate applicable to the Notes, and the method for determining the fallback rate in relation to the Notes, in order to follow market practice in relation to the Successor Rate or Alternative Benchmark Rate and/or Adjustment Spread, which changes shall apply to the Notes for all future Interest Periods (as applicable) (subject to the subsequent operation of this Condition 7(j)); and
- (vii) the Issuer shall promptly following the determination of any Successor Rate or Alternative Benchmark Rate and Alternative Relevant Screen Page and Adjustment Spread (if any) give notice thereof and of any changes pursuant to sub-paragraph (vi) above to the Calculation Agent, the Fiscal Agent and the Noteholders.

The determination of the Alternative Benchmark Rate and the other matters referred to above by the Independent Adviser will (in the absence of manifest error) be final and binding on the Issuer, the Calculation Agent and the Noteholders and no liability to any such person will attach to the Independent Adviser in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes. For the avoidance of doubt, each Noteholder shall be deemed to have accepted the Alternative Benchmark Rate, Adjustment Spread and/or Successor Rate (where applicable) and such other changes made pursuant to this Condition 7(j) and no consent or approval of any Noteholder shall be required.

For the purposes of these Conditions, "**Benchmark Event**" means:

- (A) the Reference Rate has ceased to be published on the Relevant Screen Page as a result of such benchmark ceasing to be calculated or administered; or
- (B) a public statement by the administrator of the Reference Rate that it has ceased, or will cease, publishing such Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of such Reference Rate); or
- (C) a public statement by the supervisor of the administrator of the Reference Rate that such Reference Rate has been or will be permanently or indefinitely discontinued; or
- (D) a public statement by the supervisor of the administrator of the Reference Rate that means that such Reference Rate will be prohibited from being used or that its use will be subject to restrictions or adverse consequences, either generally or in respect of the Notes; or
- (E) it has or will become unlawful for the Calculation Agent or the Issuer to calculate any payments due to be made to any Noteholder using the relevant Reference Rate (as applicable) (including, without limitation, under the Benchmarks Regulation (EU) 2016/1011, if applicable).

#### 8. **Zero Coupon Note Provisions**

- (a) *Application:* This Condition 8 (*Zero Coupon Note Provisions*) is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Final Terms as being applicable.
- (b) *Late payment on Zero Coupon Notes:* If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:
  - (i) the Reference Price; and
  - (ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date

to (but excluding) whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

9. **Redemption and Purchase**

- (a) *Scheduled redemption:* Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date, subject as provided in Condition 10 (*Payments - Bearer Notes*) and Condition 11 (*Payments - Registered Notes*).
- (b) *Redemption for tax reasons:* The Notes may be redeemed at the option of the Issuer in whole, but not in part:
  - (i) at any time (if the Floating Rate Note Provisions are not specified in the relevant Final Terms as being applicable); or
  - (ii) on any Interest Payment Date (if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable),

on giving not less than 30 nor more than 60 days' notice to the Noteholders (which notice shall be irrevocable), at their Early Redemption Amount (Tax), together with interest accrued (if any) to the date fixed for redemption, if:

- (A) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 12 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of Finland or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the date of issue of the first Tranche of the Notes; and
- (B) such obligation cannot be avoided by the Issuer taking reasonable measures available to it,

*provided, however, that* no such notice of redemption shall be given earlier than:

- (1) where the Notes may be redeemed at any time, 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due; or
- (2) where the Notes may be redeemed only on an Interest Payment Date, 60 days prior to the Interest Payment Date occurring immediately before the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Fiscal Agent (A) a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred and (B) an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment. Upon the expiry of any such notice as is referred to in this Condition 9(b), the Issuer shall be bound to redeem the Notes in accordance with this Condition 9(b).

- (c) *Redemption at the option of the Issuer:* If the call option is specified in the relevant Final Terms as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Final Terms, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Noteholders, or such other period(s) as may be specified in the relevant Final Terms, (which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes or, as the case

may be, the Notes specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) plus accrued interest (if any) to such date). Any such redemption must be of a nominal amount not less than the Minimum Redemption Amount and not more than the Maximum Redemption Amount, in each case as may be specified in the relevant Final Terms as being applicable. The Optional Redemption Amount (Call) will be either, as specified in the relevant Final Terms, (i) if Make Whole Redemption Price is specified as being applicable in the applicable Final Terms, the relevant Make Whole Redemption Price or (ii) the specified percentage (being no less than 100 per cent.) of the nominal amount of the Notes as stated in the applicable Final Terms.

The Make Whole Redemption Price will be an amount equal to the higher of:

- (i) if Spens Amount is specified as being applicable in the applicable Final Terms, (i) 100 per cent. of the nominal amount outstanding of the Notes to be redeemed or (ii) the nominal amount outstanding of the Notes to be redeemed multiplied by the price, as reported to the Issuer and the relevant Dealer(s) by the Determination Agent, at which the Gross Redemption Yield on such Notes on the Reference Date is equal to the Gross Redemption Yield (determined by reference to the middle market price) at the Quotation Time on the Reference Date of the Reference Bond, plus the Redemption Margin; or
- (ii) if Make Whole Redemption Amount is specified as applicable in the applicable Final Terms, (i) 100 per cent. of the nominal amount outstanding of the Notes to be redeemed and (ii) the sum of the present values of the nominal amount outstanding of the Notes to be redeemed and the Remaining Term Interest on such Notes (exclusive of interest accrued to the date of redemption) and such present values shall be calculated by discounting such amounts to the date of redemption on an annual basis (assuming a 360-day year consisting of twelve 30-day months or, in the case of an incomplete month, the number of days elapsed) at the Reference Bond Rate, plus the Redemption Margin,

all as determined by the Determination Agent.

In this Condition 9(c):

**"DA Selected Bond"** means a government security or securities selected by the Determination Agent as having an actual or interpolated maturity comparable with the remaining term of the Notes, that would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities denominated in the Specified Currency and of a comparable maturity to the remaining term of the Notes;

**"Determination Agent"** means an investment bank or financial institution of international standing selected by the Issuer after consultation with the relevant Dealer(s);

**"Gross Redemption Yield"** means, with respect to a security, the gross redemption yield on such security, expressed as a percentage and calculated by the Determination Agent on the basis set out by the United Kingdom Debt Management Office in the paper "Formulae for Calculating Gilt Prices from Yields", page 4, Section One: Price/Yield Formulae "Conventional Gilts"; "Double dated and Undated Gilts with Assumed (or Actual) Redemption on a Quasi-Coupon Date" (published 8 June 1998, as amended or updated from time to time) on a semi-annual compounding basis (converted to an annualised yield and rounded up (if necessary) to four decimal places) or on such other basis as the relevant Dealer(s) may approve;

**"Quotation Time"** shall be as set out in the applicable Final Terms;

**"Redemption Margin"** shall be as set out in the applicable Final Terms;

**"Reference Bond"** shall be as set out in the applicable Final Terms or the DA Selected Bond;

**"Reference Bond Price"** means, with respect to any date of redemption, (a) the arithmetic average of the Reference Government Bond Dealer Quotations for such date of redemption, after excluding the highest and lowest such Reference Government Bond Dealer Quotations, or (b) if the Determination Agent obtains fewer than four such Reference Government Bond Dealer Quotations, the arithmetic average of all such quotations;

**"Reference Bond Rate"** means, with respect to any date of redemption, the rate per annum equal to the annual or semi-annual yield (as the case may be) to maturity or interpolated yield to maturity (on the relevant day count basis) of the Reference Bond, assuming a price for the Reference Bond (expressed as a percentage of its nominal amount) equal to the Reference Bond Price for such date of redemption;

**"Reference Date"** will be set out in the relevant notice of redemption;

**"Reference Government Bond Dealer"** means each of five banks selected by the Issuer, or their affiliates, which are (A) primary government securities dealers, and their respective successors, or (B) market makers in pricing corporate bond issues;

**"Reference Government Bond Dealer Quotations"** means, with respect to each Reference Government Bond Dealer and any date of redemption, the arithmetic average, as determined by the Determination Agent, of the bid and offered prices for the Reference Bond (expressed in each case as a percentage of its nominal amount) at the Quotation Time on the Reference Date quoted in writing to the Determination Agent by such Reference Government Bond Dealer; and

**"Remaining Term Interest"** means, with respect to any Note, the aggregate amount of scheduled payment(s) of interest on such Note for the remaining term of such Note determined on the basis of the rate of interest applicable to such Note from and including the date on which such Note is to be redeemed by the Issuer pursuant to this Condition 9(c).

- (d) *Partial redemption:* If the Notes are to be redeemed in part only on any date in accordance with Condition 9(c) (*Redemption at the option of the Issuer*), the Notes to be redeemed shall be selected by the drawing of lots in such place as the Fiscal Agent approves and in such manner as the Fiscal Agent considers appropriate, subject to compliance with applicable law, the rules of each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation and the notice to Noteholders referred to in Condition 9(c) (*Redemption at the option of the Issuer*) shall specify the serial numbers of the Notes so to be redeemed. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Final Terms, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.
- (e) *Redemption at the option of Noteholders:* If the put option is specified in the relevant Final Terms as being applicable, the Issuer shall, at the option of the Holder of any Note redeem such Note on the Optional Redemption Date (Put) specified in the relevant Put Option Notice at the relevant Optional Redemption Amount (Put) together with interest (if any) accrued to such date. In order to exercise the option contained in this Condition 9(e), the Holder of a Note must, not less than 30 nor more than 60 days before the relevant Optional Redemption Date (Put), deposit with any Paying Agent such Note together with all unmatured Coupons relating thereto and a duly completed Put Option Notice in the form obtainable from any Paying Agent. The Paying Agent with which a Note is so deposited shall deliver a duly completed Put Option Receipt to the depositing Noteholder. No Note, once deposited with a duly completed Put Option Notice in accordance with this Condition 9(e), may be withdrawn; *provided, however, that* if, prior to the relevant Optional Redemption Date (Put), any such Note becomes immediately due and payable or, upon due presentation of any such Note on the relevant Optional Redemption Date (Put), payment of the redemption moneys is improperly withheld or refused, the relevant Paying Agent shall mail notification thereof to the depositing Noteholder at such address as may have been given by such Noteholder in the relevant Put Option Notice and shall hold such Note at its Specified Office for collection by the depositing Noteholder against surrender of the relevant Put Option Receipt. For so long as any outstanding Note is held by a Paying Agent in accordance with this Condition 9(e), the depositor of such Note and not such Paying Agent shall be deemed to be the Holder of such Note for all purposes.
- (f) *No other redemption:* The Issuer shall not be entitled to redeem the Notes otherwise than as provided in paragraphs (a) to (e) above.
- (g) *Early redemption of Zero Coupon Notes:* Unless otherwise specified in the relevant Final Terms, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount no less than its principal amount and equal to the sum of:

- (i) the Reference Price; and
- (ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Final Terms for the purposes of this Condition 9(g) or, if none is so specified, a Day Count Fraction of 30E/360.

- (h) *Purchase:* The Issuer or any of its respective Subsidiaries may at any time purchase Notes in the open market or otherwise and at any price, provided that all unmatured Coupons are purchased therewith.
- (i) *Cancellation:* All Notes so redeemed or purchased by the Issuer or any of its respective Subsidiaries and any unmatured Coupons attached to or surrendered with them shall be cancelled and may not be reissued or resold.

#### 10. **Payments - Bearer Notes**

This Condition 10 is only applicable to Bearer Notes.

- (a) *Principal:* Payments of principal shall be made only against presentation and (provided that payment is made in full) surrender of Bearer Notes at the Specified Office of any Paying Agent outside the United States by cheque drawn in the currency in which the payment is due on, or by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency (in the case of a sterling cheque, a town clearing branch of a bank in the City of London).
- (b) *Interest:* Payments of interest shall, subject to paragraph (h) below, be made only against presentation and (provided that payment is made in full) surrender of the appropriate Coupons at the Specified Office of any Paying Agent outside the United States in the manner described in paragraph (a) above.
- (c) *Payments in New York City:* Payments of principal or interest may be made at the Specified Office of a Paying Agent in New York City if (i) the Issuer has appointed Paying Agents outside the United States with the reasonable expectation that such Paying Agents will be able to make payment of the full amount of the principal and interest on the Notes in the currency in which the payment is due when due, (ii) payment of the full amount of such principal and interest at the offices of all such Paying Agents is illegal or effectively precluded by exchange controls or other similar restrictions and (iii) payment is permitted by applicable United States law.
- (d) *Payments subject to fiscal laws:* All payments in respect of the Bearer Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 12 (*Taxation*) and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 12 (*Taxation*)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.
- (e) *Deductions for unmatured Coupons:* If the relevant Final Terms specifies that the Fixed Rate Note Provisions are applicable and a Bearer Note is presented without all unmatured Coupons relating thereto:
  - (i) if the aggregate amount of the missing Coupons is less than or equal to the amount of principal due for payment, a sum equal to the aggregate amount of the missing Coupons will be deducted from the amount of principal due for payment; *provided, however, that* if the gross amount available for payment is less than the amount of principal due for

payment, the sum deducted will be that proportion of the aggregate amount of such missing Coupons which the gross amount actually available for payment bears to the amount of principal due for payment;

- (ii) if the aggregate amount of the missing Coupons is greater than the amount of principal due for payment:
  - (A) so many of such missing Coupons shall become void (in inverse order of maturity) as will result in the aggregate amount of the remainder of such missing Coupons (the "**Relevant Coupons**") being equal to the amount of principal due for payment; *provided, however, that* where this sub-paragraph would otherwise require a fraction of a missing Coupon to become void, such missing Coupon shall become void in its entirety; and
  - (B) a sum equal to the aggregate amount of the Relevant Coupons (or, if less, the amount of principal due for payment) will be deducted from the amount of principal due for payment; *provided, however, that*, if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of the Relevant Coupons (or, as the case may be, the amount of principal due for payment) which the gross amount actually available for payment bears to the amount of principal due for payment.

Each sum of principal so deducted shall be paid in the manner provided in paragraph (a) above against presentation and (provided that payment is made in full) surrender of the relevant missing Coupons.

- (f) *Unmatured Coupons void:* If the relevant Final Terms specifies that this Condition 10(f) is applicable or that the Floating Rate Note Provisions are applicable, on the due date for final redemption of any Note or early redemption in whole of such Note pursuant to Condition 9(b) (*Redemption for tax reasons*), Condition 9(e) (*Redemption at the option of Noteholders*), Condition 9(c) (*Redemption at the option of the Issuer*) or Condition 13 (*Events of Default*), all unmatured Coupons relating thereto (whether or not still attached) shall become void and no payment will be made in respect thereof.
- (g) *Payments on business days:* If the due date for payment of any amount in respect of any Bearer Note or Coupon is not a Payment Business Day in the place of presentation, the Holder shall not be entitled to payment in such place of the amount due until the next succeeding Payment Business Day in such place and shall not be entitled to any further interest or other payment in respect of any such delay.
- (h) *Payments other than in respect of matured Coupons:* Payments of interest other than in respect of matured Coupons shall be made only against presentation of the relevant Bearer Notes at the Specified Office of any Paying Agent outside the United States (or in New York City if permitted by paragraph (c) above).
- (i) *Partial payments:* If a Paying Agent makes a partial payment in respect of any Bearer Note or Coupon presented to it for payment, such Paying Agent will endorse thereon a statement indicating the amount and date of such payment.
- (j) *Exchange of Talons:* On or after the maturity date of the final Coupon which is (or was at the time of issue) part of a Coupon Sheet relating to the Bearer Notes, the Talon forming part of such Coupon Sheet may be exchanged at the Specified Office of the Fiscal Agent for a further Coupon Sheet (including, if appropriate, a further Talon but excluding any Coupons in respect of which claims have already become void pursuant to Condition 14 (*Prescription*)). Upon the due date for redemption of any Bearer Note, any unexchanged Talon relating to such Note shall become void and no Coupon will be delivered in respect of such Talon.

#### 11. **Payments - Registered Notes**

This Condition 11 is only applicable to Registered Notes.



- (a) *Principal:* Payments of principal shall be made by cheque drawn in the currency in which the payment is due drawn on, or, upon application by a Holder of a Registered Note to the Specified Office of the Fiscal Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency (in the case of a sterling cheque, a town clearing branch of a bank in the City of London) and (in the case of redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.
- (b) *Interest:* Payments of interest shall be made by cheque drawn in the currency in which the payment is due drawn on, or, upon application by a Holder of a Registered Note to the Specified Office of the Fiscal Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency (in the case of a sterling cheque, a town clearing branch of a bank in the City of London) and (in the case of interest payable on redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.
- (c) *Payments subject to fiscal laws:* All payments in respect of the Registered Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 12 (*Taxation*) and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 12 (*Taxation*)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.
- (d) *Payments on business days:* Where payment is to be made by transfer to an account, payment instructions (for value the due date, or, if the due date is not Payment Business Day, for value the next succeeding Payment Business Day) will be initiated and, where payment is to be made by cheque, the cheque will be mailed (i) (in the case of payments of principal and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Note Certificate is surrendered (or, in the case of part payment only, endorsed) at the Specified Office of a Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Registered Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from (A) the due date for a payment not being a Payment Business Day or (B) a cheque mailed in accordance with this Condition 11 arriving after the due date for payment or being lost in the mail.
- (e) *Partial payments:* If a Paying Agent makes a partial payment in respect of any Registered Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Note Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Note Certificate.
- (f) *Record date:* Each payment in respect of a Registered Note will be made to the person shown as the Holder in the Register at the opening of business in the place of the Registrar's Specified Office on the fifteenth day before the due date for such payment (the "**Record Date**"). Where payment in respect of a Registered Note is to be made by cheque, the cheque will be mailed to the address shown as the address of the Holder in the Register at the opening of business on the relevant Record Date.

