UBS

Participation

Rolling Reverse Convertible

Strategy Certificate linked to EURO STOXX 50 Put Write Strategy
Issued by UBS AG, Zurich
Cash Settled
SVSP Product Type: Tracker Certificates (1300)
Valor: 47358462
ISIN: CH0473584628
WKN: US8JAA

Final Terms

This Product does not represent a participation in any of the collective investment schemes pursuant to Art. 7 ff of the Swiss Federal Act on Collective Investment Schemes (CISA) and does not require an authorisation of the Swiss Financial Market Supervisory Authority (FINMA). Therefore, investors in this Product are not eligible for the specific investor protection under the CISA. Moreover, Investors in this Product bear the issuer risk.

This document (Final Terms) constitutes the Simplified Prospectus for the Product described herein; it can be obtained free of charge from UBS AG, P.O. Box, CH-8098 Zurich (Switzerland), via telephone (+41-(0)44-239 47 03), fax (+41-(0)44-239 69 14) or via e-mail (swiss-prospectus@ubs.com). The relevant version of this document is stated in English; any translations are for convenience only. For further information please refer to paragraph «Product Documentation» under section 4 of this document.

1. Description of the Product

Information on Underlying

Underlying	**EURO STOXX 50 97.5% Put Write Strategy, as described in the Annex 1**
Strategy Description	The EURO STOXX 50 97.5% Put Write Strategy (the "Strategy") replicates daily selling put options on EURO STOXX 50 (daily allocation will be 1/21 based on the Option Portfolio Level) with strike of 97.5% based on the spot level and a target expiry of 21 scheduled trading days together with a cash position which accrues interest at the prevailing reference rate (which is capped at 1.2%p.a. and can be negative from time to time).

Product Details

Security Numbers	Valor: 47358462 / ISIN: CH0473584628 / WKN: US8JAA
Issue Size	Up to 10'000 Certificates (with reopening clause)
Denomination	EUR 1'000.00
Issue Price per Certificate	EUR 1'000.00
Settlement Currency	EUR
Distribution Fee	0.8% p.a. The Distribution Fee is deducted daily and in arrears

Dates

Launch Date	16 September 2019
Pricing Date ("Pricing")	04 October 2019
Payment Date (Issue Date)	11 October 2019
Last Trading Day / Time	02 October 2020
Expiration Date ("Expiry")	05 October 2020, or if such day is not a Scheduled Trading Day, the immediately following Scheduled Trading Day
Redemption Date / Maturity Date	12 October 2020 (subject to Market Disruption Event provisions)

Redemption Amount

The Investor is entitled to receive from the Issuer on the Redemption Date an amount in the Settlement Currency, in accordance with the terms described below.

Redemption Amount

The Investor receives an amount on the Redemption Date per Certificate according to the following formula:

Max [0, Denomination + Final Amount]

Final Amount

An amount calculated by the Calculation Agent in respect of the Expiration Date 'T' in accordance with the following formula:

$$\left[\prod_{1}^{T}\left(1-\frac{DF}{365}\right)\right]\times \mathbf{OP_T}-\mathbf{OP_0}$$

Where:
$\mathbf{OP_T}$ is the Option Portfolio Level on the Expiration Date 'T' (as described in Annex 1) adjusted for reasonable incurred Option Spread (as specified for each Portfolio Constituent in Annex 1) of the Hedging Party in respect of any adjustment(s) made to its hedge positions to reflect the termination of this Product, as determined by the Calculation Agent in its reasonable discretion;

$\mathbf{OP_0}$ is the Option Portfolio Level with respect to the Pricing Date adjusted for reasonably incurred Option Spread equal to EUR 0.50 (as specified for each Portfolio Constituent in Annex 1) of the Hedging Party in respect of any adjustment(s) made to its hedge positions to reflect the initiation of this Product, as determined by the Calculation Agent in its reasonable discretion;

DF is the level of the Distribution Fee; and

T means the number of calendar days that have passed since the Pricing Date

Product Structure

The Product tracks the performance of the EURO STOXX 50 Put Write Strategy. The EURO STOXX 50 Put Write Strategy reflects the performance of the Option Portfolio and the Cash position described in Annex 1.

General Information

Issuer	UBS AG, Zurich and Basel, Switzerland
Rating	Aa3 Moody's / A+ S&P's / AA- Fitch
Issuer Supervisory Authority	Swiss Financial Market Supervisory Authority (FINMA). London Branch additionally

	Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA). Jersey Branch additionally Jersey Financial Services Commission (JFSC).
Lead Manager	UBS AG, Zurich (UBS Investment Bank)
Calculation Agent	UBS AG, London Branch
Paying Agent	UBS Switzerland AG
Hedging Party	UBS AG, London Branch
Business Day	London, Zurich
Listing	None
Minimum Investment	1 Certificate (subject to Selling Restrictions)
Minimum Trading Lot	1 Certificate
Secondary Market	The Issuer or the Lead Manager, as applicable, intends, under normal market conditions, to provide bid and/or offer prices for the Products on a regular basis. However, the Issuer or the Lead Manager, as applicable, makes no firm commitment to provide liquidity by means of bid and/or offer prices for the Products and assumes no legal obligation to quote any such prices or with respect to the level or determination of such prices. Potential Investors therefore should not rely on the ability to sell this Product at a specific time or at a specific price. An Investor in the Product should note that the bid and/or offer prices of the Products, where provided by the Issuer or the Lead Manager, as applicable, are likely to be narrower when all locations listed under the Business Days definition are normally open for trading. Outside of such normal trading hours, the bid and/or offer prices of the Products are likely to be wider, if at all available.
Clearing	SIX SIS, Euroclear, Clearstream (registered as intermediated securities with SIX SIS AG)
Status	Unsecured / Unsubordinated
Form of Deed	Uncertificated Securities
Governing Law / Jurisdiction	Swiss / Zurich
Product	One Certificate with the given Denomination is equivalent to one (1) "Product". "Products" wherever used herein shall be construed to mean integral multiples of the same, subject to the Issue Size.
Adjustments	The terms of the Product may be subject to adjustments during its lifetime. For clients outside of the United Kingdom, any changes with regard to the terms of this Product shall be published on the internet at www.ubs.com/keyinvest. Detailed information on such adjustments is to be found in the Product Documentation.
Public Offering	Switzerland

Tax Treatment Switzerland

Swiss Transfer Stamp Duty	The product qualifies as a taxable security (share/unit in a Swiss collective investment vehicle, TK 24). Secondary market transactions are in principle subject to Swiss Stamp Duty.
Swiss Income Tax	The taxable income and capital gains/losses will be kept apart and will be reported to the Swiss Federal Tax Administration at redemption date. The taxable income is

	subject to Swiss income tax.
Swiss Withholding Tax	The taxable income (if any) is subject to Swiss Withholding Tax on redemption date.

The tax information only provides a general overview over the Swiss tax consequences linked to this product based on the tax laws and the practice of the tax administration at the time of issue. Tax laws and the practice of tax administrations may change, possibly with retroactive effect.

Classification

This Product does not represent a participation in any of the collective investment schemes pursuant to Art. 7 ff of the Swiss Federal Act on Collective Investment Schemes (CISA) and thus does not require an authorisation of the Swiss Financial Market Supervisory Authority (FINMA). Therefore, investors in this Product are not eligible for the specific investor protection under the CISA (this paragraph is relevant to public offerings in Switzerland only). Moreover, Investors in this Product bear the issuer risk.

Furthermore, this Product does not benefit from any depositor protection under Art. 37a under the Swiss Federal Law on Banks and Savings Banks (Banking Act) or other forms of deposit insurance under any other law as might be applicable to this Product.

2. Prospects of Profits and Losses

Market expectation	Investors in this Product expect a positive performance of the Underlying over the life of the Product.

Effect of the performance of the Underlying on the overall redemption amount or on delivery obligation:

- Positive performance	If the Underlying performs positively, Investors realise a positive return.
- Sideways to slightly negative performance	If the Underlying performs sideways to slightly negative, the value of the Product will remain constant or decreases.
- Pronounced negative performance	Investors may lose some or in the worst case all of the investment as they are fully exposed to the negative performance of the Underlying.
Maximum Return	The profit potential is unlimited.
Maximum Loss	Investors may lose some or all of the investment as they are fully exposed to the performance of the Underlying.

3. Significant Risks for Investors

General risk warning	Potential investors should understand the risks associated with an investment in the Product and shall only reach an investment decision after careful considerations with their legal, tax, financial and other advisors of (i) the suitability of an investment in the Product in the light of their own particular financial, fiscal and other circumstances; (ii) the information set out in this document and (iii) the Underlying. The following is a summary of the most significant risks. Further risks are set out in the Product Documentation.
Risk tolerance	Investors in this Product should be experienced Investors and familiar with both derivative products and the stock markets. Investors must be willing to make an investment that is exposed to the full down-side risk of the Underlying.

Product Specific Risks

Loss potential	The investors may lose some or all of the investment as they are fully exposed to the