## 12. **Taxation**

- (a) *Gross up:* All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of Finland or any political subdivision therein or any authority therein or thereof having power to tax, unless the withholding or deduction of such taxes, duties, assessments, or governmental charges is required by law or

agreement with a governmental authority. In that event, the Issuer shall pay such additional amounts as will result in receipt by the Noteholders and the Couponholders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in respect of any Note or Coupon:

- (i) held by or on behalf of a Holder which is liable to such taxes, duties, assessments or governmental charges in respect of such Note or Coupon by reason of its having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of the Note or Coupon; or
  - (ii) held by or on behalf of a Holder who would not be liable or subject to the withholding or deduction by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority; or
  - (iii) where the relevant Note or Coupon or Note Certificate is presented or surrendered for payment more than 30 days after the Relevant Date except to the extent that the Holder of such Note or Coupon or Note Certificate would have been entitled to such additional amounts on presenting or surrendering such Note or Coupon or Note Certificate for payment on the last day of such period of 30 days.
- (b) *Taxing jurisdiction:* If the Issuer becomes subject at any time to any taxing jurisdiction other than Finland, references in these Conditions to Finland shall be construed as references to Finland and/or such other jurisdiction.
- (c) *FATCA Withholding:* Notwithstanding anything to the contrary in this Condition, none of the Issuer, any paying agent or any other person shall be required to pay any additional amounts with respect to any withholding or deduction imposed on or in respect of any Note pursuant to Section 1471 to 1474 of the Code ("FATCA"), any treaty, law, regulation or other official guidance implementing FATCA, or any agreement between the Issuer, a paying agent or any other person and the United States, any other jurisdiction, or any authority of any of the foregoing implementing FATCA.

### 13. **Events of Default**

If any of the following events occurs and is continuing:

- (a) *Non-payment:* the Issuer fails to pay any amount of principal in respect of the Notes within five days of the due date for payment thereof or fails to pay any amount of interest in respect of the Notes within seven days of the due date for payment thereof; or
- (b) *Breach of other obligations:* if the Issuer fails to perform or observe any of its other obligations under these Conditions as completed by the relevant Final Terms in respect of the Notes and the failure continues for the period of 30 days after notice thereof shall have been given by the holder of any of the Notes to the Issuer or to the Specified Office of the Fiscal Agent; or
- (c) *Cross-default of Issuer or Subsidiary:*
  - (i) any Indebtedness, other than Supply Contract Indebtedness, of the Issuer or any of its respective Material Subsidiaries (if any) is not paid when due or (as the case may be) within any originally applicable grace period;
  - (ii) any such Indebtedness, other than Supply Contract Indebtedness, becomes (or becomes capable of being declared) due and payable prior to its stated maturity otherwise than at the option of the Issuer or the Material Subsidiary or (provided that no event of default, howsoever described, has occurred) any Person entitled to such Indebtedness;
  - (iii) the Issuer or any of its respective Material Subsidiaries fails to pay when due any amount payable by it under any Guarantee of any Indebtedness, other than Supply Contract Indebtedness;

- (iv) any security given by the Issuer or any of its Subsidiaries (if any) for any Indebtedness, other than Supply Contract Indebtedness, becomes enforceable by reason of default; or
- (v) one or more final judgement(s) or order(s) for the payment is rendered against the Issuer or any of its Subsidiaries and continue(s) unsatisfied and unstaged for a period of 45 days after the date(s) thereof or, if later, the date therein specified for payment,

provided that the amount of Indebtedness referred to in sub-paragraph (i) and/or sub-paragraph (ii) above and/or the amount payable under any Guarantee referred to in sub-paragraph (iii) above and/or the amount payable under any security referred to in sub-paragraph (iv) above, individually or in the aggregate exceeds EUR 50,000,000 (or its equivalent in any other currency or currencies), where "**Supply Contract Indebtedness**" means any indebtedness incurred pursuant to a contract for the supply, acquisition, construction or development of a nuclear power unit or associated facility; or

- (d) *Security enforced:* a secured party takes possession, or a receiver, manager or other similar officer is appointed, of the whole or any part of the undertaking, assets and revenues of the Issuer where the value of the undertaking, assets and revenues in question exceeds EUR 10,000,000; or
- (e) *Insolvency etc:* the Issuer or a Material Subsidiary shall be adjudicated or found bankrupt or insolvent, or shall suspend payments, or any order or action shall be made or taken by any competent court or administrative agency, or any resolution shall be passed by the Issuer, to apply for judicial composition proceedings with its creditors or for the appointment of a receiver or trustee or other similar official in insolvency proceedings in relation to the Issuer or a Material Subsidiary or a substantial part of its assets, or the Issuer shall be wound up or dissolved; or
- (f) *Winding Up:* an order is made or an effective resolution is passed for the winding up, liquidation or dissolution of the Issuer or any of its Material Subsidiaries, save for the purposes of an amalgamation, merger, consolidation, reorganisation, reconstruction or other similar arrangement (A) in the case of a Material Subsidiary not involving or arising out of the insolvency of such Material Subsidiary and under which all or substantially all of its assets are transferred to the Issuer or any of its Subsidiaries, or (B) in the case of a Material Subsidiary under which all or substantially all of its assets are transferred to a third party or parties (whether associated or not) for consideration received by the Issuer or a Subsidiary on an arm's length basis, or (C) in the case of a Material Subsidiary under which all or substantially all of its assets are transferred and the transferee is or immediately upon such transfer becomes a Material Subsidiary, or (D) on terms previously approved in writing by an Extraordinary Resolution of the Noteholders; or
- (g) *Analogous event:* any event occurs which under the laws of Finland has an analogous effect to any of the events referred to in paragraphs (d) to (f) above,

then any Note may be declared immediately due and payable if written notice is received from Holders holding not less than one fifth of the aggregate principal amount of the outstanding Notes and such notice is addressed by such Holders thereof to the Issuer and delivered to the Issuer or to the Specified Office of the Fiscal Agent, whereupon it shall become immediately due and payable at its Early Termination Amount together with accrued interest (if any) without further action or formality. Notice of any such declaration shall promptly be given to all other Noteholders of such Notes.

#### 14. **Prescription**

Claims for principal in respect of Bearer Notes shall become void unless the relevant Bearer Notes are presented for payment within ten years of the appropriate Relevant Date. Claims for interest in respect of Bearer Notes shall become void unless the relevant Coupons are presented for payment within five years of the appropriate Relevant Date. Claims for principal and interest on redemption in respect of Registered Notes shall become void unless the relevant Note Certificates are surrendered for payment within ten years of the appropriate Relevant Date.

#### 15. **Replacement of Notes and Coupons**

If any Note, Note Certificate or Coupon is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Fiscal Agent, in the case of Bearer Notes, or the Registrar,

in the case of Registered Notes (and, if the Notes are then admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent or Transfer Agent in any particular place, the Paying Agent or Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system), subject to all applicable laws and competent authority, stock exchange and/or quotation system requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer may reasonably require. Mutilated or defaced Notes, Note Certificates or Coupons must be surrendered before replacements will be issued.

**16. Agents**

In acting under the Agency Agreement and in connection with the Notes and the Coupons, the Agents act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders or Couponholders.

The initial Agents and their initial Specified Offices are listed below. The initial Calculation Agent (if any) is specified in the relevant Final Terms. The Issuer reserves the right at any time to vary or terminate the appointment of any Agent and to appoint a successor fiscal agent or registrar or Calculation Agent and additional or successor paying agents; *provided, however, that*:

- (a) the Issuer shall at all times maintain a fiscal agent and a registrar; and
- (b) if a Calculation Agent is specified in the relevant Final Terms, the Issuer shall at all times maintain a Calculation Agent; and
- (c) if and for so long as the Notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent and/or a Transfer Agent in any particular place, the Issuer shall maintain a Paying Agent and/or a Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system.

Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Noteholders.

**17. Meetings of Noteholders; Modification and Waiver**

- (a) *Meetings of Noteholders*: The Agency Agreement contains provisions for convening meetings of Noteholders to consider matters relating to the Notes, including the modification of any provision of these Conditions. Any such modification may be made if sanctioned by an Extraordinary Resolution. Such a meeting may be convened by the Issuer and shall be convened by them upon the request in writing of Noteholders holding not less than one-tenth of the aggregate principal amount of the outstanding Notes. The quorum at any meeting convened to vote on an Extraordinary Resolution will be one or more Persons holding or representing a clear majority of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, one or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented; *provided, however, that* Reserved Matters may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which one or more Persons holding or representing not less than three-quarters or, at any adjourned meeting, not less than a clear majority of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders and Couponholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of all Noteholders who for the time being are entitled to receive notice of a meeting of Noteholders will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

- (b) *Modification*: The Notes, these Conditions and the Deed of Covenant may be amended without the consent of the Noteholders or the Couponholders to correct a manifest error or if such modification is of a formal, minor or technical nature. In addition, the parties to the Agency Agreement may agree to modify any provision thereof, but the Issuer shall not agree, without the

consent of the Noteholders, to any such modification unless it is of a formal, minor or technical nature, it is made to correct a manifest error or it is, in the opinion of such parties, not materially prejudicial to the interests of the Noteholders.

18. **Further Issues**

The Issuer may from time to time, without the consent of the Noteholders or the Couponholders, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single series with the Notes.

19. **Notices**

- (a) *Bearer Notes:* Notices to the Holders of Bearer Notes shall be valid if published in a leading English language daily newspaper published in London (which is expected to be the *Financial Times*) and, if the Bearer Notes are admitted to trading on the Luxembourg Stock Exchange and it is a requirement of applicable law or regulations, a leading newspaper having general circulation in Luxembourg (which is expected to be *Luxemburger Wort*) or published on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)) or in either case, if such publication is not practicable, in a leading English language daily newspaper having general circulation in Europe. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any stock exchange or other relevant authority on which the Notes are for the time being listed.
- (b) *Registered Notes:* Notices to the Holders of Registered Notes shall be sent to them by first class mail (or its equivalent) or (if posted to an overseas address) by airmail at their respective addresses on the Register and, if the Registered Notes are admitted to trading on the Luxembourg Stock Exchange and it is a requirement of applicable law or regulations, notices to Noteholders will be published on the date of such mailing in a leading newspaper having general circulation in Luxembourg (which is expected to be *Luxemburger Wort*) or published on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)) or in either case, if such publication is not practicable, in a leading English language daily newspaper having general circulation in Europe. Any such notice shall be deemed to have been given on the fourth day after the date of mailing.

Any such notice shall be deemed to have been given on the date of first 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). Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Holders of Bearer Notes.

20. **Currency Indemnity**

If any sum due from the Issuer in respect of the Notes or the Coupons or any order or judgment given or made in relation thereto has to be converted from the currency (the "**first currency**") in which the same is payable under these Conditions or such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Issuer, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes, the Issuer shall indemnify each Noteholder, on the written demand of such Noteholder addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Fiscal Agent, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which such Noteholder may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer and shall give rise to a separate and independent cause of action.

21. **Rounding**

For the purposes of any calculations referred to in these Conditions (unless otherwise specified in these Conditions), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005 per cent. being rounded

up to 0.00001 per cent.), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

22. **Governing Law and Jurisdiction**

- (a) *Governing law:* The Notes and any non-contractual obligations arising out of or in connection with the Notes are governed by English law.
- (b) *English courts:* The courts of England have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising out of or in connection with the Notes (including a dispute relating to the existence, validity or termination of the Notes or any non-contractual obligation arising out of or in connection with the Notes) or the consequences of their nullity.
- (c) *Appropriate forum:* 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.
- (d) *Rights of the Noteholders to take proceedings outside England:* Condition 22(b) (*English courts*) is for the benefit of the Noteholders only. As a result, nothing in this Condition 22 (*Governing law and jurisdiction*) prevents any Noteholder from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction. To the extent allowed by law, Noteholders may take concurrent Proceedings in any number of jurisdictions.
- (e) *Process agent:* The Issuer agrees that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it by being delivered to Vistra Trust Company Limited at Suite 1, 3<sup>rd</sup> Floor, 11-12 St James's Square, London SW1Y 4LB or, if different, its registered office for the time being or at any address of the Issuer in Great Britain at which process may be served on it in accordance with the Companies Act 2006. If such person is not or ceases to be effectively appointed to accept service of process on behalf of the Issuer, the Issuer shall, on the written demand of any Noteholder addressed and delivered to the Issuer or to the Specified Office of the Fiscal Agent appoint a further person in England to accept service of process on its behalf and, failing such appointment within 15 days, any Noteholder shall be entitled to appoint such a person by written notice addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Fiscal Agent. Nothing in this paragraph shall affect the right of any Noteholder to serve process in any other manner permitted by law. This Condition applies to Proceedings in England and to Proceedings elsewhere.

## FORM OF FINAL TERMS

*The Final Terms in respect of each Tranche of Notes will be substantially in the following form, duly completed to reflect the particular terms of the relevant Notes and their issue. Text in this section appearing in italics does not form part of the form of the Final Terms but denotes directions for completing the Final Terms.*

**[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 ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU ("**MiFID II**"); (ii) a customer within the meaning of Directive 2002/92/EC, 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 Directive 2003/71/EC (as amended or superseded, the "**Prospectus Directive**"). No key information document required by Regulation (EU) No 1286/2014 (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.<sup>1</sup>

**[MiFID II 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 Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU (as amended, "**MiFID II**")/[MiFID II]; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the 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 Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.<sup>2</sup>

[In connection with Section 309B of the Securities and Futures Act (Chapter 289) of Singapore (the "**SFA**") and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "**CMP Regulations 2018**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes [are] / [are not] prescribed capital markets products (as defined in the CMP Regulations 2018) and [Excluded] / [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 Recommendation on Investment Products).<sup>3</sup>

**Final Terms dated [•]**

### TEOLLISUUDEN VOIMA OYJ

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]  
under the

**EUR 4,000,000,000 Euro Medium Term Note Programme**

### PART A – CONTRACTUAL TERMS

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the base prospectus dated 27 June 2019 [and the supplement(s) to it dated [•]] which [together] constitute[s] a base prospectus (the "**Base Prospectus**") for the purposes of the Prospectus Directive. This document constitutes the Final Terms of the Notes described herein for the purposes of Article 5.4 of the Prospectus Directive and must be read in conjunction with the Base Prospectus. The

<sup>1</sup> Include where Part B item 9 of the Final Terms specifies "Applicable".

<sup>2</sup> Delete legend if the manager[s] in relation to the Notes are not subject to MiFID II and therefore there are no MiFID II manufacturers.

<sup>3</sup> [For any Notes to be offered to Singapore investors, the Issuer to consider whether it needs to re-classify the Notes pursuant to Section 309B of the SFA prior to the launch of the offer.]

expression "**Prospectus Directive**" means Directive 2003/71/EC (as amended or superseded) and includes any relevant implementing measures in the Relevant Member State.

Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Base Prospectus. The Base Prospectus is available for viewing on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)).]

*(The following alternative language applies if the first tranche of an issue which is being increased was issued under a base prospectus with an earlier date and the relevant terms and conditions from that base prospectus with an earlier date were incorporated by reference in this Base Prospectus.)*

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the base prospectus dated [2010/2012/2013/2014/2015/2016/2017/2018] which are incorporated by reference in the Base Prospectus dated 27 June 2019. This document constitutes the Final Terms of the Notes described herein for the purposes of Article 5.4 of the Prospectus Directive and must be read in conjunction with the base prospectus dated 27 June 2019 [and the supplement[s] thereto dated [•]] which [together] constitute[s] a base prospectus for the purposes of the Prospectus Directive (the "**Base Prospectus**"), save in respect of the Conditions which are set forth in the base prospectus dated [2010/2012/2013/2014/2015/2016/2017/2018] [and the supplement[s] to it dated [•]]. The expression "**Prospectus Directive**" means Directive 2003/71/EC (as amended or superseded) and includes any relevant implementing measures in the Relevant Member State.

Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of these Final Terms, the Base Prospectus [and the supplement[s] dated [•]]. The Base Prospectus is available for viewing on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)).]

*(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 or sub-paragraphs. Italics denote guidance for completing the Final Terms.)*

1.
  - (i) Series Number: [•]
  - (ii) Tranche Number: [•]
  - (iii) Date on which the Notes become fungible: [Not Applicable/The Notes shall be consolidated, form a single series and be interchangeable for trading purposes with the [provide issue amount/ISIN/maturity date/issue date of earlier Tranches] on [the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph 20 below [which is expected to occur on or about [•]]]
2. Specified Currency or Currencies: [•]
3. Aggregate Nominal Amount: [•]
  - (i) Series: [•]
  - (ii) Tranche: [•]
4. Issue Price: [•] per cent. of the Aggregate Nominal Amount [plus accrued interest from [insert date] *(in the case of fungible issues only, if applicable)*]
5.
  - (i) Specified Denominations: [EUR 100,000]

*(For Bearer Notes only, where any notes have a Specified Denomination of EUR 100,000 and integral multiples of EUR 1,000 in excess thereof up to and including EUR 199,000 in paragraph 24 (Form of Notes) of the Final Terms, the Temporary*



*Global Note or the Permanent Global Note may only be exchangeable for Definitive Notes in the limited circumstances specified in the applicable Temporary Global Note or Permanent Global Note.)*

*(Other denomination of at least EUR 100,000)*

*(Notes which may be listed on the Luxembourg Stock Exchange and/or admitted to listing, trading and/or quotation by any other listing authority, stock exchange and/or quotation system situated or operating in a member state of the European Union may not have a minimum denomination of less than EUR100,000 (or nearly equivalent in another currency))*

*(Subject thereto, if Notes are to be issued which have denominations consisting of a minimum Specified Denomination and higher integral multiples of another smaller amount, the following sample wording should be used (as adjusted for the relevant Specified Currency and the actual Specified Denominations:*

*[€]100,000 and integral multiples of [€]1,000 in excess thereof up to and including [€]199,000. Definitive Notes will not be issued in denominations in excess of [€]199,000.)]*

- |    |      |                             |   |
|----|------|-----------------------------|---|
|    | (ii) | Calculation Amount:         | [•]   |
| 6. | (i)  | Issue Date:                 | [•]   |
|    | (ii) | Interest Commencement Date: | [Specify/Issue Date/Not Applicable]   |
| 7. |      | Maturity Date:              | [•] (Specify date or (for Floating Rate Notes) Interest Payment Date falling in or nearest to the relevant month and year)  |
|    |      |                             | <i>(If the Maturity Date is less than one year from the Issue Date and either (a) the issue proceeds are received by the Issuer in the United Kingdom, or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, (i) the Notes must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be sold only to "professional investors" or (ii) another applicable exemption from section 19 of the FSMA must be available.)]</i> |
| 8. |      | Interest Basis:             | [[ ] per cent. Fixed Rate]<br><br>[[•] month<br>[EURIBOR/LIBOR/NIBOR/SOFR/SONIA/CIBOR/STIBOR]+/- [ ] per cent. Floating Rate]<br><br>[Zero Coupon]<br><br>(further particulars specified below)   |
| 9. |      | Redemption/Payment Basis:   | [Subject to any purchase and cancellation, early redemption, call option or put option] [The] Notes   |