	performance of the Underlying.
Capital Protection (at Expiry)	No. Investors should be aware that the performance of the Product may be negative, and therefore the Redemption Amount may be, can be less than the Issue Price.
Risk potential in comparison to a direct investment in the Underlying	The risk potential is similar to a direct investment in the Underlying.
Issuer call right	None
Stop Loss Event	None
Price Source Disruption Event	It may become impossible to obtain the relevant price during the lifetime of the Product and/or on the Expiration Date due to one or more of the price sources normally used in the relevant market for the Underlying being unavailable because an unscheduled bank closure is declared on short notice in the relevant country or due to the occurrence of any other disruption (each a ''Price Source Disruption Event''). The Calculation Agent will determine in good faith in a commercially reasonable manner whether a Price Source Disruption Event has occurred. A Price Source Disruption Event may lead to (i) a postponement of the Expiration Date and therefore the redemption payment, (ii) to the use of an alternative source for the relevant price and or (iii) to the unilateral determination of the applicable price by the Calculation Agent. Such postponement, use of alternative price source and/or determination of the applicable price by the Calculation Agent may affect, materially or otherwise, the Redemption Amount which the Investor will receive.
Extraordinary termination risk	The Product contains terms and conditions that allow the Issuer to terminate and redeem the Product prior to the Redemption Date. In case of such extraordinary termination, the Issuer shall pay to the Investors an extraordinary termination amount as determined by the Calculation Agent which is usually equivalent to the market value of the Product. Potential Investors should note that the extraordinary termination amount may deviate from and may be considerably below the amount which would be payable pursuant to the final redemption provisions on the Redemption Date. Investors are not entitled to request any further payments on the Product after the termination date.
Adjustment risk	Investors should be aware that it cannot be excluded that certain events occur or certain measures are taken (by parties other than the Issuer) in relation to the Underlying which can lead to changes to the Underlying or its concept (e.g. corporate events of a company whose shares constitute an Underlying, Market Disruption Events or other circumstances affecting normal activities). In the case of the occurrence of such events or measures, the Issuer and/or the Calculation Agent are entitled to effect adjustments according to the Product Documentation. Such adjustments might have a negative impact on the value of the Product.
Underlying performance risk	If the price of the EURO STOXX Index falls materially, the Underlying is unlikely to be able to generate sufficient premiums through the Underlying to compensate for the losses incurred due to a fall of the EURO STOXX Index. It should also be noted that the premiums earnt by selling put options are dependent on market levels of implied volatility so if the level of implied volatility decreases then the returns generated by the Underlying may be lower than those generated historically. The value of the Underlying will be impacted as well by notional fees and costs included within the strategy methodology (as described in the Annex).
Illiquidity risk in secondary market	The Issuer or the Lead Manager, as applicable, intends, under normal market conditions, to provide bid and/or offer prices for this Product on a regular basis. However, the Issuer or the Lead Manager, as applicable, makes no firm commitment to provide liquidity by means of bid and/or offer prices for this Product, and assumes no legal obligation to quote any such prices or with respect to the level or determination of such prices. Potential investors therefore should not rely on the ability to sell this Product at a specific time or at a specific price. Potential investors should note that prices quoted typically include a spread and therefore may deviate from the market value of the Product. In

	special market situations, where the Issuer is completely unable to enter into hedging transactions, or where such transactions are very difficult to enter into, the spread between the bid and offer prices in the secondary market may be temporarily expanded, in order to limit the economic risks of the Issuer. Hence, Investors might sell at a price considerably lower than the actual price of the Product at the time of its sale. By selling the Product in the secondary market Investors may receive less than the capital invested. In case of a secondary market transaction, there is a possibility that costs, including taxes, related to or in connection with the Product may arise for Investors that are not paid by the Issuer or imposed by the Issuer.
Calculation Agent's discretion	The Calculation Agent has a broad discretionary authority to make various determinations and adjustments under the Products, any of which may have an adverse effect on the value and/or the amounts payable under the Products. Prospective investors should be aware that any determinations made by the Calculation Agent may have an impact on the value and financial return of the Products. Where the Calculation Agent is required to make a determination it may do so without taking into account the interests of the holders of the Product.
Market Disruption risk	Investors are exposed to market disruption events (such as trading disruption, exchange disruption and early closure of the relevant exchange), which could have an impact on the redemption amount through delay in payment, change in value or suspension of trading in the Product in the secondary market. For a detailed description of such events and their effects please refer to the Product Documentation.
Withholding tax	Investors in this Product should note that any payment under this Product may be subject to withholding tax (such as, inter alia, Swiss Withholding Tax, and/or withholding related to FATCA or 871(m) of the US Tax Code). **Any payments due under this Product are net of such tax.** Please refer to the General Terms and Conditions for detailed information. If the Issuer is required to withhold any amount pursuant to Section 871(m) or FATCA of the U.S. Tax Code, the Issuer will not be required to pay additional amounts with respect to the amount so withheld.

Risk Factors relating to the Issuer

In addition to the market risk with regard to the development of the Underlying, each Investor bears the general risk that the financial situation of the Issuer could deteriorate. The Products constitute immediate, unsecured and unsubordinated obligations of the Issuer, which, particularly in case of insolvency of the Issuer, rank pari passu with each and all other current and future unsecured and unsubordinated obligations of the Issuer, with the exception of those that have priority due to mandatory statutory provisions. The general assessment of the Issuer's creditworthiness may affect the value of the Products. This assessment generally depends on the ratings assigned to the Issuer or its affiliated companies by rating agencies such as Moody's, Fitch and Standard & Poor's.

The Issuer Ratings indicated in this document reflect the situation at the time of issuance and may be subject to changes. The actual Issuer Ratings at any given time can be seen on the Issuer's website (www.ubs.com) under "Analysts & Investors".

4. Additional Information

Product Documentation

This document ("**Final Terms**") constitutes the Simplified Prospectus for the Product and contains the information required by Article 5 CISA and the corresponding Guidelines of the Swiss Bankers Association. The prospectus requirements of Article 652a/Article 1156 of the Swiss Code of Obligations are not applicable.