- will be redeemed on the Maturity Date at [par/[insert amount greater than par]]
10. Change of Interest or Payment Basis: Not Applicable / [From [insert date / Interest Payment Date] onwards the interest rate basis for payments shall be [•]]
11. Put/Call Options: [Investor Put]  
[Issuer Call]  
[(further particulars specified below)]
12. (i) [Date of [Board] approval for [•]  
issuance of Notes obtained:

#### **PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE**

13. **Fixed Rate Note Provisions** [Applicable/Not Applicable]  
*(If not applicable, delete the remaining sub-paragraphs of this paragraph)*
- (i) Rate[(s)] of Interest: [•] per cent. per annum [payable on each Interest Payment Date in arrear]
- (ii) Interest Payment Date(s): [•] in each year [adjusted [for payment purposes only] in accordance with [specify Business Day Convention and any applicable Business Centre(s) for the definition of "Business Day"]/not adjusted]
- (iii) Fixed Coupon Amount[(s)]: [•] per Calculation Amount
- (iv) Broken Amount(s): [[•] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [•]/Not Applicable]
- (v) Day Count Fraction: [Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/365 (Fixed) / Actual/360 / 30/360 / 30E/360 / Eurobond Basis]
- (vi) Determination Date(s): [[ ] in each year][Not Applicable]  
*(N.B. Only relevant where Day Count Fraction is Actual/Actual (ICMA). In such case, insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon.)*
14. **Floating Rate Note Provisions** [Applicable/Not Applicable]  
*(If not applicable, delete the remaining sub-paragraphs of this paragraph)*
- (i) Specified Period: [•]  
*(Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable")*

- (ii) Specified Interest Payment Dates: [[•] in each year, subject to adjustment in accordance with the Business Day Convention set out in (iv) below]
- (Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "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]
- (v) Additional Business Centre(s): [Not Applicable/[•]]
- (vi) Manner in which the Rate(s) of Interest is/are to be determined: [Screen Rate Determination/ISDA Determination]
- (vii) Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s): [Fiscal Agent/[•]]
- (viii) Screen Rate Determination:
- Reference Rate: [[•] month  
[LIBOR/EURIBOR/NIBOR/CIBOR/SOFR/SONIA/STIBOR]
  - Interest Determination Date(s): [•]  
*(In the case of SONIA: shall not be specified as less than three London Banking Days prior to the Interest Payment Date without the prior consent of the Calculation Agent)*
  - Relevant Screen Page: [•]  
*(For example, Reuters LIBOR 01/ EURIBOR 01/ CIBOR 01/ NIBOR 01/ STIBOR 01)*
  - Relevant Time: [•]  
*(For example, 11.00 a.m. London time/Brussels time)*
  - Relevant Financial Centre: [•]  
*(For example, London/Euro-zone (where Euro-zone means the region comprised of the countries whose lawful currency is the euro))*
- (ix) ISDA Determination:
- Floating Rate Option: [•]
  - Designated Maturity: [•]
  - Reset Date: [•]

- ISDA Benchmarks [Applicable/Not Applicable]  
Supplement:
- (x) Margin(s): [ +/- ][ • ] per cent. per annum
- (xi) Minimum Rate of Interest: [ • ] per cent. per annum
- (xii) Maximum Rate of Interest: [ • ] per cent. per annum
- (xiii) Day Count Fraction: [ Actual/365 / Actual/Actual (ISDA) / Actual/365 (Fixed) / Actual/360 / 30E/360 / Eurobond Basis ]
- (xiv) Observation Look-back Period: [ • ] / Not Applicable
- 15. **Zero Coupon Note Provisions** [Applicable/Not Applicable]  
*(If not applicable, delete the remaining subparagraphs of this paragraph)*
- (i) [Amortisation/Accrual] Yield: [ • ] per cent. per annum
- (ii) Reference Price: [ • ]
- (iii) Day Count Fraction: [ Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/365 (Fixed) / Actual/360 / 30/360 / 30E/360 / Eurobond Basis ]

#### PROVISIONS RELATING TO REDEMPTION

- 16. **Call Option** [Applicable/Not Applicable]  
*(If not applicable, delete the remaining subparagraphs of this paragraph)*
- (i) Optional Redemption Date(s): [ [ • ] / [Any date from and including [date] to but excluding [date]] ]
- (ii) Optional Redemption Amount(s): [ [ • ] per Calculation Amount/Make Whole Redemption Price ] [in the case of the Optional Redemption Date(s) falling [on [ • ]]/[in the period from and including [date] to but excluding [date]] ]
- (iii) Make Whole Redemption Price: [ Spens Amount/Make Whole Redemption Amount/Not Applicable ]  
*(If not applicable, delete the remaining subparagraphs of this paragraph)*
- (a) Redemption Margin: [ • ]
- (b) Reference Bond: [ • ]
- (c) Quotation Time: [ • ]
- (iv) If redeemable in part:
  - (a) Minimum Redemption Amount: [ • ] per Calculation Amount
  - (b) Maximum Redemption Amount: [ • ] per Calculation Amount

- (iv) Notice period: [•]
17. **Put Option** [Applicable/Not Applicable]
- (If not applicable, delete the remaining sub-paragraphs of this paragraph)*
- (i) Optional Redemption Date(s): [•]
- (ii) Optional Redemption Amount(s) and method, if any, of calculation of such amount(s): [•] per Calculation Amount
- (iii) Notice period: [•]
18. **Final Redemption Amount of each Note** [•] per Calculation Amount
- Calculation Agent responsible for calculating the Final Redemption Amount: [•]
19. **Early Redemption Amount** [Not Applicable/[•]]
- Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default if different from the principal amount of the Notes:

#### GENERAL PROVISIONS APPLICABLE TO THE NOTES

20. **Form of Notes:** [Bearer Notes:]
- [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes on [•] days' notice/at any time/in the limited circumstances specified in the Permanent Global Note]
- [Temporary Global Note exchangeable for Definitive Notes on [•] days' notice]
- [Permanent Global Note exchangeable for Definitive Notes on [•] days' notice/at any time/in the limited circumstances specified in the Permanent Global Note]
- (The exchange upon notice/at any time options should not be expressed to be applicable if the Specified Denomination of the Notes includes language substantially to the following effect: "€100,000 and integral multiples of €1,000 in excess thereof up to and including €199,000". Furthermore, such Specified Denomination construction is not permitted in relation to any issuance of Notes which is to be represented on issue by a Permanent Global Notes exchangeable for Definitive Notes.)*
- [Registered Notes:]
- [Global Registered Note [€ [•] nominal amount)] registered in the name of a nominee for a common depositary for Euroclear and Clearstream,

Luxembourg/a common safekeeper for Euroclear and Clearstream, Luxembourg (that is, held under the New Safekeeping Structure (NSS)).]

[Global Registered Note exchangeable for individual note Certificates on [•] days' notice/at any time/in the limited circumstances specified in the Global Registered Note]

- |     |   |   |
|-----|---|---|
| 21. | New Global Note:  | [Yes]/[No]  |
| 22. | Additional Financial Centre(s) or other special provisions relating to payment dates:                 | [Not Applicable/[•]]<br><i>(Note that this paragraph relates to the date and place of payment, and not interest period end dates, to which sub paragraphs 15(ii), 16(v) and 18(x) relate)</i> |
| 23. | Talons for future Coupons to be attached to Definitive Notes (and dates on which such Talons mature): | [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 left.] [Not Applicable]                |

### THIRD PARTY INFORMATION

[Not Applicable] / [Relevant 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.]

Signed on behalf of **TEOLLISUUDEN VOIMA OYJ**:

By: .....

Duly authorised

## PART B – OTHER INFORMATION

### 1. LISTING AND ADMISSION TO TRADING

- (i) Listing [Application has been made by the Issuer (or on its behalf) for the Notes to be listed on the Official List of the Luxembourg Stock Exchange] with effect from [•].] [Application is expected to be made by the Issuer (or on its behalf) for the Notes to be listed on the Official List of the Luxembourg Stock Exchange with effect from [•].] [Other] [Not Applicable.]
- (ii) Admission to trading [Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Luxembourg Stock Exchange] 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 regulated market of the Luxembourg Stock Exchange with effect from [•].] [Not Applicable.]
- (Where documenting a fungible issue need to indicate that original Notes are already admitted to trading.)*
- (iii) Estimate of total expenses related to admission to trading: [•]

### 2. RATINGS

[Not Applicable]/[The Notes to be issued [have been/are expected to be] rated]/[The following ratings reflect ratings assigned to Notes of this type issued under the Programme generally]:

[S&P Global Ratings Europe Limited: [•]]

[Fitch Ratings Ltd.: [•]]

### 3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE/OFFER

[So far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer. / [•]/[Not Applicable]]

### 4. *[Fixed Rate Notes only]* – YIELD

Indication of yield: [•]

### DISTRIBUTION

5. (i) If syndicated, names of Managers: [Not Applicable/give names]
- (Include names of entities agreeing to underwrite the issue on a firm commitment basis and names 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 the Managers.)*
- (ii) Stabilising Manager(s) (if any): [Not Applicable/[•]]
6. If non-syndicated, name of Dealer: [Not Applicable/[•]]

7. U.S. Selling Restrictions: [Reg. S Compliance Category 2];  
*(In the case of Bearer Notes)* - [TEFRA C/TEFRA D/ TEFRA not applicable]  
*(In the case of Registered Notes)* – [Not Applicable]
8. Relevant Benchmark[s]: [[*specify benchmark*] is provided by [*administrator legal name*]][*repeat as necessary*]. As at the date hereof, [[*administrator legal name*]][appears]/[does not appear]][*repeat as necessary*] in the register of administrators and benchmarks established and maintained by ESMA pursuant to Article 36 (*Register of administrators and benchmarks*) of the Benchmark Regulation]/[As far as the Issuer is aware, as at the date hereof, [*specify benchmark*] does not fall within the scope of the Benchmark Regulation]/[Not Applicable]
9. Prohibition of Sales to EEA Retail Investors: [Applicable/Not Applicable]
10. **OPERATIONAL INFORMATION**
- ISIN Code: [•]
- Common Code: [•]
- [FISN [[•], as updated as set out on the website of Association of National Number Agencies ("ANNA")/Not Applicable]
- [CFI Code [[•], as updated as set out on the website of Association of National Number Agencies ("ANNA")/Not Applicable]  
*(If the CFI and/or FISN is not required, requested or available, it/they should be specified as "Not Applicable")*
- Any clearing system(s) other than Euroclear Bank SA/NV and Clearstream Banking, S.A. and the relevant identification number(s): [Not Applicable/give name(s), number(s) and address(es)]/[Norwegian Central Securities Depository Verdipapirsentralen ASA, Fred Olsens gate 10152 OSLO, Norway]
- Names and addresses of additional Paying Agent(s) (if any) [Not Applicable]/[•]
- Delivery: Delivery [against/free of] payment
- Intended to be held in a manner which would allow Eurosystem eligibility: [Yes. Note that the designation "yes" simply means that the Notes are intended upon issue to be deposited with one of the ICSDs as common safekeeper [(and registered in the name of a nominee of one of the ICSDs acting as common safekeeper,][include this text for registered notes] and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend



upon the ECB being satisfied that Eurosystem eligibility criteria have been met.]

[No. Whilst the designation is specified as "no" at the date of these Final Terms, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safekeeper [(and registered in the name of a nominee of one of the ICSDs acting as common safekeeper,)] [include this text for registered notes]. Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.]]

## OVERVIEW OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

### Clearing System Accountholders

In relation to any Tranche of Notes represented by a Global Note in bearer form, references in the Terms and Conditions of the Notes to "Noteholder" are references to the bearer of the relevant Global Note which, for so long as the Global Note is held by a depositary or a common depositary, in the case of a CGN, or a common safekeeper, in the case of an NGN, for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, will be that depositary or common depositary or, as the case may be, common safekeeper (see *Terms and Conditions*).

In relation to any Tranche of Notes represented by a Global Registered Note, references in the Terms and Conditions of the Notes to "Noteholder" are references to the person in whose name such Global Registered Note is for the time being registered in the Register which in the case of any Global Registered Note which is held by or on behalf of a depositary or a common depositary or a common safekeeper for Euroclear and/or Clearstream, Luxembourg, will be that depositary or common depositary or common safekeeper or a nominee for that depositary or common depositary or common safekeeper.

Each of the persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Global Note or a Global Registered Note (each an "**Accountholder**") must look solely to Euroclear and/or Clearstream, Luxembourg and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the Issuer to the holder of such Global Note or Global Registered Note and in relation to all other rights arising under such Global Note or Global Registered Note. The extent to which, and the manner in which, Accountholders may exercise any rights arising under the Global Note or Global Registered Note will be determined by the respective rules and procedures of Euroclear and Clearstream, Luxembourg and any other relevant clearing system from time to time. For so long as the relevant Notes are represented by a Global Note or Global Registered Note, Accountholders shall have no claim directly against the Issuer in respect of payments due under the Notes and such obligations of the Issuer will be discharged by payment to the holder of such Global Note or Global Registered Note.

### Exchange of Temporary Global Notes

Whenever any interest in a Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure:

- (a) in the case of first exchange, the prompt delivery (free of charge to the bearer) of such Permanent Global Note, duly authenticated and, in the case of an NGN, effectuated, to the bearer of the Temporary Global Note; or
- (b) in the case of any subsequent exchange, an increase in the principal amount of such Permanent Global Note in accordance with its terms,

in each case in an aggregate principal amount equal to the aggregate of the principal amounts specified in the certificates issued by Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and received by the Fiscal Agent against presentation and (in the case of final exchange) surrender of the Temporary Global Note to or to the order of the Fiscal Agent within 7 days of the bearer requesting such exchange.

Whenever a Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

If:

- (a) a Permanent Global Note has not been delivered or the principal amount thereof increased by 5.00 p.m. (London time) on the seventh day after the bearer of a Temporary Global Note has requested exchange of an interest in the Temporary Global Note for an interest in a Permanent Global Note; or

- (b) Definitive Notes have not been delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer of a Temporary Global Note has requested exchange of the Temporary Global Note for Definitive Notes; or
- (c) a Temporary Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of a Temporary Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer of the Temporary Global Note in accordance with the terms of the Temporary Global Note on the due date for payment,

then the Temporary Global Note (including the obligation to deliver a Permanent Global Note or increase the principal amount thereof or deliver Definitive Notes, as the case may be) will become void at 5.00 p.m. (London time) on such seventh day (in the case of (a) above) or at 5.00 p.m. (London time) on such thirtieth day (in the case of (b) above) or at 5.00 p.m. (London time) on such due date (in the case of (c) above) and the bearer of the Temporary Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Temporary Global Note or others may have under the Deed of Covenant.) Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Temporary Global Note will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Temporary Global Note became void, they had been the holders of Definitive Notes in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system.

#### **Exchange of Permanent Global Notes**

Whenever a Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

If:

- (a) Definitive Notes have not been delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer of a Permanent Global Note has duly requested exchange of the Permanent Global Note for Definitive Notes; or
- (b) a Permanent Global Note (or any part of it) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Notes has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer of the Permanent Global Note in accordance with the terms of the Permanent Global Note on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under the Deed of Covenant). Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Permanent Global Note will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Permanent Global Note became void, they had been the holders of Definitive Notes in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system.

#### **Exchange of Global Registered Notes**

Whenever a Global Registered Note is to be exchanged for Individual Note Certificates, the Issuer shall procure that Individual Note Certificates will be issued in an aggregate principal amount equal to the principal amount of the Global Registered Note within five business days of the delivery, by or on behalf

of the holder of the Global Registered Note to the Registrar of such information as is required to complete and deliver such Individual Note Certificates (including, without limitation, the names and addresses of the persons in whose names the Individual Note Certificates are to be registered and the principal amount of each such person's holding) against the surrender of the Global Registered Note at the specified office of the Registrar. Such exchange will be effected in accordance with the provisions of the Agency Agreement and the regulations concerning the transfer and registration of Notes scheduled thereto and, in particular, shall be effected without charge to any holder, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such exchange.

If:

- (a) Individual Note Certificates have not been delivered by 5.00 p.m. (London time) on the thirtieth day after they are due to be issued and delivered in accordance with the terms of the Global Registered Note; or
- (b) any of the Notes represented by a Global Registered Note (or any part of it) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Notes has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the holder of the Global Registered Note in accordance with the terms of the Global Registered Note on the due date for payment,

then the Global Registered Note (including the obligation to deliver Individual Note Certificates) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the holder of the Global Registered Note will have no further rights thereunder (but without prejudice to the rights which the holder of the Global Registered Note or others may have under the Deed of Covenant. Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Global Registered Note will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Global Registered Note became void, they had been the holders of Individual Note Certificates in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system.

#### **Conditions applicable to Global Notes**

Each Global Note and Global Registered Note will contain provisions which modify the Terms and Conditions of the Notes as they apply to the Global Note or Global Registered Note. The following is a summary of certain of those provisions:

*Payments:* All payments in respect of the Global Note or Global Registered Note which, according to the Terms and Conditions of the Notes, require presentation and/or surrender of a Note, Note Certificate or Coupon will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Note or Global Registered Note to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the Issuer in respect of the Notes. On each occasion on which a payment of principal or interest is made in respect of the Global Note, the Issuer shall procure that in respect of a CGN the payment is noted in a schedule thereto and in respect of an NGN the payment is entered pro rata in the records of Euroclear and Clearstream, Luxembourg.

*Payment Business Day:* In the case of a Global Note, or a Global Registered Note, shall be, if the currency of payment is euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or, if the currency of payment is not euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre.

*Exercise of put option:* In order to exercise the option contained in Condition 9(e) (*Redemption at the option of Noteholders*) the bearer of the Permanent Global Note or the holder of a Global Registered Note must, within the period specified in the Conditions for the deposit of the relevant Note and put notice, give written notice of such exercise to the Fiscal Agent specifying the principal amount of Notes in respect of which such option is being exercised. Any such notice will be irrevocable and may not be withdrawn.

*Payment Record Date:* Each payment in respect of a Global Registered Note will be made to the person shown as the Holder in the Register at the close of business (in the relevant clearing system) on the Clearing System Business Day before the due date for such payment (the "**Record Date**") where "**Clearing System Business Day**" means a day on which each clearing system for which the Global Registered Note is being held is open for business.

*Partial exercise of call option:* In connection with an exercise of the option contained in Condition 9(c) (*Redemption at the option of the Issuer*) in relation to some only of the Notes, the Permanent Global Note or Global Registered Note may be redeemed in part in the principal amount specified by the Issuer in accordance with the Conditions and the Notes to be redeemed will not be selected as provided in the Conditions but in accordance with the rules and procedures of Euroclear and Clearstream, Luxembourg (to be reflected in the records of Euroclear and Clearstream, Luxembourg as either a pool factor or a reduction in principal amount, at their discretion).

*Notices:* Notwithstanding Condition 19 (*Notices*), while all the Notes are represented by a Permanent Global Note (or by a Permanent Global Note and/or a Temporary Global Note) or a Global Registered Note and the Permanent Global Note is (or the Permanent Global Note and/or the Temporary Global Note are), or the Global Registered Note is, deposited with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system or a common safekeeper, notices to Noteholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and, in any case, such notices shall be deemed to have been given to the Noteholders in accordance with Condition 19 (*Notices*) on the date of delivery to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, except that, for so long as such Notes are admitted to trading on the Luxembourg Stock Exchange and it is a requirement of applicable law or regulations, such notices shall be published in a leading newspaper having general circulation in Luxembourg (which is expected to be *Luxemburger Wort*) or published on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)).

#### **USE OF PROCEEDS**

The proceeds of the issue of the Notes will be used by the Issuer for general corporate purposes.

## DESCRIPTION OF THE ISSUER

### Introduction

The Issuer's legal and commercial name is Teollisuuden Voima Oyj ("**TVO**"). TVO was incorporated as a limited liability company under the laws of the Republic of Finland and was registered with the Finnish Trade Register on 25 April 1969 (Trade Register number 196.448 and Business Identity Code 0196656-0). In 2007, TVO was registered as a public limited liability company, with no shares listed on a stock exchange. TVO's place of registered office is Helsinki, Finland and the principal place of business is at Olkiluoto, FI 27160 Eurajoki, Finland, and the telephone number of its principal place of business is +358 2 8381 1.

TVO's principal object, as set out in its Articles of Association, is the construction and procurement of power plants and power transmission equipment as well as, generation and supply of electricity at cost price to its shareholders. The shareholders consist mainly of electric utilities or their subsidiaries. TVO's objective is to produce electricity for the shareholders safely, economically and in an environmentally friendly manner.

### The TVO Group

TVO is the ultimate parent company of the TVO group. TVO's largest shareholder is Pohjolan Voima Oyj ("**PVO**"), with a total shareholding of 58.5 per cent. Subsidiaries in the TVO group (the "**Group**") are TVO Nuclear Services Oy ("**TVONS**") and the joint venture Posiva Oy.

TVONS is a wholly owned subsidiary of TVO. It delivers to its customers expertise and services related to high level nuclear safety, cost-effective operations and nuclear waste management. TVONS provides its customers with access to the special expertise of TVO personnel and the Olkiluoto infrastructure.

Posiva Oy, which is jointly owned by TVO and Fortum Power and Heat Oy, is responsible for research of the final disposal of spent nuclear fuel and implementation of the final repository for Olkiluoto nuclear power plants (owned by TVO) and Loviisa nuclear power plants (owned by Fortum Power and Heat Oy) (see "*Nuclear Waste Management - Disposal*" below). Posiva Solutions Oy is a wholly-owned subsidiary of Posiva Oy. Posiva Solutions Oy focuses on the sales of the know-how Posiva has accumulated from its design, research and development activities in the final disposal of spent nuclear fuel, as well as on associated consulting services. Posiva Oy together with its subsidiary Posiva Solutions Oy forms the Posiva Group.

### Operating Model of TVO

TVO operates on a Mankala Principle, which is widely applied in the Finnish energy industry. The Mankala Principle is not defined in Finnish legislation or other regulation but is based on the Articles of Association of each company applying the Mankala Principle and therefore, the detailed operating model, including the provision for coverage of costs by the shareholders, may differ between companies applying the Mankala Principle. The Mankala Principle applicable to TVO is described in Article 4 of the Articles of Association of TVO. Pursuant to the Articles of Association, amending Article 4 of the Articles of Association would require unanimous shareholder approval.

Under its Articles of Association, TVO supplies electricity to its shareholders at cost, which means that it delivers the electricity it has produced to its shareholders in proportion to their shareholdings in each series of TVO shares. Each of the shareholders of each series of TVO shares is liable for its proportionate share of the variable and fixed annual costs related to the nuclear power plant unit or other units of TVO represented by such series of shares, as specified in Article 4 of the Articles of Association of TVO incorporated into this Base Prospectus by reference other than in exceptional circumstances such as those described under "*Risk Factors — Risks related to nuclear operations*" and "*Risk Factors — Financial risks*". In practice, the Company currently prepares an annual balance sheet divided into series of its shares. The balance sheet, which is presented each year to a meeting of TVO's shareholders, is prepared solely for management accounting purposes in order to allocate annual costs, incurred by TVO, to the different series of shares. As to day-to-day operations, TVO prepares, for each calendar year, a related cost budget, which consists of normal operating costs (variable and fixed), interest on TVO's entire loan portfolio (including hedging) and depreciation (based on TVO's total assets and expected lifetime of the assets) and is used as the basis for setting the amount of each shareholder's payment for electricity. Of such payments, the amount

corresponding to the depreciation of assets (net of capital expenditures), which is a non-cash item, is used to amortise TVO's entire loan portfolio.

In addition to invoicing its shareholders on a monthly basis for fixed and variable costs in accordance with its Articles of Association, TVO finances its operations, including investments, through various types of financing from third parties, including loans under the Programme, and has also received a number of equity capital injections and/or subordinated loans from its shareholders in the past. In accordance with shareholder loan commitments signed by the series B shareholders in June 2013 and in December 2017, in order for TVO to maintain a sufficient equity ratio in relation to OL3 EPR and to manage potential additional delays and costs in connection with the finalisation of the project (as anticipated at those times), as at the date of this Base Prospectus, EUR 250 million of these commitments are still undrawn. In addition, pursuant to a Facilities Agreement executed on 2 February 2016, TVO also currently maintains a revolving credit facility of EUR 1,300 million consisting of two tranches: a EUR 1,000 million five-year tranche and a EUR 300 million three-year tranche. At the date of execution of the Revolving Credit Facility, both tranches included two one-year extension options, which have since been exercised, following that the tranches will mature 2023 and 2021, respectively. In addition, in February 2019, the maturity of the EUR 300 million three-year tranche was further extended to 2022. At this time, the entire revolving credit facility remains undrawn.

TVO is a limited liability company and its shareholders have no personal liability for the indebtedness or other obligations of TVO. Pursuant to the Articles of Association, TVO has the sole right to call upon the responsibilities of the shareholders in accordance with Article 4 of the Articles of Association.

In accordance with the Articles of Association, each shareholder's share of the liability for TVO's annual costs is always limited to the amount corresponding to the proportion of its shareholding in relation to all shares belonging in the same series, and another shareholder's failure will not increase shareholder's liability based on its shareholding. The shareholders shall not be liable for costs other than costs of TVO specified in the Articles of Association, unless otherwise agreed in writing.

A prerequisite to the shareholder's right to receive electricity is, according to the Articles of Association, that it has paid its share of costs on time. If a shareholder neglects to observe its payment obligation, TVO will have the right to immediately cut off the distribution of electricity to the shareholder and to sell the shareholder's portion of electricity to a party submitting the best offer, primarily to another shareholder of TVO. To date, TVO has never experienced payment delays by its shareholders. By applying the Mankala Principle, TVO supplies electricity only to its shareholders and at cost price. Consequently, in principle the profit/loss for the financial year is usually zero or close to zero. As a result, TVO is not exposed to fluctuations in the market price for electricity. Furthermore, TVO is not subject to price regulation.

The costs of production, i.e. the price of the electricity, is charged in two or three stages: fixed costs are collected monthly in advance and variable costs are charged monthly in arrear and are determined according to the amount of electricity actually supplied. Any further operating costs incurred, if any, are funded on an annual basis. Currently, approximately 25 per cent. of any new large investments, such as the OL3 EPR construction project, come from equity capital injections or subordinated shareholder loans (hybrid equity under IFRS). A shareholder could buy less electricity than it is entitled to, however, such a shareholder would still be required to pay the fixed costs, although the variable costs related to that electricity produced would be reduced.

In April 2010, the European Commission received a complaint and a written question from two members of the European Parliament concerning the granting of alleged state aid to a significant number of electricity generators (re: CP344/2009 "Mankala" electricity supply scheme). In June 2010, the Finnish authorities provided the European Commission with their summary of the facts. The Commission requested some further clarification on the Mankala scheme from the Finnish authorities in April 2011. In August 2011, the Finnish authorities responded to this request and were of the opinion that the "Mankala" electricity supply scheme did not constitute alleged state aid under Article 107 paragraph 1 of the Treaty on the Functioning of the European Union. In November 2012, the European Commission's Directorate-General for Competition concluded the handling of the complaint submitted to the Commission without any adverse findings for TVO or other Finnish energy companies operating pursuant to the Mankala Principle.

## **Shareholders**



TVO has six shareholders, and its share capital is divided into three share series, A, B and C. The A series entitles shareholders to electricity generated by OL1 and OL2 and gas-fired plants at Olkiluoto. The B series entitles shareholders to the electricity that will be generated by OL3 EPR. The C series entitles shareholders to the electricity generated by TVO's share in the Meri-Pori coal-fired power plant. Existing shareholders have a pre-emptive right to any shares to be issued in proportion to their current shareholdings in TVO. None of the shareholders have majority rights and important decisions such as investment plans and cost budgets require a three-quarters majority vote of the Board of Directors. However, a change in the Mankala business model of TVO, would require unanimous shareholder approval. The shareholder structure has been stable since TVO's inception, with no significant shareholder changes over the last 20 years.

As of 31 May 2019, the share series were held as follows:

**TVO's Shareholders (per cent.)**

	A series	B series	C series	Total
EPV Energia Oy	6.5	6.6	0.0	6.4
Fortum Power and Heat Oy <sup>(1)</sup>	26.6	25.0	100.0	27.6
Loiste Holding Oy	0.1	0.1	0.0	0.1
Kemira Oyj	1.9	–	0.0	0.9
Oy Mankala Ab <sup>(2)</sup>	8.1	8.1	0.0	7.9
Pohjolan Voima Oyj	56.8	60.2	0.0	57.1
Total	100.0	100.0	100.0	100.0

(1) Fortum Power and Heat Oy is a subsidiary of Fortum Oyj.

(2) Oy Mankala Ab is wholly-owned by Helen Oy, the parent company of the municipal energy group of the City of Helsinki.

TVO's principal shareholder, PVO, is also itself a utilities company operating on the basis of the Mankala Principle, as are certain other shareholders of TVO and PVO. PVO's principal shareholders also include a number of publicly listed companies or their respective subsidiaries, such as Kemira Oyj; Metsäliitto Cooperative, Metsä-Fibre Oy and Metsä Board Oyj (each a member of the Metsä Group); Stora Enso Oyj; and Myllykoski Oyj, UPM Energy Oy and UPM Communication Papers Oy (each, a subsidiary of UPM-Kymmene Oyj).

**Business and Operations of TVO**

A total of 87 TWh of electricity was consumed in Finland in 2018, of which some 15 TWh (17 per cent.) was produced by TVO. In 2018, the consumption increased by 2.0 per cent compared to 2017. The share of net electricity imports was 23.0 per cent (23.9 TWh) of total consumption. The amount of nuclear power generated in 2018 was 22.0 TWh, which accounted for 25 per cent of the total electricity produced. At Olkiluoto, electricity is generated by two nuclear power plant units and TVO also has a 100-megawatt reserve gas turbine power plant built as a joint venture by Fingrid Oyj and TVO. Additionally TVO has a 45 per cent. share in electricity generated by the Meri-Pori coal-fired power plant.

**Nuclear Power**

*Olkiluoto 1 and Olkiluoto 2*

TVO currently operates two nuclear power plant units Olkiluoto 1 ("OL1") and Olkiluoto 2 ("OL2"). The rated net output of the nuclear power plant units are 890 MW for OL1 and 890 MW for OL2. In 2018, the annual output of the OL1 and OL2 nuclear power plant units combined was 13,414 GWh (14,348 GWh in 2016). The OL1 and OL2 nuclear power plant units combined produced 16 per cent. of the aggregate amount of electricity used in Finland during 2017 (as compared to 17 per cent. in 2016).

2017		2018	
Net production (GWh)	Capacity (per cent.)	Net production (GWh)	Capacity (per cent.)

Olkiluoto 1	7,158	93,1	6,755	87,8
Olkiluoto 2	6,256	81,3	7,334	94,3
Total	13,414		14,089	

OL1 and OL2 are in constant operation, aside from planned maintenance outages, for the supply of base-load electricity. In addition to regular annual outages, TVO also carries out extensive service outages approximately once every 10 years in order to implement major modifications. TVO maintains OL1 and OL2 according to best practices to ensure highest safety standards and efficient power generation until the end of the economic lifetimes of the units, which is estimated to be approximately 60 years.

The annual outages of 2019 reached completion on 11 June 2019 when the OL1 plant unit was re-connected to electricity production. This year OL1 underwent a refuelling outage while more extensive maintenance work was carried out at the OL2 unit. The total duration of the annual outages was about six weeks.

The start of the annual outage was brought forward by four days at the OL2 plant unit due to damaged fuel assemblies. The most significant activities conducted during the maintenance outage, in addition to refuelling, included for example a pressure test in the primary circuit, replacement of a heat exchanger in the reactor water purification system, and renewal of the 400 kV switchgear. The damaged fuel assemblies were removed from the reactor and replaced with new assemblies.

#### *Olkiluoto 3 EPR*

In 2005, the Finnish Government granted a construction license for OL3 EPR to be constructed at the Olkiluoto site. OL3 EPR is currently under construction by the Supplier. The companies constituting the Supplier are jointly and severally liable for the turnkey delivery of OL3 EPR, and Areva SA provided a parent company guarantee in respect of the contractual obligations of Areva NP SAS and Areva GmbH until the end of 2012.

According to the Plant Contract, the Supplier is responsible for the design, engineering, equipment procurement, equipment manufacture, construction, erection, testing, commissioning, licensing, fuel supply and remedying of defects, as well as project management and schedule of OL3 EPR on a turnkey basis. Due to the Supplier's turnkey responsibility, TVO is only responsible for a limited scope of work under the Plant Contract. The Plant Contract includes contractual protection for TVO, including a contract performance bond, a guarantee period bond and liquidated damages for delays, plant performance and plant availability. Pursuant to the terms of the GSA, in the event that the Supplier fails to complete the OL3 EPR project by 30 June 2021, TVO has a right to terminate the Plant Contract upon notice.

Areva NP, Areva GmbH, Areva group parent company Areva SA, Siemens AG and TVO signed the GSA in March 2018 concerning the completion of the OL3 EPR project and the settlement of disputes relating to the project. In addition to settling all on-going legal actions related to the OL3 EPR project (see "*Arbitration and other proceedings*" below), the GSA stipulates as follows:

- The turnkey principle of the Plant Contract and the joint and several liability of the Supplier consortium companies remain in full force.
- In order to provide and maintain adequate and competent technical and human resources for the OL3 EPR project completion, Areva will source needed additional resources from Framatome, whose majority owner is EDF.
- The GSA sets up several funding mechanisms to secure the completion of the OL3 EPR covering all guarantee periods, including a trust funded by Areva NP, Areva GmbH and Areva SA to secure the financing of the costs of completion and start-up of the OL3 EPR.
- The ICC arbitration concerning the costs and losses caused by the delay of the OL3 EPR project is settled by a total financial compensation of EUR 450 million to be paid to TVO in two installments by the Supplier consortium companies.

- The parties withdraw all on-going legal actions related to OL3 EPR, including the ICC arbitration.
- The Supplier is entitled to receive an incentive payment (the amount depends on the actual completion date of the project and, in any case, is limited to a maximum of EUR 150 million). However, as the estimated completion of the project is expected to extend beyond the end of 2019, the Supplier is not expected to be entitled to receive any incentive payment. Should the completion be delayed further beyond 2019, the Supplier shall pay penalties to TVO (the amount depends on the actual completion date of the project and, in any case, is limited to a maximum of EUR 400 million).

Based on the current OL3 EPR project schedule provided by the Supplier, capital expenditure assumptions discussed in "*Key operative and financial targets*" below and the effect of the GSA, the total investment in the OL3 EPR is estimated to be approximately EUR 5.5 billion.

In its financial statements for the three months ending 31 March 2018, TVO recorded the first payment of EUR 328 million of the settlement amount in cash and cash equivalents and it reduced the initial OL3 EPR project costs incurred by TVO. The second payment of EUR 122 million payable at the completion date or, in any event, at the latest on December 31, 2019, has been recorded in receivables and it also reduces the total project cost.

According to a stock exchange release published by TVO on 10 April 2019, the Supplier is expected to update the schedule for OL3 EPR project and deliver a new schedule to TVO by the end of June 2019. Based on the information provided by the Supplier, nuclear fuel will not be loaded to the reactor before the end of August 2019 at the earliest. Furthermore, according to a stock exchange release published by TVO on 19 June 2019, based on the information provided by the Supplier, the schedule review is expected to be completed in July 2019. After receiving the updated project schedule from the Supplier, TVO will issue a market message required by law to the Nord Pool electricity market informing the market about the scheduled regular electricity production start date.

Based on the incentive and penalty mechanism agreed in the GSA, TVO's total investment cost for the OL3 EPR unit is not expected to change due to the revised schedule.

The OL3 EPR nuclear power plant unit will comprise a European Pressurised Water Reactor which, when operational, will have an installed capacity of approximately 1,600 MW and will be more efficient than the existing nuclear power plant units at Olkiluoto as it will produce less radioactive waste per MWh of electricity produced, with the planned operating life being at least 60 years. However, no assurance can be given about the actual operating life of a nuclear power plant.

However, as the OL3 EPR project is still on-going, no assurance can be given that further delays, which could have a material adverse impact on TVO's business and financial position, will not occur prior to completion of the OL3 EPR project. For further information, see "Risk Factors – Factors that may affect TVO's ability to fulfil its obligations under the Notes issued under the Programme – Risks related to nuclear operations – Risks related to the Olkiluoto 3 EPR project – Risks related to major adverse events that could disrupt TVO's power production or otherwise have a material adverse effect on TVO's business or financial position".