These Final Terms (Simplified Prospectus) together with the 'General Terms and Conditions for Structured Products on Equity, Commodity and Index Underlyings', stipulated in English and as amended from time to time ("**General Terms and Conditions**") shall form the entire documentation for this Product ("**Product Documentation**"), and accordingly the Final Terms should always be read together with the General Terms and Conditions. The Simplified Prospectus may be provided in various languages, however, only the English version will be relevant and any translations are for convenience only. Definitions

used in the Final Terms, but not defined therein shall have the meaning given to them in the General Terms and Conditions. In the event that the Product is listed (see above item 'Listing' under «General Information»), the Product Documentation will be amended in accordance with the listing requirements of the relevant exchange.
The Product Documentation can be obtained free of charge from UBS AG, P.O. Box, CH-8098 Zurich (Switzerland), via telephone (+41-(0)44-239 47 03), fax (+41-(0)44-239 69 14) or via e-mail (swiss-prospectus@ubs.com). In addition, for clients outside of the United Kingdom, the Product Documentation is available on the internet at www.ubs.com/keyinvest. Notices in connection with this Product shall be validly given by publication as described in the General Terms and Conditions. Furthermore, for clients outside of the United Kingdom, any changes with regard to the terms of this Product shall be published on the internet at www.ubs.com/keyinvest.

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Important Information

The information herein is communicated by UBS AG and/or its affiliates ("**UBS**"). UBS may from time to time, as principal or agent, have positions in, or may buy or sell, or make a market in any securities, currencies, financial instruments or other assets underlying the Product to which this document relates. UBS may provide investment banking and/or other services to and/or have officers who serve as directors of the companies referred to in this document. UBS' trading and/or hedging activities related to this Product may have an impact on the price of the underlying asset(s) and may affect the likelihood that any relevant barrier(s) is/are crossed. UBS has policies and procedures designed to minimise the risk that officers and employees are influenced by any conflicting interest or duty and that confidential information is improperly disclosed or made available.

In certain circumstances UBS sells this Product to dealers and other financial institutions at a discount to the issue price or rebates to them for their account some proportion of the issue price ("**Distribution Fees**"). Distribution Fees, if any, are disclosed in section 1 of this document and reflect the maximum amount a dealer or financial institution may receive from UBS; the actual amount may be lower.

Structured transactions are complex and may involve a high risk of loss. Prior to entering into a transaction you should consult with your own legal, regulatory, tax, financial and accounting advisors to the extent you consider it necessary, and make your own investment, hedging and trading decisions (including decisions regarding the suitability of this transaction) based upon your own judgement and advice from those advisers you consider necessary. Save as otherwise expressly agreed in writing, UBS is not acting as your financial adviser or fiduciary in any transaction.

This document should not be construed as an offer, personal recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice. The terms of any investment in the Product to which this document relates will be exclusively subject to the detailed provisions, including risk considerations, contained in the Product Documentation.

UBS makes no representation or warranty relating to any information herein which is derived from independent sources. This document shall not be copied or reproduced without UBS' prior written permission.

No action has been or will be taken in any jurisdiction that would permit a public offering of the Products described herein. The Products must be sold in accordance with all applicable selling restrictions in the jurisdictions in which they are sold.

There is a possibility that costs, including taxes, related to transactions in connection with this Product may arise for the Investor that are not paid by UBS or imposed by it.

Index Disclaimers

The EURO STOXX 50® index and the trademarks used in the index name are the intellectual property of STOXX Limited, Zurich, Switzerland and/or its licensors. The index is used under license from STOXX. The swaps based on the index are in no way sponsored, endorsed, sold or promoted by STOXX and/or its licensors and neither STOXX nor its licensors shall have any liability with respect thereto.

Selling Restrictions

Any Products purchased by any person for resale may not be offered in any jurisdiction in circumstances which would result in the Issuer being obliged to register any further documentation relating to this Product in such jurisdiction.
The restrictions listed below must not be taken as definitive guidance as to whether this Product can be sold in a jurisdiction. Additional restrictions on offering, selling or holding of this Product may apply in other jurisdictions. Investors in this Product should seek specific advice before on-selling this Product.

European Economic Area - In relation to each Member State of the European Economic Area (each, a "Member State"), an offer of the Products to the public in a Member State may only be made in accordance with the following exemptions as set out in the Regulation (EU) 2017/1129 (as may be amended or replaced from time to time) (the "Prospectus Regulation"):

(a) Qualified investors: at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
(b) Fewer than 150 offerees: at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation);
(c) An offer of Products addressed to investors who acquire Products for a total consideration of at least EUR 100,000 per investor, for each separate offer; and/or
(d) Other exempt offers: at any time in any other circumstances falling within Article 1 (4) of the Prospectus Regulation,
provided that no such offer of Products referred to in (a) to (d) above shall require the publication of a prospectus pursuant to Article 3 of the Prospectus Regulation, or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression "offer of Securities to the public" in relation to any Products in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Products to be offered so as to enable an investor to decide to purchase or subscribe the Products.

The aforementioned restrictions shall not apply for jurisdictions specified in the section “Public Offering” under "General Information" above.

Hong Kong - Each purchaser has represented and agreed that it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Products, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Products which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

This is a structured product which involves derivatives. Do not invest in it unless you fully understand and are willing to assume the risks associated with it. If you are in any doubt about the risks involved in the product, you may clarify with the intermediary or seek independent professional advice.