Most of the construction works for the OL3 EPR unit have been completed. The installation of the electrical systems, the instrumentation and control system ("**I&C**"), and mechanical systems is still in progress. Simulator training for the operating personnel commenced in February 2017. Hot functional tests were completed in May 2018. During the hot functional tests, it was noticed that the pressurizer surge line vibrates. Vibration will be eliminated by modifying the surge line's supporting structures. Training of the workforce at the site at 31 May 2019 was about 2,000 persons. Occupational safety at the site remained at a good level.

In addition to the normal monitoring of deliveries and manufacture, several quality audits have been conducted (including by TVO and STUK) in order to inspect the activities of the Supplier and the Supplier's subcontractors. TVO continues to provide support for the Supplier to ensure the completion of the project as soon as possible, without compromising safety and quality requirements at the site.

TVO submitted its application for the operating licence for the OL3 EPR nuclear power plant unit to the MEE on 14 April 2016. On 25 February 2019, STUK gave its statement on the operating licence application of OL3 EPR plant unit. In its statement, STUK did not see any obstacles to grant the licence as applied until

the end of 2038. Following STUK's statement, the Finnish Government granted the operating licence for OL3 EPR nuclear plant unit on 7 March 2019. TVO will still need a separate permission from STUK for the loading of the nuclear fuel.

In August 2017, TVO drew a EUR 100 million shareholder loan from the existing shareholder loan commitments for the OL3 EPR project. As at 31 March 2019, the total amount of shareholder loans outstanding was EUR 679 million. In December 2017, the shareholder loan commitments were increased with an additional commitment of EUR 150 million and, following a drawdown of EUR 100 million in September 2018, the total undrawn shareholder loan commitment was EUR 250 million as at 31 March 2019.

### *Operating Licences*

An operating licence for a nuclear power plant is granted for a fixed period in accordance with section 20 of the Nuclear Energy Act. On 20 September 2018, the Finnish Government granted TVO an operating licence under section 20 of the Nuclear Energy Act for the nuclear power plant units OL1 and OL2. The licence decision also allows TVO to use the current interim storage facilities for spent nuclear fuel located at TVO's Olkiluoto site for the interim storage of nuclear waste generated in the operation of the OL1 and OL2 units until 31 December 2038. The operating licence for OL1 and OL2 units is valid until 31 December 2038. The new licence replaced TVO's previous operating licence for OL1 and OL2 units granted on 20 August 1998. Based on the licence decision, the licence is immediately enforceable regardless of appeals in accordance with section 31 of the Finnish Administrative Judicial Procedure Act (586/1996, as amended).

The licence decisions for OL1 and OL2 as well as OL3 EPR were based particularly on the statement and safety assessment of the Finnish Radiation and Nuclear Safety Authority ("STUK"). In its safety assessment, STUK concluded that the operations at OL1 and OL2 as well as OL3 EPR are safe and meet the relevant legislative requirements. Both the operating licences for OL1 and OL2 as well as OL3 EPR include licence conditions relating to the possession, production, processing and storage of nuclear material, and nuclear waste management. The licence conditions also include an obligation for TVO to carry out a periodic safety assessment of the OL1 and OL2 units as well as OL3 EPR unit by 31 December 2028. The operating licences do not cover the operation of the final disposal facilities, but they are considered separate nuclear facilities and need their own licence.

### *Fuel Procurement*

Procurement of nuclear fuel involves the following three main elements: the purchase of raw uranium, uranium enrichment services, and nuclear fuel manufacture. TVO itself is not involved in the uranium acquisition, enrichment or manufacture processes and only receives the final product which has been sufficiently enriched to be used as a fuel, but has not been enriched further. TVO maintains relationships with a number of suppliers in each field which results in reliable and cost-efficient fuel sourcing, diversified supply sources and competitive pricing. Most of the above services are being procured under long-term contracts.

### *Nuclear Waste Management - Disposal*

According to the Nuclear Energy Act, each nuclear operator is fully responsible for the costs of waste management and the final cost of decommissioning. Estimates of these future costs are assessed annually and reviewed by the MEE. TVO bears full legal and financial responsibility for the management and disposal of nuclear waste produced by the Olkiluoto nuclear power plant units.

After removal from the reactor, spent nuclear fuel is placed in pools within the reactor halls to cool for a few years. Thereafter the spent fuel is packed in a strong transfer container filled with water. This container is transported on a purpose-built vehicle to the on-site interim storage facility where the spent fuel will stay 40 years in storage pools before being transferred to the final repository. The expansion construction work of the interim storage facility to double the storage capacity which began in the summer of 2010 has now been completed.

TVO currently operates permanent final repositories for low-level and intermediate-level radioactive waste at the Olkiluoto site. Low-level waste is miscellaneous waste contaminated with radioactive material (including flame-retardant fabrics, plastics, protective clothing, tools and machine parts and pipes removed

from the power plant). Intermediate-level waste consists of the ion-exchange resins used to purify the water used in the nuclear power production processes.

In order to reduce the risk of nuclear irradiation, multi-layered containment systems and sophisticated safety protocols are used to isolate radioactive materials from the surrounding environment during the process of interim storage, packaging, transport, relocation and encasement of nuclear waste in the final disposal repositories. The operating waste is packed into steel drums. Soft low-level waste is packed into 200 litre drums, which are then compacted to about half their original size and packed into concrete boxes. Low-level scrap metal waste is cut up or crushed and packed directly into the concrete boxes. The ion-exchange resins are dried and solidified with bitumen, and then cast into 200-litre drums. These drums are also packed into concrete boxes.

The repository for low and medium level waste "VLJ repository" is on the Olkiluoto site. Packed into concrete boxes, the waste is transported by a radiation-shielded vehicle into the repository, where it is transferred to low and medium level silos excavated into the bedrock at a depth of 60 to 100 metres. There is also a separate space in the VLJ repository for storing the small quantities of radioactive waste that are generated as a result of scientific research and health care in Finland. The VLJ repository will also house irradiated equipment and construction material when the respective nuclear facilities are decommissioned. In November 2012, the government granted TVO a licence amendment for the final disposal of low and medium level nuclear waste from OL3 EPR in the VLJ repository. The expansion of the VLJ repository is estimated to take place in the 2030s, when there will be no more room left in the existing final disposal silos.

TVO and Fortum Power and Heat Oy own a company, Posiva Oy, which will dispose of high-level nuclear waste from the Olkiluoto nuclear power plants (OL1, OL2 and OL3 EPR) owned by TVO and the Loviisa nuclear power plants (Loviisa 1 and Loviisa 2) owned by Fortum Power and Heat Oy (the high-level waste will be stored for approximately 40 years in interim storage facilities on site at the respective nuclear power plants). Posiva Oy will dispose of the nuclear waste at a purpose-built nuclear waste repository. TVO's operations (OL1, OL2 and OL3 EPR) will account for approximately 74 per cent. of the waste deposited at the site, and TVO will contribute the same proportion of the costs. The spent nuclear fuel will be packed into copper/cast iron canisters and stored approximately 420 meters below ground.

Posiva Oy submitted an application to the Finnish Government regarding the construction licence for the final disposal repository for spent nuclear fuel in December 2012 (although the application has been supplemented by additional clarifications). In its statement submitted to the MEE in February 2015, STUK noted that the encapsulation plant and final disposal facility designed by Posiva Oy could safely be constructed as a repository for spent nuclear fuel. STUK's safety assessment is required for the decision on the construction licence that MEE will propose to the Finnish Government. The Finnish Government granted a construction licence for Posiva Oy's final disposal repository and encapsulation plant in November 2015. After STUK issued a decision in November 2016 confirming that Posiva was in a position to initiate the works under the construction licence, Posiva began the construction of the final disposal facility for spent nuclear fuel.

Excavation of the vehicle access tunnels leading to the final disposal facility, technical rooms and excavation of the central tunnel for the integrated systems test were completed in 2018. The full-scale in-situ system test ("FISST") commenced in the final disposal repository at the end of June 2018 and the backfilling has been completed. The aim of the FISST is to demonstrate that the safe final disposal concept can be implemented as designed by Posiva. The test will be monitored for several years.

#### *Nuclear Waste Management – Funding*

In Finland, the future costs of the final disposal of spent fuel, the management of low and intermediate-level radioactive waste and nuclear power plant decommissioning are provided for by a state established fund (the Finnish State Nuclear Waste Management Fund) (the "**Fund**") to which nuclear power plant operators make annual contributions. MEE calculates annually TVO's total liability for nuclear waste management and the contribution TVO must make to the Fund based on the actual total cost of containing the nuclear waste over time.

As at 31 March 2019, TVO's legal liability for nuclear waste management according to the Nuclear Energy Act was EUR 1,505.8 million (compared with EUR 1,481.6 million in 31 March 2018) and TVO's funding target obligation for 2019 to the Fund was EUR 1,505.8 million (compared with EUR 1,470.8 million for

2018). As at 31 March 2019, TVO's share in the Fund was EUR 1,505.8 million. The difference between TVO's legal liability calculated according to the Nuclear Energy Act and TVO's funding target obligation is covered by collateral securities. The liabilities in the consolidated financial statements show a provision related to nuclear waste management liability of EUR 956.6 million at 31 March 2019 (compared with EUR 959.7 million in 31 March 2018), calculated according to IFRS. A corresponding amount, under assets, represents TVO's share in the Fund. TVO utilises the right to borrow funds back from the Fund in accordance with the law. At 31 March 2019, the amount of the loan was EUR 591.4 million. The loan has been relented to TVO's A series shareholders.

According to the Nuclear Energy Act, TVO shall, prior to the commencement of the waste generating OL3 EPR operation, supply the Finnish State with collateral securities/funds to cover its waste management obligation in relation to the OL3 EPR. It has been estimated by TVO that at commissioning, the OL3 EPR nuclear waste management liability will be approximately EUR 400 million. Collateral securities are expected to be provided by TVO's shareholders.

Although TVO's contributions to the Fund are calculated to cover estimated future costs of the final disposal of spent fuel; the management of low and medium level radioactive waste; and plant decommissioning (and includes a safety margin in respect of such estimated future costs), the possibility exists that actual costs could exceed the provisions of the Fund. If this were to occur, TVO would be responsible for its proportion of any such excess costs.

#### *Nuclear Liability - Current and Temporary Regime*

Under the Finnish Nuclear Liability Act (Ydinvastuulaki, 484/1972) and its temporary amendment (Laki ydinvastuulain väliaikaisesta muuttamisesta, 581/2011)<sup>4</sup> (the "FNLA"), TVO has strict third-party liability in relation to nuclear accidents. According to the temporary amendment, the liability of the plant operator is unlimited for nuclear damage suffered in Finland caused by a single nuclear incident but limited to a maximum amount of 600 million Special Drawing Rights (corresponding to approximately EUR 740 million<sup>5</sup>) for nuclear damage suffered outside of Finland. TVO is obliged under statute to have private insurance to cover up to this amount. TVO maintains insurance in compliance with its statutory obligations, in addition to which TVO maintains separate insurance to cover its operations. TVO's liability is insured up to 600 million Special Drawing Rights for each nuclear incident that may occur during each insurance period. In addition, TVO maintains insurance to cover any non-nuclear damage of up to EUR 420,500 under the corresponding legislation.

#### *Nuclear Liability - New Regime*

The provisions of the FNLA are mainly based on the international Paris and Brussels conventions. The parties to those conventions agreed to modify the conventions in February 2004. In Finland, the amendment of the FNLA to incorporate such modifications to the Paris and Brussels conventions was approved by Parliament in 2005; however, this has not yet been implemented into domestic legislation in its entirety, as the revised Paris and Brussels conventions will only come into force when two thirds of the undersigned countries have ratified the amendments. In most of the countries, this procedure has not yet been completed and, therefore, it is difficult to forecast when the amendments will come into force. However, some of the approved modifications entered into force in Finland in 2012 by the temporary amendment, when the Finnish Parliament temporarily amended new provisions of the Nuclear Liability Act relating to: the plant operator's unlimited liability for nuclear damage suffered in Finland; its insurance obligation of up to 600 million Special Drawing Rights; and a new maximum limited amount of the liability of the plant operator for nuclear damage suffered outside of Finland.

The agreed modifications to the conventions will not increase the insurance obligation on TVO as it already exists under the temporary regime. Instead, the liability of the Finnish Government would increase and it would compensate for any damages exceeding EUR 700 million and up to a limit of EUR 1,200 million

<sup>4</sup> The temporary amendment to the Nuclear Liability Act entered into force on 1 January 2012 and will remain in force until the date on which the Act amending the Nuclear Liability Act (493/2005) enters into force either in its entirety or with exceptions.

<sup>5</sup> The currency value of the Special Drawing Rights is determined by summing the values in U.S. dollars, based on market exchange rates, of a basket of major currencies (the U.S. dollar, euro, Japanese yen, pound sterling and the Chinese renminbi). The Special Drawing Rights currency value is calculated daily and the valuation basket is reviewed and adjusted every five years. The exchange rate on 31 May 2019 was 1 SDR = 1.235420 euros.

(i.e. a maximum liability to the Finnish Government of EUR 500 million). Thereafter, the compensation community (composed of the countries which are party to the Paris and Brussels conventions) will be liable for further damages of up to EUR 300 million for any nuclear incident, so that the total maximum amount of compensation would be EUR 1,500 million.

Under the new regime, there will be no limit on the liability of a nuclear power operator for damage that has occurred within Finland. Therefore, TVO will be liable for the cost of any damage up to EUR 700 million (up to which amount it will be required by statute to be insured) for any damage occurring either inside or outside of Finland. For damage occurring outside of Finland, TVO's liability will be capped at this amount, however, as there is no limit on liability for damage occurring inside Finland, TVO will be liable for the cost of any such damage where the cost exceeds EUR 1,500 million (TVO will not be required by statute to be insured for such amounts).

#### *Safety and Environmental Issues*

Finland is a member of the International Atomic Energy Agency ("IAEA") and TVO is a member of the World Association of Nuclear Operators ("WANO"). Like other members of WANO, TVO submits its nuclear power plant units to periodic peer review. The last such review was conducted in May 2012 and a follow-up review was conducted in May 2014.

In 1991, the IAEA and the Nuclear Energy Agency of the OECD introduced the following seven-grade international nuclear events scale ("INES"), an internationally recognised standard used to inform the public of the safety significance of a nuclear event:

Level	Description	Criteria
0	Below scale	No safety significance.
1	Anomaly	Variation from permitted procedures.
2	Incident	Incident with potential safety consequences on site but with sufficient safety defences remaining. Insignificant release of radiation off site.
3	Serious incident	Very small release of radioactivity. Radiation exposure off site a fraction of the prescribed limits. Local protective measures unlikely. Possible acute health effects to worker.
4	Accident without significant off-site risks	Minor release of radioactivity. Radiation exposure off site of the order of prescribed limits. Local protective measures unlikely except for some food monitoring and control. Significant plant damage. Fatal exposure of a worker.
5	Accident with off-site risks	Release of radioactivity. Severe plant damage. Partial implementation of local countermeasures.
6	Serious accident	Significant release of radioactivity. Full implementation of local countermeasures.
7	Major accident	Major release of radioactivity. Acute health and long term environmental effects.

In Finland, the final classification of nuclear incidents is carried out by STUK. The INES classification of incidents at Olkiluoto this decade has been as shown in the following table. The INES 1 events have included incidents such as a reactor scram, which started from a disruption from external electrical network.

#### **Incidents at TVO as classified according to INES**

INES Classification	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 (to date)
7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1	3	–	2	5	3	2	1	1	–	1	1	–	–	1	–
0	3	4	5	5	2	–	2	4	5	2	4	2	7	9	3

TVO's radioactive emissions into the air are well within officially permitted limits. The activation and fission products discharged into seawater at Olkiluoto are substantially less than the maximum permitted values and tritium emissions are also substantially less than the officially set maximum levels.

TVO carries insurance cover of up to EUR 810 million for damage incurred as a result of sabotage or terrorist activity. As at the date of this Base Prospectus, TVO has never experienced a security incident.

TVO's operations are in accordance with TVO's environmental policy and all applicable environmental permits (see "*Regulation*" below), and environmental management system. TVO's environmental management system, which also covers the construction phase of OL3 EPR complies with the international ISO 14001:2004 standard and is EMAS registered.

TVO has covered its environmental responsibility in a separate report since 1996, and its corporate social responsibility including financial, environmental, and social responsibility, since 2001. The information describing TVO's environmental responsibility is based on reporting abiding by the EMAS Regulation (EY) No 1221/2009 as well as Commission Regulation (EU) 2017/1505. TVO's report for 2018, which provides more detailed information on the environment issues and indicators, was released in March 2019 on TVO's website ([www.tvo.fi](http://www.tvo.fi)). TVO's Responsibility Report 2018 can also be found on the above-mentioned website.

### Developments after the Fukushima Incident

In March 2011, a strong earthquake struck Japan and a tsunami which followed the earthquake, caused a severe nuclear accident at Fukushima Dai-ichi nuclear power plant, located on the eastern coast of Japan. Due to the accident in Japan, checks on safety measures were initiated in Europe.

The European Commission initiated actions to analyse the risk and safety level of all nuclear power plants within the EU. The report released in April 2012 by the European Commission stated that the safety in the nuclear power plants in European Union is at a good level. According to the report, however, national measures are needed especially for preparing for the consequences of extreme conditions. The national action plans are being drawn up and part of the measures are already under implementation. In Finland, STUK started in 2011, at the request of the MEE, an assessment on how nuclear power plants in Finland have prepared for the impact that floods and other extreme conditions may have on the functioning of the facilities. According to the final report given by STUK in 2012, the safety of Finnish nuclear power plants, including provisions for severe accidents, earthquakes and extreme weather conditions, has been improved systematically since the plants were commissioned. STUK, however, raised some new questions and suggestions for improvements. Such improvements are currently being implemented for OL1 and OL2 and include, reducing the dependence of cooling needed in emergency situations on the electrical systems. In May 2013, TVO signed an agreement for the delivery of emergency diesel generators and associated auxiliary systems that are designed to reduce such dependence. The replacement project of the emergency diesel generators is the largest individual plant modification project ever undertaken in Olkiluoto. The total investment of the replacement project is estimated to be more than EUR 100 million. The project is estimated to continue until 2023. STUK updated its original 2012 Finnish National Action Plan in



December 2014. In its report STUK addressed the measures initiated and implemented to that date on the national level and at the nuclear power plants as a result of the Fukushima Dai-ichi accident.

As a result of the European Commission's review, certain legislative amendments have been made which aim to strengthen the powers and independence of national safety authorities and introduce EU-wide safety objectives. See *"Risk Factors - Factors that may affect TVO's ability to fulfil its obligations under the Notes issued under the Programme - Risks related to nuclear operations - Regulation of nuclear power plants"*.