Singapore – This document has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Products may not be circulated or distributed, nor may the Products be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A) under Section 274 of the Securities and Futures Act Chapter 289 of Singapore, as modified and/or amended from time to time (the "SFA")), (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Products are subscribed or purchased under Section 275 of the SFA by a relevant person which is:
(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Products pursuant to an offer made under Section 275 of the SFA except:

(1) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
(2) where no consideration is or will be given for the transfer;
(3) where the transfer is by operation of law;
(4) as specified in Section 276(7) of the SFA; or
(5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Pursuant to section 309B(1)(c) of the SFA, the Issuer hereby notifies the relevant persons (as defined in the SFA) that the Products are classified as "capital markets products other than prescribed capital markets products" (as defined in the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018) and "Specified Investment Products" (as defined in the MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

UK – For the purpose of non-discretionary accounts, this Product should not be sold with a consideration of less than 100,000 EUR or equivalent.

USA – This Product may not be sold or offered within the United States or to U.S. persons.

ANNEX 1

EURO STOXX 50 97.5% Put Write Strategy

The EURO STOXX 50 97.5% Put Write Strategy reflects the performance of the Option Portfolio described in this Annex.

This Annex sets out the methodology used to calculate the level of the Option Portfolio (the "Option Portfolio Level" also interchangeably referred to as the "Underlying Level" in this document) in EUR (the "Option Portfolio Currency").

1. Summary of Details

Table 1: Option Portfolio Details

Terms	***Definition***
Option Portfolio Currency	EUR
Fee	0.4% p.a
Option Portfolio Commencement Date	4th October 2019
Initial Value of Cash Position	1012.70174676996 EUR
Calendar Day Count Convention	365
Scheduled Trading Day Count Convention	252
Tax Adjustment Multiplier	70%
Risk Free Rate	ICE EUR Overnight LIBOR (BBG: EE00O/N Index)
Option Discounting Rate	ICE EUR 1M LIBOR (BBG: EE0001M Index)

Table 2: Option Details

Option Contract	
Underlying Index	EURO STOXX 50 Index (Bloomberg Ticker: SX5E Index)
Underlying Index Sponsor	STOXX Limited
Underlying Settlement Index	An index representing the official closing price of the Underlying Index as published by the Underlying Index Sponsor
Option Settlement Price	The settlement price of the relevant option as published by the corresponding Exchange
Currency	Euro Dollar (EUR)
Exchange	EUREX
Option Type	Put
Style	European
Target Maturity Period	21 Scheduled Trading Days
Strike Type	% of Spot
Target Strike	97.5%
Listed Target Expiration Date	Third Friday of each month (if holiday then prior day)
Listed Target Strike Interval	EUR 25
Allocation	-1/21
Option Premium Floor	0%
Option Cost Floor	0.025%
Vega Ratio Min	0.6
Vega Ratio Scale	0.6
IV Barrier	16%

2. Definitions

"CDCC" means Calendar Day Count Convention as provided in Table 1;

"Currency of Portfolio Constituent "i"" means the currency in which the Portfolio Constituent "i" is denominated, as provided in Table 2 in respect of each Option Contract;

"Current Options" means:

a) in respect of the Option Portfolio Commencement Date, the list of options detailed in Annex 2;

b) in respect of any other Option Portfolio Business Day, all Portfolio Constituents that are Live Options but exclude Expiring Options with respect to such Option Portfolio Business Day. For the avoidance of doubt, Current Options shall include all New Options;

"Disrupted Day" means any Scheduled Trading Day in respect of which:

(i) a Market Disruption Event has occurred in relation to any Portfolio Constituent; and/or
(ii) a Market Disruption Event has occurred in relation to an Portfolio Reference Index Component; and/or
(iii) any Exchange or any Related Exchange(s) fails to open for trading during its regular trading session;

"Early Closure" means the closure on any Scheduled Trading Day of the relevant Exchange or Related Exchange in respect of any Portfolio Constituent or, as the case may be, Portfolio Reference Index Component, prior to its scheduled closing time unless such earlier closing is announced by such Exchange or Related Exchange(s) at least one hour prior to the earlier of: (i) the actual closing time for the regular trading session on such Exchange or Related Exchange(s) on such Scheduled Trading Day; and (ii) the submission deadline for orders to be entered into the relevant Exchange or Related Exchange(s) system for execution as at the close of trading on the relevant Exchange or Related Exchange(s) on such Scheduled Trading Day;

"Exchange" means, in respect of a Portfolio Constituent, the exchange or quotation system on which that Portfolio Constituent is principally traded, as provided in Table 2 in respect of each Option Contract;

"Exchange Disruption" means any event (other than an Early Closure) that disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for (1) any Portfolio Constituent on the relevant Exchange or any Portfolio Reference Index Component on a Related Exchange or (2) any futures or options contracts relating to such Portfolio Constituent or such Portfolio Reference Index Components on any relevant Related Exchange(s), in each case, as determined by the Calculation Agent;

"Expiring Options" means in respect of any Option Portfolio Business Day, all Portfolio Constituents that are expiring on such Option Portfolio Business Day;

"Expiry Date" means the expiry date of the relevant option as detailed in Section 5(a);

"Far Expiry Date" shall have the meaning given to such term in Section 6(e);