TVO's management is currently not aware of any deficiencies in the safety measures in the Olkiluoto nuclear power plant units. However, the operation of nuclear power plant units requires compliance with a number of regulations including, but not limited to, regulations concerning safety, technical specifications and the transport and storage of nuclear material. A failure by TVO to comply with applicable regulations or any new regulations that may be introduced could result in interruption of its operations and have a material adverse impact on its business and financial position. In addition, no assurance can be given that any new legislation would not adversely affect TVO's business and financial position due to significant new investments required, or otherwise.

### **Coal Power**

TVO has a 45 per cent. holding in the Meri-Pori coal-fired power plant operated by Fortum Power and Heat Oy (which also owns the remaining share of the power plant). TVO is entitled to a share of the plant's capacity corresponding to its holding and is responsible for providing the coal required to produce such share of the capacity. Operating the plant is the responsibility of Fortum Power and Heat Oy.

TVO's share of the amount of electricity produced at the Meri-Pori coal-fired power plant was 659.7 GWh in 2018 (compared to 130.7 GWh in 2017). In order to produce TVO's share, 242,2 thousand tonnes of coal was used in 2018 (compared to 46.7 thousand tonnes in 2017) and 524.3 thousand tonnes of carbon dioxide emissions rights were used in 2018 (compared to 120.7 thousand tonnes in 2017).

TVO buys the emission rights in the open market. In 2018, TVO acquired emission rights worth EUR 8.7 million (compared to EUR 0.7 million in 2017).

TVO and its shareholders have agreed on ownership arrangements of shares entitling to a share of Meri-Pori power plant's production capacity. TVO will relinquish its ownership in the Meri-Pori power plant in full.

According to the agreement signed in June 2018, Fortum will acquire TVO's share of the production capacity of the Meri-Pori power plant. Fortum will be entitled to use TVO's share of Meri-Pori capacity as from the beginning of 2019, and TVO will relinquish its share in Meri-Pori in full at the beginning of July 2020.

### **Gas Power**

TVO owns a 50 per cent. share of the gas turbine power unit at the Olkiluoto plant, which has an installed capacity of 100 MW. The gas unit is a reserve unit and is not currently in operation other than for the purpose of periodic testing.

### **Personnel**

As at 31 December 2018, the total number of personnel in the TVO Group was 878 (compared with 807 at the end of 2017), and the average during the year was 801 (the average in 2017 was 801).

TVO recruited 134 employees in 2018 (compared with 110 in 2017).

As the operating phase of OL3 EPR is approaching, technical services and electricity production organisations have been reinforced with several dozens of technical professionals. Considerable investments have been made by TVO in personnel training that supports the Olkiluoto integration, and the number of realised training days was considerably higher during 2018 as compared to 2017.

Collective bargaining agreements for different groups of personnel within the energy industry are in force in accordance with the so-called framework agreement of labor confederations until the beginning of 2020. All of TVO's employees are working under a collective agreement.

## **Operating Environment**

Finland, Sweden, Norway, Denmark and the Baltic States together comprise a single electricity market, with the price of electricity established by free trading on the electricity exchange, Nord Pool. Nord Pool quotes the day-ahead market price for each hour of a given day, which is calculated on the basis of purchase and sale bids. During 2018, a total of 524 TWh of power was traded, encompassing a new Nordic and Baltic day-ahead market trading record (512 TWh).

Finland has the highest per capita electricity consumption in the EU owing to its energy-intensive industries (steel, manufacturing, pulp and paper) as well as the additional energy expenditures required generally in a cold climate. Demand from industrial users of electricity contributed 47 per cent. to the total electricity consumption in 2018.

Aggregate Finnish electricity consumption was 87.0 TWh in 2018. Combined electricity and heat generation accounted for approximately 24 per cent., nuclear power for approximately 25 per cent., hydro power for approximately 15 per cent. and coal-fired and other condensation power for approximately 7 per cent. of the electricity used. Net imports of electricity accounted for 23 per cent. of electricity used. Wind power accounted for approximately 7 per cent. of electricity used.

In 2015, the European Commission initiated a consultation concerning the renewal of the nuclear power investment notification procedure, which is based on Articles 41-44 of the Euratom agreement. According to the European Commission, the present procedures are scattered and unclear from the perspective of the notifying party. However, as of the date of this Base Prospectus, the Commission has not presented any changes to the procedure.

To deliver on EU's Paris Agreement commitments and to take a step towards the creation of EU's Energy Union, the European Commission published a set of legislative measures on energy, the so-called "Clean Energy for all Europeans" package in 2016. It was finalised in December 2018 and is currently being implemented in the EU Member States. The package includes eight legislative proposals, including revised Energy Efficiency and Renewable Energy Directives and new rules for EU's electricity markets.

The European Commission published a strategic long-term vision for a climate-neutral economy by 2050 in November 2018. The European Commission recognises that nuclear energy will form a backbone of EU's future electricity system, together with renewable energy sources. The 2050 strategy will be the main driver of EU's future energy policy. There is an endeavor to agree on the strategy and 2050 target by the end of 2019 under Finland's EU Council Presidency.

In May 2018, the European Commission proposed a legislative package to facilitate sustainable investment. From nuclear industry's perspective, one important proposal is the creation of the European classification system taxonomy on what can be considered an environmentally sustainable economic activity. The European Parliament voted on its own report in March 2019. Instead of endorsing the European Commission's technology-neutral approach, the European Parliament proposes that only renewables-based technologies could be eligible for sustainable finance. The Council has not yet adopted its position, and the trilogue negotiations will begin in Autumn 2019 under Finland's EU Council Presidency.

In December 2018, eight parties in the Finnish Parliament decided on common climate policy goals. The parties called for climate policies of the European Union and Finland to be renewed so that Finland and EU can do their part to limit the global mean temperature increase to 1.5 degrees celsius. The EU's long-term climate measures must be developed so that the EU can achieve carbon neutrality before 2050. According to the parties, achieving carbon neutrality in the EU by 2050 requires tightening of the emission reduction obligations of 2030 to at least 55 per cent. of the 1990 level.

## **Regulatory Environment**

The use of nuclear energy is subject to licensing. Applications are made to the Finnish Government for decisions in-principle, construction licences and operating licences. STUK is responsible for monitoring the safe use of nuclear energy and it is also responsible for monitoring safety and emergency arrangements and nuclear material in Finland. TVO's environmental system complies with the international ISO 14001:2004 standard. TVO has the licences relevant to its business, such as but not limited to operating licences for OL1 and OL2 as well as operating licence and construction licence for OL3 EPR as well as the

necessary environmental and water permits. There is no reason to believe that any of these licences will be revoked.

A fundamental principle behind the Finnish legislation on nuclear energy is that its use must be for the overall good of the society as a whole. The main rules on the use of nuclear energy, monitoring of that use and nuclear safety, are contained in the Nuclear Energy Act and the Nuclear Energy Decree 161/1988, as well as lower level statutes and regulations enacted pursuant to them, such as the general safety regulations issued by STUK. The general safety regulations relating to the use of nuclear energy issued by STUK entered into force on 1 January 2016. The general safety regulations of STUK include Regulation on the Safety of a Nuclear Power Plant (*Säteilyturvakeskuksen määräys ydinvoimalaitoksen turvallisuudesta*, STUK Y/1/2016), Regulation on the Emergency Arrangements of a Nuclear Power Plant (*Säteilyturvakeskuksen määräys ydinvoimalaitoksen valmiusjärjestelyistä*, STUK Y/2/2016), Regulation on the Security in the Use of Nuclear Energy (*Säteilyturvakeskuksen määräys ydinenergian käytön turvajärjestelyistä*, STUK Y/3/2016), Regulation on the Safety of Disposal of Nuclear Waste (*Säteilyturvakeskuksen määräys ydinjätteiden loppusijoituksen turvallisuudesta*, STUK Y/4/2016) and Regulation on the Safety of Mining and Milling Operations Aimed at Producing Uranium or Thorium (*Säteilyturvakeskuksen määräys uraanin tai toriumin tuottamiseksi harjoitettavan kaivostoiminnan ja malminrikastustoiminnan turvallisuudesta*, STUK Y/5/2016). In addition, the Finnish Nuclear Liability Act (484/1972) and its temporary amendment (581/2011)<sup>6</sup> regulate the liability of an operator in charge of a nuclear plant in the event of a nuclear accident. No such changes in the regulatory framework are foreseeable that would significantly affect the operation of TVO.

On 15 December 2018, amendments to the Nuclear Energy Act relating to radiation safety entered into force. The new provisions include an obligation for a licence holder to establish dose constraints for the employees at a nuclear power plant and provide the respective information to STUK, an exemption from administrative supervision for nuclear waste (other than nuclear fuel) if its radioactivity is below set threshold values and a prohibition on diluting nuclear waste for the purposes of avoiding the statutory obligations.

On 1 January 2018, a legislative amendment to the Nuclear Energy Act entered into force introducing, among others, a new requirement for a license for the decommissioning of nuclear facilities that is granted by the Finnish Government. The new legislation also transposed the amended nuclear safety directive 2009/71/Euratom into national law. Licensee's responsibility to ensure the compliance of products and services produced by suppliers and subcontractors that are significant from the viewpoint of nuclear safety of the facility was also included in the regulations. It is considered that the new legislation would not significantly affect the operation of TVO.

The previous amendments to the Nuclear Energy Act came into force on 16 May 2017 in respect of the handling of license applications in relation to nuclear installations. The amendments came into force due to the entry into force of the new Act on Environmental Impact Assessment Procedure (*Laki ympäristövaikutusten arviointimenettelystä*, 5252/2017), implementing the Directive 2014/52/EU. It is considered that the legislation will not significantly affect the operation of TVO. The changes in the Nuclear Energy Act that took effect on 1 January 2016 increased the nuclear safety research fee collected from the operators of nuclear facilities and waste management fee collected from those liable for waste management with different fee levels for fixed periods of 2016–2020 and 2021–2025. For TVO this means an increase in fees by an additional EUR 4 million per year during the period of 2016–2020.

Additional regulations pertaining to the exploitation of nuclear energy are set out in the Finnish Radiation Act (*Säteilylaki*, 859/2018) which entered into force on 15 December 2018 as well as lower level statutes enacted pursuant to the Radiation Act. The new Radiation Act, among others, transposed the European Union Directive 2013/59/EURATOM of the European Council of 5 December 2013 into national law in Finland.

TVO maintains insurance for nuclear liability in accordance with requirements of Finnish laws and regulations that are based on the international conventions on nuclear liability to which Finland is a party.

As a result of the European Commission's review of safety measures in the nuclear industry, certain legislative amendments have been made which aim to strengthen the powers and independence of national

<sup>6</sup> The temporary amendment to the Nuclear Liability Act entered into force on 1 January 2012 and it shall remain in force until the date on which the Act amending the Nuclear Liability Act (493/2005) enters into force either in its entirety or with exceptions.

safety authorities and introduce EU-wide safety objectives. See *"Risk Factors – Factors that may affect TVO's ability to fulfil its obligations under the Notes issued under the Programme – Risks related to nuclear operations – Regulation of nuclear power plants"*. Changes to the European legislative landscape have precipitated changes at a domestic level.

STUK has issued regulatory guides on nuclear safety ("**YVL Guides**") that came into force at 2013, and which are subject to on-going evaluation and revisions. The YVL Guides are applied as they stand to all new nuclear power plant units. The implementation of the YVL Guides and their revisions to existing nuclear power plant units, such as OL1 and OL2, and to nuclear power plant units under construction, such as OL3 EPR, is subject to a separate STUK decision.

In December 2013, the Finnish Parliament approved a tax related to carbon dioxide-free nuclear, hydro and wind power generation. The power plant tax was estimated to have the effect of approximately EUR 6 million on TVO's annual costs. The Finnish Government withdrew the introduction of the new power plant tax in June 2014. The final decision on repealing the tax was made in Parliament in October 2014.

#### *Key Operative and Financial Targets*

In connection with its strategic planning, TVO has defined the following long-term operative and financial targets.

TVO's annual net electricity production levels at the OL1 and OL2 nuclear power plant units combined have varied between 13,385 GWh and 14,740 GWh during the period from 2013 to 2017 (total annual production capacity factors being between 87.2 per cent. and 96.0 per cent.). Based on historical levels of production, TVO's long-term target is to produce annually approximately 14,000 GWh to 14,700 GWh of electricity at the OL1 and OL2 units combined (with intended production capacity factor between 90 and 95 per cent.). Once OL3 EPR nuclear power plant unit starts regular power production, TVO's aggregate annual production amount is expected to increase by an estimated 12,000 GWh to 13,000 GWh in the long-term.

Annual investments during the period from 2014 to 2018 for OL1/OL2 units combined have varied between EUR 41 million and EUR 73 million. TVO's long-term target is to maintain an annual OL1/OL2 combined investment level of approximately EUR 50 million.

As of 31 March 2019, capitalized investment related to the OL3 EPR unit was approximately EUR 4.8 billion and the remaining OL3 EPR project milestone payments totalled approximately EUR 400 million. In addition to the milestone payments, annual investments during the period from 2014 to 2018 for the OL3 EPR project have varied between EUR 108 million - EUR 298 million. This rate of annual investment is expected to remain at approximately the same level during the remaining lifetime of the OL3 EPR project, which is equivalent to around EUR 300 million between 31 March 2019 and the current OL3 EPR projected completion date, as detailed in the schedule provided by the Supplier and agreed in the GSA.

Based on the current OL3 EPR project schedule provided by the Supplier, capital expenditure assumptions discussed above and the effect of the GSA, the total investment in the OL3 EPR is estimated to be approximately EUR 5.5 billion.

OL3 EPR's annual investment level during its first five years of operation is expected to be less than EUR 50 million.

As of 31 March 2019, TVO had senior debt amounting to approximately EUR 4.1 billion, (excluding loan from the State Nuclear Waste Management Fund), cash and cash equivalents approximately EUR 108 million, and the average interest rate on TVO's debt was 1.73 per cent. Based on the above investment level estimates, senior debt at or about when OL3 EPR is expected to start its commercial operation is estimated to be less than EUR 5.0 billion (excluding loan from the State Nuclear Waste Management Fund).

Based on the above production targets and the current operating and capital cost expectations, TVO's average long-term production cost target for OL1, OL2 and OL3 EPR combined is expected to be approximately 30€/MWh.

This section includes forward-looking statements. Please see "Important Notices-Forward-looking statements" for more information.

## Governance of TVO

### General

Under its Articles of Association, TVO delivers electricity to its shareholders at cost (the "**Mankala Principle**"), which means delivering the electricity produced or procured to its shareholders in proportion to their shareholdings in each series of shares. Each of the shareholders of each series bears their share of the variable and fixed annual costs as specified in the Articles of Association. The shareholders have concluded a mutual shareholders' agreement, which contains more detailed regulations on corporate governance.

TVO observes on a voluntary basis the Corporate Governance Code for listed companies, issued by the Finnish Securities Market Association in 2015, where applicable<sup>7</sup>. However, TVO is not obliged to observe the Corporate Governance Code nor, therefore, the Comply or Explain principle. According to the Securities Markets Act (*Arvopaperimarkkinalaki*, 746/2012), the issuer of a security subject to public trading must provide a corporate governance statement in its annual report or separately. TVO publishes a separate Responsibility report on its website ([www.tvo.fi](http://www.tvo.fi)), which is updated on a yearly basis.

### Shareholders' Meeting

The Shareholders' Meeting is the highest decision-making body in TVO. It decides on matters falling within its sphere of competence under the Finnish Companies Act (*Osakeyhtiölaki*, 624/2006) and Articles of Association such as adoption of the financial statements, the use of the profit shown on the adopted balance sheet and discharging the Board of Directors and the President and CEO from liability. Pursuant to the Articles of Association, the Shareholders' Meeting also elects the Members of the Board, elects the Auditors and decides on the remuneration of the Members of the Board.

The Annual General Meeting is held at the latest in May each year. The shareholders are invited to the Annual General Meeting no earlier than four weeks and no later than ten days before the meeting.

The Annual General Meeting is attended by the President and CEO, the Chairman of the Board of Directors, a sufficient number of members of the Board and the Auditor. As a rule, anyone running for membership of the Board of Directors for the first time is required to attend the Shareholders' Meeting deciding on their election, unless their presence is prevented by a substantial reason.

In 2019, TVO's Annual General Meeting was held on 27 March 2019.

### Board of Directors

Under the Articles of Association, TVO's Board of Directors consists of a minimum of seven and a maximum of ten members (each, a "**Director**"). The term of office of a Board member starts at the termination of the Shareholders' Meeting at which the election takes place and ends at the close of the Shareholders' Meeting at which the new election takes place. According to TVO's Articles of Association, a shareholder who owns at least 20 per cent. and a maximum of 50 per cent. of TVO's shares has the right to appoint three members to the Board of Directors. The Board of Directors elects a Chairman and a Deputy Chairman from among its members. The Board convenes when summoned by the Chairman or, where the Chairman is prevented from so doing, by the Deputy Chairman. More than a half of the members of the Board present at a meeting constitute a quorum.

The Board of Directors promotes the interest of the Issuer and all its shareholders. The members of the Board do not represent those parties who proposed them as members or any other parties.

The Board of Director's responsibilities and authority cover all matters related to TVO's administration that, according to legislation or the Articles of Association, are not handled by the Shareholders' Meeting. TVO's Corporate Governance Statement 2018 gives more detailed information on the Board of Director's responsibilities.

---

<sup>7</sup> The Corporate Governance Code has been prepared in accordance with the so-called 'Comply or Explain' principle, which means that a company must comply with all recommendations of the code unless it accounts for a deviation from an individual recommendation and provides an explanation for it. A listed company may depart from an individual recommendation, if it accounts for such a departure and provides an explanation for it. The Code is available at [www.cgfinland.fi](http://www.cgfinland.fi).

### *Board of Directors in 2019*

The annual general meeting of TVO for 2019 took place in March following which the Board of Directors of TVO were:

<b>Name</b>	<b>Position</b>	<b>Born</b>	<b>Qualifications</b>	<b>Other positions held</b>
Ilkka Tykkyläinen	Chairman	1966	M.Sc. (Eng.), M.Sc. (Econ.)	President & CEO, Pohjolan Voima Oyj
Tiina Tuomela	Deputy Chairman	1966	M.Sc. (Eng.), MBA	Executive Vice President, Generation, Fortum Corporation
Esa Kaikkonen	Member	1969	LL.M	CEO, Metsä Tissue
Markus Mannström	Member	1963	M.Sc. (Paper Tech..)	Executive Vice President, Division Biomaterials, Stora Enso Oyj
Markus Rauramo	Member	1968	M.Sc. (Econ. and Pol. Hist.)	Chief Financial Officer, Fortum Corporation
Tapio Korpeinen	Member	1963	M.Sc. (Eng.), MBA	CFO, UPM-Kymmene Corporation, Executive Vice President, UPM Energy
Pekka Manninen	Member	1954	M.Sc. (Eng.)	CEO, Helen Oy
Risto Andsten	Member	1961	M.Sc. (Eng.)	Vice President, Fortum Power and Heat
Anders Renvall	Member	1973	M.Sc. (Eng.)	Managing Director, Kymppivoima
Rami Vuola	Member	1968	M.Sc. (Eng.)	President & CEO, EPV Energia Oy

### **Board Committees**

To ensure that the issues within the responsibility of the Board of Directors are handled as efficiently as possible, TVO has set up an Audit and Finance Committee, an OL3 Committee, a Nuclear Safety Committee and a Nomination and Remuneration Committee, each assisting and reporting to the Board of Directors and consisting of at least three members of the Board. The Board of Directors chooses the members of the committees from among its members, appoints their chairman and approves each Committee's charter.

In addition to the duties laid down in their respective charter, each committee deals also with other matters, which are related to their respective fields and passed on to them by the Board of Directors, committee members, the President and CEO or other management.

The members of the Board Committees in 2019 are:

*Audit and Finance Committee*

Markus Rauramo	Chairman
Esa Kaikkonen	Member
Rami Vuola	Member

*OL3 Committee*

Tapio Korpeinen	Chairman
Markus Mannström	Member
Pekka Manninen	Member
Tiina Tuomela	Member
Ilkka Tykkyläinen	Member

*Nuclear Safety Committee*

Markus Mannström	Chairman
Anders Renvall	Member
Risto Andsten	Member

*Nomination and Remuneration Committee*

Ilkka Tykkyläinen	Chairman
Tapio Korpeinen	Member
Tiina Tuomela	Member

**Steering Groups Assisting the Management**

The Board of Directors may set up steering groups to assist the management and to handle, without any authority or liability under Finnish company law, special issues related to their fields. Such committees or steering groups will consist of members and experts appointed by the Board of Directors.

The Board of Directors will also lay down regulations for the steering groups assisting the management.

**President and CEO**

The President and CEO deals with TVO's day-to-day management in accordance with the Finnish Companies Act and the instructions and orders issued by the Board of Directors, ensures that TVO's accounting practices comply with the law and that the financial administration and management are reliably organised. The President and CEO gives the Board and its members all the information necessary for the Board to perform its duties.

The President and CEO is Jarmo Tanhua (born 1965) and acts as the Chairman of the Board of Directors of Posiva Oy.

The President and CEO does not own any shares in TVO.

**Management Group**

The Management Group assists the President and CEO in the management of TVO's operations. The minutes of its meetings form the President and CEO's list of decisions. The members of the Management

Group, excluding the personnel representatives, report to the President and CEO, and are appointed by the Board of Directors.

The Management Group consists of:

Jarmo Tanhua	President and CEO, Chairman
Mikko Kosonen	Senior Vice President, Safety
Marjo Mustonen	Senior Vice President, Electricity Production
Jouni Silvennoinen	Senior Vice President, OL3 EPR Project
Anja Ussa	Senior Vice President, Finance, IT, Business Development and Support Services
Lauri Piekari	Senior Vice President, Treasury
Sami Jakonen	Senior Vice President, Engineering and Expert Services
Pekka Frantti	Senior Vice President, OL3 Commercial Completion
Jaana Isotalo	Senior Vice President, HR, Training, Communications and Development of Work Community Culture
Ulla Moisio	Senior Vice President, Legal Affairs
Tapio Nieminen	Personnel representative, Quality Manager
Matti Tamminen	Personnel representative (First deputy), Craftsman
Jarmo Jokiranta	Personnel representative (Second deputy), Maintenance Technician

In addition, the President of Posiva Oy (Janne Mokka) participates in the work of Management Group.

For specific issues, the President and CEO can, if necessary, invite other persons to attend meetings of the Management Group.

The Management Group deals with matters related to the Senior Vice Presidents' areas of responsibility to a necessary extent to ensure fluent communication between the President and CEO and the Senior Vice Presidents, and between the Senior Vice Presidents themselves. The Management Group also deals with essential matters related to the Company's operations and requiring a decision of the President and CEO. These include matters related to the members' areas of responsibility, matters submitted by the personnel representatives, strategy and action plans as well as operating guidelines and annual outages.

The business address of the persons mentioned above is Olkiluoto, FI-27160 Eurajoki, Finland. To the best of TVO's knowledge, there are no conflicts of interest between any of the President and CEO's, members of the Board Committees', Directors' or the Management Group's duties to TVO and their private interests or duties.

#### **Auditor**

In accordance with its Articles of Association, TVO has one auditor, which has to be an audit firm certified by the Finnish Central Chamber of Commerce. An auditor's term of office expires at the end of the Annual General Meeting following their election.

In accordance with the Auditing Act the auditor is responsible for auditing TVO's annual consolidated financial statements. The auditor for the parent company must also audit the parent company standalone financial statements. The auditor's report on the audit of the consolidated financial statements is given to the Annual General Meeting.



The 2019 Annual General Meeting elected PricewaterhouseCoopers Oy (Authorised Public Accountants) as the company auditor of TVO. Jouko Malinen (Authorised Public Accountant) acts as TVO's principal auditor from PricewaterhouseCoopers Oy.

### **Remuneration**

The Nomination and Remuneration Committee under the Board of Directors approves TVO's commitment and remuneration systems. The management of TVO receives performance related bonuses if cost, output and safety targets are met. All permanent and long-term temporary employees are included in the employee bonus system. Some of the personnel have deposited their bonuses in the Teollisuuden Voima Personnel Fund.

### **Insider Register**

As a bond issuer, and in accordance with the Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation), TVO maintains project specific insider registers on persons who work for the company on the basis of an employment contract or other contract and who, either regularly or irregularly, receive insider information directly or indirectly related to TVO.

### **Disclosure Policy for Investors**

TVO has adopted a disclosure policy for investors. TVO has a duty to disclose information on a regular and continuous basis. The objective of the disclosure policy is to ensure the provision, without undue delay, of correct and relevant information to investors and other market participants regarding TVO's operations, operating environment, strategy, goals and financial situation.

Stock exchange releases issued by TVO are approved by the President and CEO, the Chairman of the Board or an executive authorised by them.

### **Internal Control and Risk Management**

The Board of Directors and the management are responsible for organising the internal control of TVO and for ensuring that it is adequate. The purpose of internal control is to ensure that TVO's operations are carried out on an efficient and cost-effective basis, that the information supplied is reliable and that all relevant regulations and operating principles are followed. Company documents, including the Articles of Association, shareholders' agreement, operating agreement, corporate governance principles, organization manual, TVO's activity based management system, management code for the Olkiluoto NPP as well as adopted policies and TVO's Code of Conduct provide a basis for TVO's corporate governance and internal control.

The goal of internal control is to ensure with adequate certainty that:

1. TVO's operations are effective and in line with its strategy
2. TVO's goals and objectives are achieved
3. TVO's financial and operational control and reporting are reliable and correct
4. TVO's operations are in accordance with the legislation.

TVO's internal control consists of:

- Financial control and management reporting
- Risk management
- Internal Audit
- Auditing of the activity based management system

The correctness and efficiency of internal control is ultimately overseen by the Audit and Finance Committee both through the monitoring of routine tasks and through discrete assessments such as internal audits of quality issues, environmental issues and occupational safety.

TVO's Code of Conduct, approved by the Board of Directors, is based on TVO's values and is aligned with TVO's principles of responsible business.

#### *Financial Control and Reporting*

In order for internal control to work properly, the accounting and other systems in place must be reliable. Operative and financial reporting supported by IT systems enables efficient management and control of TVO's business operations. Open communication enables the efficiency of internal control.

The aim of TVO's strategic planning is to ensure that TVO's operations support implementation of TVO's vision, strategy and long-term planning and goals, and that the budgeting is consistent with the strategic plans.

The status of the annual goals is monitored through monthly reporting to the management.

Reliable financial reporting must be based on appropriate control of financial administration and accounting processes. Supervision of the financial reporting process is within the responsibility of the Audit and Finance Committee. TVO's Finance function is in charge of the financial planning and reporting processes of the Group. The main processes of financial reporting have been described and their control activities defined, however, development of the processes and control activities is a continuous activity.

In the TVO Group's consolidated financial statements the International Financial Reporting Standards (IFRS) are followed, whilst in the parent company's separate financial statements the Finnish Accounting Standards (FAS) are followed. The Group has adopted IFRS 16 Leases -standard on 1 January 2019. Because of the adoption, recognition of the right-of-use assets EUR 762 thousand has been made to property, plant and equipment and recognition of lease liability EUR 762 thousand has been made to non-current liabilities and current liabilities. The expected impact on the profit/loss for the financial year 2019 is EUR -486 thousand. The comparative financial information for the year 2018 has not been restated. The purpose of the parent company's internal accounting is to produce financial information for the shareholders by share series. The accounting system by share series is based on FAS, and the related accounting principles have been approved by the Board of Directors. TVO's Financial Policy is approved by the Board of Directors.

#### *Internal Auditing*

TVO's Internal Audit function assesses the efficiency and expediency of policies and procedures in use and reviews the functioning of the internal control. Internal Auditing also tries to promote the progress of TVO's corporate governance and risk management in different functions of TVO. The principles guiding TVO's internal auditing are set out in internal guidelines. The Internal Auditing reports to the Audit and Finance Committee and supports the management in the development of good corporate governance, risk management and internal control systems as well as of their efficiency and adequacy.

Annual internal audits are based on audit plans approved by the Audit and Finance Committee. The annual internal audit plan content is coordinated with the audits conducted by the auditor and the internal audits of the Quality and Environment function. A summary of the internal audit is regularly reviewed by the Audit and Finance Committee and reported annually to the Board of Directors.

Internal auditing presents the President and CEO a report on each audit immediately after they have been conducted. An annual summary lists the targets, dates and contents of the audits, any observations made and irregularities detected, and suggestions for further measures.

The observations and irregularities are reported to the Management Group, who then decides on the monitoring of the irregularities and appoint a responsible person to deal with each observation or irregularity. The Management Group is responsible for making sure that the required corrective measures are made.

### *Risk Management*

Risk management at TVO is based on the principle of comprehensive risk management and forms an important part of TVO's supervision and management system. The purpose of risk management is to support the achievement of goals, to prevent risks from materialising, and to reduce the probability of risks and their possible effects. Risk management is supervised by the Board of Directors, which endorses the principles on which it is based.

Risk management is the responsibility of TVO's Management Group, under which there is a risk management group that controls the coordination. The risk management group maintains and develops the risk management system, undertakes company risk surveys as often and as thoroughly as necessary, analyses risks, and monitors the necessary contingency measures, ensuring that their scope is adequate.

Each organisation unit is responsible for the practical implementation of risk management. Corporate security, risk management guidelines, reports and insurance are dealt with centrally.

At TVO, risk management is part of activity based management system that is in accordance with TVO's safety culture and a part of the daily operation. Threats to operations, different risk factors and procedures for preventing, managing and reducing risks, are constantly monitored. In risk identification processes the likelihood of various threats is assessed and separate contingency plans are drawn up for them on a case-by-case basis.

At TVO, strategic risks are classified as follows: power plants, safety and environment; new capacity; personnel and skills; cost-efficiency; nuclear waste management and the confidence of stakeholders. Risk assessments for annual targets are based on the targets of the organisational units for the following year.

TVO reduces risks connected with safety and production by keeping the nuclear power plant units in good condition. The high-quality planning and implementation of annual outages is particularly important. TVO has also taken out nuclear and other property damage insurance policies to cover risks to property. Statutory liability insurance is valid for cases involving nuclear liability. Fuel for TVO's electricity production, uranium and coal is bought on the global market. Risks connected with the supply of nuclear fuel have been reduced by making purchases from a number of suppliers and by concluding long-term contracts.

At OL3 EPR, risk management during the commissioning stage is primarily a question of overseeing the work of the plant contractor according to the terms of the turnkey contract. Property damage risks and possible delays caused by them are covered by insurance.

TVO's financing and financial risk management is dealt with centrally by the treasury and risk management department in accordance with the financing and risk management policies adopted by the Board of Directors. The financing risks of TVO's business include liquidity, market and credit risks. By diversifying the sources of finance, and with long-term credit commitments and liquid funds, financing risks are reduced. The financial position has been strengthened by issuing long term private placements and bonds. TVO has reduced market risks by making use of interest rate and currency derivatives. According to TVO's financing policy the loans denominated in foreign currencies will be hedged to EUR until the maturity date by using derivatives.

Identification of risks related to the financial reporting process is part of the risk management process. Certain control activities and control points have been defined for these risks.

Descriptions of the reporting process and the risk assessments attached to these descriptions are analysed every year.

### *Auditing of the Activity Based Management System*

Internal audits consist of assessments of compliance with operating instructions with regard to records, measures and the continuity and efficiency of operations.

Any irregularities detected during internal audits are reported and dealt with individually through the Kelpo application and together twice a year at management reviews.

### *Control Activities*

Internal audits are carried out in accordance with a plan approved by the Board of Directors. The management ensures that the observations made and any irregularities detected by Internal Auditing are noted and remedied, where necessary. Instructions on financial reporting have been laid down in TVO's Administration Manual and Accounting Manual and provide the basis for financial reporting within the TVO Group. TVO's finance function is responsible for the accuracy and consistency of external and internal financial reporting and for compliance with the series of shares accounting principles as approved by the Board of Directors. SVP, Finance is responsible for developing the reporting process, maintaining related instructions and determining the control activities and measures related to financial reporting processes. Each control measure has a responsible person in charge of monthly, quarterly and annual reporting. Control measures include reconciliations, analytical review and approval procedures which are used to ensure the accuracy of financial reporting.

The annual financial statements are audited by the Auditor.

The accuracy and efficiency of internal control are assessed by the Audit and Finance Committee under the Board or Directors.

### **Recent Developments**

In February 2016, TVO signed a new syndicated revolving credit facility of EUR 1.3 billion. The facility consists of two tranches: EUR 1,000 million 5-year tranche and EUR 300 million 3-year tranche. At execution of the Revolving Credit Facility, both tranches included two one-year extension options, which have since been exercised, following that the tranches will mature 2023 and 2021, respectively. In addition, in February 2019, the maturity of the EUR 300 million three-year tranche was further extended to 2022.

### **Arbitration and Other Proceedings**

Due to the delays in the construction of the OL3 EPR project, TVO was party to arbitration proceedings under the ICC with respect to costs and losses incurred in relation thereto. The Supplier had submitted claims to the ICC for an aggregate amount of approximately EUR 3.59 billion, which included a total amount of approximately EUR 1.58 billion in penalty interest (calculated up to 30 June 2017) and payments allegedly delayed by TVO under the Plant Contract, as well as approximately EUR 132 million of alleged loss of profit. TVO's estimated quantum of costs and losses in respect of the period ending in late 2018 (which was the Supplier's earlier estimate for the start of regular electricity production at OL3 EPR), which it had counter-claimed from the Supplier, was approximately EUR 2.6 billion, including TVO's actual claim and an estimate of certain costs and interest.

In 2016 and 2017, the ICC tribunal made three final and binding partial awards on the initial key issue areas in the arbitration. The partial awards resolved the great majority of the facts and matters covered in these proceedings in favour of TVO, and rejected the great majority of the Supplier's contentions in this regard. The partial awards do not take a position on the claimed monetary amounts.

In March 2018, Areva NP, Areva GmbH, Areva group parent company Areva SA, Siemens AG and TVO agreed finally and irrevocably to settle the claims pending or reserved in the arbitration and any other existing disputes among TVO and the Supplier in relation to the OL3 EPR project, whether or not raised in the arbitration, known and unknown claims between TVO and the Supplier arising out of or relating to events and circumstances regarding the OL3 EPR Project occurred prior to the signing date of the GSA, regardless of when the impact of such events and circumstances occurs, whether or not raised in the arbitration. In addition to settling all on-going legal actions related to the OL3 EPR project, the GSA is aimed at securing the provision of adequate and competent technical and human resources as well as funds for completion and start-up of the OL3 EPR until the end of the applicable guarantee periods. For more details on the GSA, see "*Olkiluoto 3 EPR*" above.

The arbitration settlement does not release the Supplier from any liability with regard to quality, performance and defects of the OL3 EPR, whether in design, configuration management, workmanship or any other cause whatsoever and regardless of when the event or circumstance giving rise to this liability occurs, or settle any future entitlement of the Supplier to unpaid portions of the contractual price, or settle any claims arising out of or relating to events and circumstances after the signing date of the GSA.

In accordance with the terms of the GSA, TVO also withdrew its appeals with the General Court of the European Union against the European Commission's decisions in January 2017 and in January 2018 related to the contemplated State Aid connected with the plan to restructure Areva's business. The restructuring plan involved a transfer of the operations of Areva NP, excluding the OL3 EPR project and resources necessary for its completion, to New NP which was sold to a consortium led by EDF. In July 2017, Areva and EDF confirmed the signature of binding agreements with Mitsubishi Heavy Industries and Assystem for the acquisition of an equity interest in New NP. Agreements pertaining to the OL3 EPR project and the resources necessary for its completion, as well certain agreements pertaining to components that are forged at the Creusot plant, remained within Areva NP. The transaction was completed on 31 December 2017, and thereafter the shares of New NP were sold respectively to EDF (75.5 per cent), Mitsubishi Heavy Industries (19.5 percent) and Assystem (5 percent). New NP was renamed Framatome as of January 2018.

See also "*Olkiluoto 3 EPR*" above and "*Risk Factors-Risks related to the Olkiluoto 3 EPR project*".