"Listed Expiry Dates" means in respect of each Option Contract, all expiry dates corresponding to Listed Options;

"Listed Options" means in respect of each Option Contract, all the exchange traded options corresponding to the relevant Underlying Index that are listed on the relevant Exchange with expiries corresponding to Listed Target Expiration Date and strikes being a multiple of Listed Target Strike Interval;

"Listed Strikes" means in respect of each Option Contract, all strikes corresponding to Listed Option;

"Listed Target Expiration Date" means in respect of each Option Contract, all expiry dates of the corresponding Listed Options, as provided in Table 2;

"Listed Target Strike Interval" means in respect of each Option Contract, the value as stated in Table 2;

"Live Options" means in respect of any Option Portfolio Business Day, all Portfolio Constituents which are due to expire on or after such Option Portfolio Business Day;

"Near Expiry Date" shall have the meaning given to such term in Section 6(e);

"New Options" means in respect of any Option Portfolio Business Day, all Portfolio Constituents to which exposure is acquired on such Option Portfolio Business Day;

"Market Disruption Event" means in respect of any Portfolio Constituent and/or any Portfolio Reference Index Component, the occurrence or existence of:

(i) a Trading Disruption;

(ii) an Exchange Disruption; or

(iii) an Early Closure;

in each case, which the Calculation Agent determines is material;

"Option Contract" means the contract terms used to define and categorise the Portfolio Constituents, and shall include the contract(s) stated in Table 2;

"Option Discounting Rate" means for each Option Contract, the Option Discounting Rate specified in Table 1. On any Option Portfolio Business Day "t", the Option Rate is the value published on the relevant Bloomberg ticker specified in Table 1. If no value is published on the relevant Bloomberg ticker on Option Portfolio Business Day "t", then the last available value shall be used;

"Option Portfolio Business Day" means each Scheduled Trading Day which is also a London Business Day;

"Option Portfolio Commencement Date" means the date as stated in Table 1;

"Option Type" means for each Option Contract, the Option Type specified in Table 2;

"Option Settlement Price" means as defined in Table 2;

"Option Spread" means, the spread charged for trading the relevant option as detailed in Section 6(c);

"Option Strike" means, the strike level of the relevant option as detailed in Section 5(c);

"Option Units" means the number of units traded of the relevant option as detailed in Section 5(e);

"Option Weight" means the weight in the relevant option as detailed in Section 5(d);

"Portfolio Constituents" means in respect of any Option Portfolio Business Day, as of close of such Option Portfolio Business Day all option contracts that have non-zero exposure in the portfolio including the option contracts that are due to expire on such Option Portfolio Business Day;

"Portfolio Reference Index" means any index referenced by, and serving as the underlying of a Portfolio Constituent;

"Portfolio Reference Index Component" means in respect of each Portfolio Reference Index any share, financial instrument or security, asset or other component referenced by such Portfolio Reference Index;

"Rebalancing Day" means each Option Portfolio Business Day;

"Related Exchange(s)" means in respect of each Portfolio Reference Index Component, the exchange or quotation system on which that Portfolio Reference Index Component is principally traded, as determined by the Calculation Agent;

"Risk Free Rate" means the Risk Free Rate as provided in Table 1. On any day "t", if Table 1 specifies a Bloomberg Ticker rather than a fixed percentage rate then the Risk Free Rate is the value published on the relevant Bloomberg ticker specified in Table 1. If no value is published on the relevant Bloomberg ticker on day "t", then the last available value shall be used;

"Scheduled Trading Day" means any day on which each Exchange (corresponding to each Live Option) is scheduled to be open for trading for their respective regular trading sessions;

"$STDCC$" means Scheduled Trading Day Count Convention as provided in Table 1.

"Target Maturity Period" means the period defined in Table 2 in respect of each Option Contract;

"Trading Disruption" means any suspension or permanent discontinuation of, or limitation imposed on trading in (1) any Portfolio Constituent on the relevant Exchange or any Portfolio Reference Index Component on a relevant Related Exchange or (2) any futures or options contracts relating to such Portfolio Constituent or such Portfolio Reference Index Component on any relevant Related Exchange(s);

"Underlying Index" is defined in Table 2 for each Option Contract;

"Underlying Index Level" on any Option Portfolio Business Day "t" is the closing price of the Underlying Index as published by the Underlying Index Sponsor on that Option Portfolio Business Day "t";

“Underlying Index Sponsor” is defined in Table 2 for each Underlying Index corresponding to each Option Contract; and

"Underlying Settlement Index" is defined in Table 2 for each Option Contract.