## TAXATION

*The following is a general description of certain tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in Finland or elsewhere. Prospective purchasers of Notes should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of Notes and receiving payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of those countries. The below is based upon the law as in effect on the date of this Base Prospectus and is subject to any change in law that may take effect after such date.*

### **The Republic of Finland**

The comments below are of a general nature based on the Issuer's understanding of current law and practice in Finland. They only relate to the position of persons who are the absolute beneficial owners of the Notes and who are not resident in Finland for tax purposes and who are not engaged in trade or business in Finland for tax purposes through a permanent establishment in Finland or otherwise, and whose Notes are not connected to trade or business in Finland. They may not apply to certain classes of person such as dealers. Prospective Noteholders are urged to consult their professional advisers as to the tax consequences of holding or transferring Notes. It should be noted that the tax laws of Finland may be amended with retrospective impact.

Under Finnish tax legislation, acquiring, holding and disposing of Notes will be exempt from all taxes, duties, fees and imposts of whatever nature, imposed or levied by or within Finland or by any municipality or other political subdivision or taxing authority thereof or therein.

The issuance of Notes is not subject to tax in Finland. Finland will not levy withholding tax on the payments of interest, principal and/or other amounts under the Notes. This applies notwithstanding the clauses in tax treaties between Finland and other countries to the extent Finland is granted a right to tax payments relating to instruments such as the Notes.

The above Noteholders are not liable to pay Finnish capital gains tax on Notes and transfers of Notes are not subject to Finnish transfer tax.

Transfers of Notes by a non-resident by way of a gift or by reason of the death of the owner as a result of statutory inheritance or by a will are not subject to Finnish gift or inheritance tax on condition that the beneficiary of the gift, the heir or the legatee is not a Finnish resident.

Noteholders will not be considered as resident in Finland for tax purposes or as engaged in trade or business in Finland for tax purposes through a permanent establishment in Finland or otherwise solely by their holding of Notes or Coupons or the receipt of income therefrom.

### **The proposed financial transactions tax ("FTT")**

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common 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 Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes should, however, 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 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 EU Member States may decide to participate.

Prospective holders of Notes are advised to seek their own professional advice in relation to the FTT.

## **FATCA**

Pursuant to certain provisions of the U.S. Internal Revenue Code of 1986, commonly known as FATCA, a "foreign financial institution" may be required to withhold on certain payments it makes ("foreign passthru payments") to persons that fail to meet certain certification, reporting, or related requirements. The Issuer may be a foreign financial institution for these purposes. A number of jurisdictions (including the jurisdiction of the Issuer) have entered into, or have agreed in substance to, intergovernmental agreements with the United States to implement FATCA ("IGAs"), which modify the way in which FATCA applies in their jurisdictions. Under the provisions of IGAs as currently in effect, a foreign financial institution in an IGA jurisdiction would generally not be required to withhold under FATCA or an IGA from payments that it makes. Certain aspects of the application of the FATCA provisions and IGAs to instruments such as the Notes, including whether withholding would ever be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, are uncertain and may be subject to change. Even if withholding would be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, 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, and Notes 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 generally would be "grandfathered" for purposes of FATCA withholding unless materially modified after such date. However, if additional notes (as described under "Terms and Conditions—Further Issues") that are not distinguishable from previously issued Notes are issued after the expiration of the grandfathering period and are subject to withholding under FATCA, then withholding agents may treat all Notes, including the Notes offered prior to the expiration of the grandfathering period, as subject to withholding under FATCA. Holders should consult their own tax advisors regarding how these rules may apply to their investment in the Notes. In the event any withholding would be required pursuant to FATCA or an IGA with respect to payments on the Notes, no person will be required to pay additional amounts as a result of the withholding.

## **Luxembourg Taxation**

*The following is a general description of certain Luxembourg tax considerations relating to the Notes. It specifically contains information on taxes on the income from the Notes withheld at source and provides an indication as to whether the Issuer assumes responsibility for the withholding of taxes at the source. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in Luxembourg or elsewhere. Prospective purchasers of the Notes should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of the Notes, payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of Luxembourg. This summary is based upon the law as in effect on the date of this Base Prospectus. The information contained within this section is limited to withholding taxation issues, and prospective investors should not apply any information set out below to other areas, including (but not limited to) the legality of transactions involving the Notes.*

*Please be aware that the residence concept used under the respective headings below applies for Luxembourg income tax assessment purposes only. Any reference in the present section to a withholding tax or a tax of a similar nature refers to Luxembourg tax law and/or concepts only.*

*A holder of the Notes may not become resident, or deemed to be resident, in Luxembourg by reason only of the holding of the Notes, or the execution, performance, delivery and/or enforcement of the Notes.*

All payments of interest (including accrued but unpaid interest) and principal by the Issuer in the context of the holding, disposal, redemption or repurchase of the Notes, which are not profit sharing, can be made free and clear of any withholding or deduction for or on account of any taxes of whatsoever nature imposed, levied, withheld, or assessed by Luxembourg or any political subdivision or taxing authority thereof or therein, in accordance with the applicable Luxembourg law, subject however to the application, as regards Luxembourg resident individuals, of the Luxembourg law of 23 December 2005, as amended (the "**Relibi Law**"), which provides for a 20 per. cent withholding tax on savings income (i.e. with certain exemptions,

savings income within the meaning of the Relibi Law) paid by a paying agent within the meaning of the Relibi Law established in Luxembourg to or for an immediate benefit of an individual beneficial owner who is tax resident in Luxembourg.

Responsibility for the withholding of the 20 per cent. withholding tax will be assumed by the Luxembourg paying agent and not by the Issuer.

In addition, pursuant to the Relibi Law, Luxembourg resident individuals who are the beneficial owners of savings income paid by a paying agent established outside Luxembourg, in a Member State of either the European Union or the EEA, can opt to self-declare and pay a 20 per cent. tax (the "Levy") on such savings income.

Responsibility for the declaration and payment of the Levy is assumed by the individual resident beneficial owner and not by the Issuer.

The 20 per cent. withholding tax as described above or the Levy are final when Luxembourg resident individuals are acting in the context of the management of their private wealth.



## SUBSCRIPTION AND SALE

Notes may be sold from time to time by the Issuer to any one or more of BNP Paribas, Crédit Agricole Corporate and Investment Bank, Danske Bank A/S, MUFG Securities (Europe) N.V., Mizuho International plc, Mizuho Securities Europe GmbH, Nordea Bank Abp, OP Corporate Bank plc, Skandinaviska Enskilda Banken AB (publ), Svenska Handelsbanken AB (publ), Swedbank AB (publ) and The Royal Bank of Scotland plc (the "**Dealers**"). The arrangements under which Notes may from time to time be agreed to be sold by the Issuer to, and purchased by, Dealers are set out in an Amended and Restated Dealer Agreement dated 27 June 2019 (the "**Dealer Agreement**") and made between the Issuer and the Dealers. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer and a single Dealer for that Tranche to be issued by the Issuer and subscribed by that Dealer, the method of distribution will be "Non-Syndicated" and the name of that Dealer and any other interest of that Dealer which is material to the issue of that Tranche beyond the fact of the appointment of that Dealer will be set out in the relevant Final Terms. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer and more than one Dealer for that Tranche to be issued by the Issuer and subscribed by those Dealers, the method of distribution will be "Syndicated", the obligations of those Dealers to subscribe the relevant Notes will be joint and several and the names and addresses of those Dealers and any other interests of any of those Dealers which is material to the issue of that Tranche beyond the fact of the appointment of those Dealers (including whether any of those Dealers has also been appointed to act as Stabilising Manager in relation to that Tranche) will be set out in the relevant Final Terms.

Any such agreement will, *inter alia*, make provision for the form and terms and conditions of the relevant Notes, the price at which such Notes will be subscribed by the Dealer(s) and the commissions or other agreed deductibles (if any) payable or allowable by the Issuer in respect of such subscription. The Dealer Agreement makes provision for the resignation or termination of appointment of existing Dealers and for the appointment of additional or other Dealers either generally in respect of the Programme or in relation to a particular Tranche of Notes.

### United States of America

*Regulation S Category 2; TEFRA D or TEFRA C as specified in the relevant Final Terms or neither if TEFRA is specified as not applicable in the relevant Final Terms.*

The Notes have not been and will not be registered under the Securities Act 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 the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S.

The Bearer Notes are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the United States Internal Revenue Code and regulations thereunder.

Each Dealer has agreed that, except as permitted by the Dealer Agreement, it will not offer, sell or deliver Notes, (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution of the Notes comprising the relevant Tranche, as certified to the Fiscal Agent or the Issuer by such Dealer (or, in the case of a sale of a Tranche of Notes to or through more than one Dealer, by each of such Dealers as to the Notes of such Tranche purchased by or through it, in which case the Fiscal Agent or the Issuer shall notify each such Dealer when all such Dealers have so certified) within the United States or to, or for the account or benefit of, U.S. persons, and such Dealer will have sent to each dealer to which it sells Notes during the distribution compliance period relating thereto a confirmation or other notice setting forth the restrictions on offers and sales of the 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 of Notes comprising any Tranche, any offer or sale of Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

### Prohibition of Sales to EEA Retail Investors

Unless the applicable Final Terms in respect of any 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 Notes which are the subject of the offering contemplated by this Base Prospectus as completed by the applicable Final Terms in relation thereto to any retail investor in the European Economic Area.

For the purposes of this provision:

- (a) the expression "**retail investor**" means a person who is one (or more) of the following:
  - (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or
  - (ii) a customer within the meaning of Directive 2002/92/EC, 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 Directive; and
- (b) the expression "**offer**" includes the communications in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

#### **Selling Restrictions Addressing Additional United Kingdom Securities Laws**

Each Dealer has represented, warranted and agreed that:

- (a) **No deposit-taking:** in relation to any Notes having a maturity of less than one year:
  - (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and
  - (ii) it has not offered or sold and will not offer or sell any Notes other than to persons:
    - (A) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses; or
    - (B) who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses,

where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

- (b) **Financial promotion:** 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 Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and
- (c) **General compliance:** it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

#### **General**

Each Dealer has represented, warranted and undertaken, and each further Dealer appointed under the Programme will be required to represent, warrant and undertake, that it has, to its best knowledge and belief, complied and will comply with all applicable laws and regulations in each country or jurisdiction in or from which it purchases, offers, sells or delivers Notes or possesses, distributes or publishes this Base Prospectus or any Final Terms or any related offering material, in all cases at its own expense. Other persons into whose hands this Base Prospectus or any Final Terms comes are required by the Issuer 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 Notes or possess, distribute or publish this Base Prospectus or any Final Terms or any related offering material, in all cases at their own expense.

The Dealer Agreement provides that the Dealers shall not be bound by any of the restrictions relating to any specific jurisdiction (set out above) to the extent that such restrictions shall, as a result of change(s) or change(s) in official interpretation, after the date hereof, of applicable laws and regulations, no longer be applicable but without prejudice to the obligations of the Dealers described in the paragraph headed "*General*" above.

Selling restrictions may be supplemented or modified with the agreement of the Issuer. Any such supplement or modification may be set out in the relevant Final Terms (in the case of a supplement or modification relevant only to a particular Tranche of Notes) or in a supplement to this Base Prospectus.

## GENERAL INFORMATION

### Authorisation

1. The establishment of the Programme was authorised by a resolution of the Board of Directors of the Issuer passed on 28 May 2009. The update of the Programme was authorised by a resolution of the Board of Directors of the Issuer passed on 28 May 2019. The Issuer has obtained or will obtain from time to time all necessary consents, approvals and authorisations in connection with the issue and performance of the Notes.

### Legal and Arbitration Proceedings

2. Save as disclosed in the Base Prospectus on pages 8, 9, 95 and 96, there are no governmental, legal or arbitration proceedings, (including any such proceedings which are pending or threatened, of which the Issuer is aware), which may have, or have had during the 12 months prior to the date of this Base Prospectus, a significant effect on the financial position or profitability of the Issuer and its Subsidiaries.

### Significant/Material Change

3. Since 31 December 2018, there has been no material adverse change in the prospects of the Issuer or the Issuer and its Subsidiaries. Since 31 March 2019, there has been no significant change in the financial or trading position of the Issuer or the Issuer and its Subsidiaries.

### Auditors

4. The consolidated financial statements of the Issuer have been audited without qualification for the years ended 2018 and 2017 by PricewaterhouseCoopers Oy, Authorised Public Accountants, principal auditor Jouko Malinen, Authorised Public Accountant (member of the Finnish Association of Auditors), PO Box 1015 (Itämerentori 2) Helsinki FI-00101 Finland.

### Documents on Display

5. Copies of the following documents (together with English translations thereof) may be inspected during normal business hours at the registered office of the Issuer at Olkiluoto, FI-27160 Eurajoki, Finland and the Fiscal Agent at Deutsche Bank AG, London Branch, 1 Great Winchester Street, EC2N 2DB, London, United Kingdom for 12 months from the date of this Base Prospectus:
  - (a) the extract from the trade register of the Finnish National Board of Patents and Registration;
  - (b) Articles of Association of the Issuer approved 31 October 2018;
  - (c) the audited consolidated financial statements of the Issuer for the years ended 2018 and 2017;
  - (d) the unaudited consolidated financial statements of the Issuer, in respect of the three-months ended 31 March 2019;
  - (e) the Agency Agreement;
  - (f) the Deed of Covenant;
  - (g) the Programme Manual (which contains the forms of the Notes in global and definitive form); and
  - (h) the Issuer-ICSDs Agreement.

### Material Contracts

6. There are no contracts having been entered into outside the ordinary course of any of the Issuer's or a member of the Group's businesses, which are, or may be, material and contain provisions under

which the Issuer or any member of the Group has an obligation or entitlement which is, or may be, material to the ability of the Issuer to meet its obligations in respect of the Notes.

#### **Clearing of the Notes**

7. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate common code and the International Securities Identification Number (ISIN), the Financial Instrument Short Name (FISN) and Classification of Financial Instruments (CFI) code (as applicable) in relation to the Notes of each Tranche will be specified in the relevant Final Terms. The relevant Final Terms shall specify any other clearing system as shall have accepted the relevant Notes for clearance together with any further appropriate information

#### **Dealer Activities**

8. 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 and their affiliates in the ordinary course of business. Certain of the Dealers and their affiliates may have positions, deal or make markets in the Notes issued under the Programme, related derivatives and reference obligations, including (but not limited to) entering into hedging strategies on behalf of the Issuer and 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 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. Such investments and securities activities may involve securities and/or instruments of the Issuer and 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 Notes issued under the Programme. Any such positions could adversely affect future trading prices of 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.

#### **Issuer Ratings**

9. The Issuer has been rated BBB- by Fitch Ratings Ltd., BB+ by S&P Global Ratings Europe Limited, and A+ by the Japan Credit Rating Agency, which are all on the list of registered and certified credit rating agencies published by the European Securities and Markets Authority in accordance with Regulation (EU) No. 1060/2009.

#### **Notes Having a Maturity of Less Than One Year**

10. Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the FSMA by the Issuer.

#### **Issue Price and Yield**

11. Notes may be issued at any price. The issue price of each Tranche of Notes to be issued under the Programme will be determined by the Issuer and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions and the issue price of the relevant Notes or the method of determining the price and the process for its disclosure will be set out in the applicable

Final Terms. In the case of different Tranches of a Series of Notes, the issue price may include accrued interest in respect of the period from the interest commencement date of the relevant Tranche (which may be the issue date of the first Tranche of the Series or, if interest payment dates have already passed, the most recent interest payment date in respect of the Series) to the issue date of the relevant Tranche.

The yield of each Tranche of Notes set out in the applicable Final Terms will be calculated as of the relevant issue date on an annual or semi-annual basis using the relevant issue price. It is not an indication of future yield.

**LEI**

12. The Legal Entity Identifier code of the Issuer is 743700LQ48IZBTZN4S52.

**REGISTERED OFFICE OF THE ISSUER**

**TEOLLISUUDEN VOIMA OYJ**

Olkiluoto  
FI-27160 Eurajoki  
Finland

**ARRANGER & DEALER**

**NORDEA BANK ABP**

Satamaradankatu 5  
FI-00020 Nordea  
Finland

**DEALERS**

**BNP PARIBAS**

10 Harewood Avenue  
London NW1 6AA  
United Kingdom

**CRÉDIT AGRICOLE CORPORATE AND  
INVESTMENT BANK**

12, Place des Etats-Unis  
CS 70052  
92547 Montrouge Cedex  
France

**DANSKE BANK A/S**

2-12 Holmens Kanal  
DK-1092 Copenhagen K  
Denmark

**MUFG SECURITIES (EUROPE) N.V.**

World Trade Center, Tower H, 11th Floor  
Zuidplein 98  
1077 XV Amsterdam  
The Netherlands

**OP CORPORATE BANK PLC**

Gebhardinaukio 1  
FIN-00510 Helsinki  
Finland

**MIZUHO INTERNATIONAL PLC**

Mizuho House  
30 Old Bailey  
London EC4M 7AU  
United Kingdom

**MIZUHO SECURITIES EUROPE GMBH**

Taunustor 1  
60310 Frankfurt am Main  
Germany

**NATWEST MARKETS PLC**

250 Bishopsgate  
London EC2M 4AA  
United Kingdom

**SKANDINAVISKA ENSKILDA BANKEN AB  
(PUBL)**

Kungsträdgårdsgatan 8  
106 40 Stockholm  
Sweden

**SVENSKA HANDELSBANKEN AB (PUBL)**

Kungsträdgårdsgatan 2  
SE-106 70 Stockholm  
Sweden

**SWEDBANK AB (PUBL)**

SE – 105 34  
Stockholm  
Sweden

**LUXEMBOURG LISTING AGENT, TRANSFER AGENT AND REGISTRAR**

**DEUTSCHE BANK LUXEMBOURG S.A.**

2 bd. Konrad Adenauer  
L-1115 Luxembourg

**FISCAL AGENT**

**DEUTSCHE BANK AG, LONDON BRANCH**

Winchester House  
1 Great Winchester Street  
London EC2N 2DB  
United Kingdom

**LEGAL ADVISERS**

*To the Dealers as to English law:*

**CLIFFORD CHANCE LLP**

10 Upper Bank Street  
London E14 5JJ  
United Kingdom

*To the Dealers as to Finnish law:*

**CASTRÉN & SNELLMAN ATTORNEYS**

**LTD.**  
PO Box 233 (Eteläesplanadi 14)  
FI-00131 Helsinki  
Finland

*To the Issuer as to Finnish law:*

**ASIANAJOTOIMISTO DLA PIPER FINLAND OY**

Fabianinkatu 23  
FI-00130 Helsinki  
Finland

**AUDITOR TO THE ISSUER**

**PRICEWATERHOUSECOOPERS OY**

P.O. Box 1015 (Itämerentori 2)  
FI-00101 Helsinki  
Finland