3. Generic Functions

- $\boldsymbol{\tau_{a,b}^{STD}}$**:** Function returns the time in years between date 'b' and 'a' using Scheduled Trading Day convention.

$$\tau_{a,b}^{STD} = \frac{STD(a,b)}{STDCC}$$

- $\boldsymbol{\tau_{a,b}^{CD}}$**:** Function returns the time in years between date 'b' and 'a' using Calendar Day convention.

$$\tau_{a,b}^{CD} = \frac{CD(a,b)}{CDCC}$$

- $\mathbf{STD(a,b)}$**:** Function returns the number of Scheduled Trading Days from (but excluding) the date 'b' to (and including) the date "a". This function can return negative value if day 'b' occurs after date 'a'.
- $\mathbf{CD(a,b)}$**:** Function returns the number of Calendar Days from (but excluding) the date 'b' to (and including) the date "a". This function can return negative value if day 'b' occurs after date 'a'.
- $\mathbf{N(x)}$**:** Function returns the normal cumulative distribution at x.
- $\mathbf{N'(x)}$**:** Function returns the normal probability distribution at x.
- $\mathbf{Nearest^{+}(a,b,X)}$**:** Function returns the nearest available strike to 'a' that is a multiple of 'b' within the set of Listed Strikes 'X' such that (i) this strike is always greater than or equal to 'a' and (ii) there exists both a listed call option as well as a listed put option corresponding to this strike.
- $\mathbf{Nearest^{-}(a,b,X)}$**:** Function returns the nearest available strike to 'a' that is a multiple of 'b' within the set of Listed Strikes 'X' such that (i) this strike is always less than 'a' and (ii) there exists both a listed call option as well as a listed put option corresponding to this strike.

4. Option Portfolio Level Calculation

4.a. Option Portfolio Level

On any Option Portfolio Business Day "t", the Option Portfolio Level reflects the sum of (i) the Cash Position Level and (ii) the Option Valuation of all Current Options in the portfolio.

In respect of each Option Portfolio Business Day "t" (and subject to the occurrence of an option liquidation event), the Option Portfolio Level ("$\mathbf{OP_t}$") will be determined by the Calculation Agent in accordance with the following formula:

$$\mathbf{OP_t = Cash_t + \sum_{i \in C_t} \left[OptUnit_i \times OptVal_{i,t}\right]}$$

Where:

"$\mathbf{Cash_t}$" means the Cash Position Level in respect of Option Portfolio Business Day "t", as determined in accordance with the provisions herein;

"$\mathbf{C_t}$" means the set or universe of Current Options in respect of Option Portfolio Business Day "t";

"$\mathbf{OptUnit_i}$" means the Option Units of Portfolio Constituent "i", as determined in accordance with the provisions herein;

"$\mathbf{OptVal_{i,t}}$" means the Option Valuation of Portfolio Constituent "i" in respect of Option Portfolio Business Day "t", as determined in accordance with the provisions herein, provided that where such Option Portfolio Business Day “t” is a Disrupted Day, then the value of such Portfolio Constituent “i” shall be determined by the Calculation Agent.

4.b. Cash Position

The Cash Position represents exposure to a notional cash account. The level of the Cash Position (the "**Cash Position Level**") in respect of each Option Portfolio Business Day "t" ("$\mathbf{Cash_t}$") will be determined by the Calculation Agent in accordance with the following formula:

$$\mathbf{Cash_t} = \mathbf{Cash_{t-1}} \times \left[\mathbf{1} + \boldsymbol{min}(\mathbf{RFR}_{\boldsymbol{t-1}}, \mathbf{1.2\%}) \times \boldsymbol{\tau}_{\mathbf{t,t-1}}^{\boldsymbol{CD}}\right] + \mathbf{Cash_t^{ExpOpt}} + \mathbf{Cash_t^{NewOpt}} - \mathbf{OP}_{\boldsymbol{t-1}} \times \mathbf{Fee} \times \boldsymbol{\tau}_{\mathbf{t,t-1}}^{\boldsymbol{CD}}$$

Where:

"$\mathbf{Cash_{t-1}}$" means the Cash Position Level in respect of the Option Portfolio Business Day immediately preceding Option Portfolio Business Day "t". In respect of the Option Portfolio Business Day that is the Option Portfolio Commencement Date, $\mathrm{Cash_{t-1}}$ is equal to the Initial Value of Cash Position stated in Table 1;

"$\mathbf{RFR_{t-1}}$" means the Risk Free Rate in respect of the Option Portfolio Business Day immediately preceding Option Portfolio Business Day "t";

"$\mathbf{Cash_t^{ExpOpt}}$" means the cash amount realised by the Expiring Options in respect of Option Portfolio Business Day "t", and will be determined by the Calculation Agent in accordance with the following formula:

$$\mathbf{Cash_t^{ExpOpt}} = \sum_{\mathbf{i \in E_t}} [\mathbf{OptUnit_i} \times \mathbf{OptExpVal_i}]$$

Where:

"$\mathbf{E_t}$" means the set or universe of Expiring Options with respect to Option Portfolio Business Day "t";

"$\mathbf{OptExpVal_{i,t}}$" means the Option Expiration Value of Portfolio Constituent "i", as determined in accordance with the provisions herein;

"$\mathbf{Cash_t^{NewOpt}}$" means the cash amount realised by the New Options in respect of Option Portfolio Business Day "t". If Option Portfolio Business Day "t" is not a Rebalancing Day or if no Portfolio Constituents that are New Options are being notionally traded in respect of Option Portfolio Business Day "t" then $\mathbf{Cash_t^{NewOpt}}$ shall equal zero (0). Otherwise, $\mathbf{Cash_t^{NewOpt}}$ will be determined by the Calculation Agent in accordance with the following formula:

$$\mathbf{Cash_t^{NewOpt}} = -\sum_{\mathbf{i \in N_t}} [\mathbf{OptUnit_i} \times \mathbf{OptVal_{i,t}}] - \sum_{\mathbf{i \in N_t}} \mathbf{abs}[\mathbf{OptUnit_i} \times \mathbf{OptSpread_{i,t}}]$$

Where:

"$\mathbf{N_t}$" means the set or universe of New Options in respect of Option Portfolio Business Day "t";

"$\mathbf{OptSpread_{i,t}}$" means the Option Spread charged for notionally trading Portfolio Constituent "i" in respect of Option Portfolio Business Day "t", as determined in accordance with the provisions herein;

"OP_{t-1}" means the Option Portfolio Level in respect of the Option Portfolio Business Day immediately preceding the Option Portfolio Business Day "t". In respect of the Option Portfolio Business Day that is the Option Portfolio Commencement Date, OP_{t-1} is equal to zero;

"Fee" means the fee level as detailed in Table 1.

5. Option Portfolio Rebalancing

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day, the Option Portfolio shall acquire exposure to Portfolio Constituent(s) (corresponding to each Option Contracts) that are New Option(s). The methodology to determine the Option Expiry Date, Option Type, Option Strike, Option Weight and Option Units in respect of each Portfolio Constituent that comprises the New Options is provided below.

5.a. Option Expiry Date ("ED_i")

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day, for each selected Portfolio Constituent "i" corresponding to each Option Contract the relevant Expiry Date will be the Option Portfolio Business Day that is exactly on or after the Target Maturity Period after the relevant Rebalancing day.

5.b. Option Type ("X_i")

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day, for each selected Portfolio Constituent "i" corresponding to each Option Contract the relevant Option Type will be as detailed in Table 2.

5.c. Option Strike ("K_i")

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day, for each selected Portfolio Constituent "i", the Option Strike is calculated as:

$$\mathbf{K_i = Target\ Strike_i} \times \boldsymbol{UI_{i,t-1}}$$

The Option Strike calculated above will be rounded to 2 decimal places.
Where:

"$UI_{i,t-1}$" means the Underlying Index Level corresponding to Portfolio Constituent "i" on the Option Portfolio Business Day immediately preceding Option Portfolio Business Day "t"; and

"$\mathbf{Target\ Strike_i}$" means, in respect of each Option Contract, the Target Strike as detailed for each Option Contract in Table 2;

5.d. Option Weights ("$OptWgt_i$")

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day and in respect of each Option Contract, the Option Weight for the relevant Portfolio Constituent is equal to:

a) 0% if the corresponding Option Valuation (as described herein) is not available, for example if the Implied Forward for Listed Expiry Dates, or the Implied Volatility for Listed Expiry Dates as defined below cannot be calculated due to market data for the relevant listed Option Contracts not being available;

b) 0% if on Option Portfolio Business Day "t" the relevant Option Valuation adjusted by the Option Spread divided by the relevant Underlying Index Level is less than the Option Premium Floor;

c) 0% if such Rebalancing Day is a Disrupted Day;

d) If (a), (b) and (c) are not applicable, then 100%.

5.e. Option Units ("$\mathbf{OptUnit_i}$")

In respect of each Option Portfolio Business Day "t" that is a Rebalancing Day, for each selected Portfolio Constituent "i" that shall form part of the New Options, the Option Units to be traded are:

$$\mathbf{OptUnits_i} = \mathbf{Allocation_i} \times \frac{\mathbf{OP_{\mathit{t}-1} \times OptWgt_i}}{\mathbf{UI_{i,t-1}}}$$

Where:

"$\mathbf{Allocation_i}$" means for the Portfolio Constituent "i" the relevant Allocation as detailed in Table 2; and

"$\mathbf{UI_{i,t-1}}$" means the Underlying Index Level corresponding to Portfolio Constituent "i" on the Option Portfolio Business Day immediately preceding the Option Portfolio Business Day "t".

6. Calculation of option parameters corresponding to each Portfolio Constituent

In respect of each Portfolio Constituent 'i' that is an option, also interchangeably referred to as Option 'i', the relevant Option Valuation, Option Expiration Value, Option Spread, Option Vega, Implied Forward and Option Implied Volatility is calculated using the provisions herein.

Each Option 'i' is uniquely identified using three parameters:

1. Option Expiry Date "$\mathbf{ED_i}$"
2. Option Type "$\mathbf{X_i}$" (where X ∈ {'C=Call','P=Put'})
3. Option Strike "$\mathbf{K_i}$"

6.a. Option Valuation ("$\mathbf{OptVal_{i,t}}$")

For each Portfolio Constituent "i" in respect of each Option Portfolio Business Day "t", the Option Valuation is determined as:

If the relevant Option Type is 'Call' then: $\mathbf{OptionVal_{i,t}} = \left(\mathbf{F_{i,t}} \times \mathbf{N}\left(\mathbf{d1}_{\boldsymbol{i,t}}\right) - \mathbf{K_i} \times \mathbf{N}\left(\mathbf{d2}_{\boldsymbol{i,t}}\right)\right) \times \boldsymbol{exp}\left(-\boldsymbol{ODR_t} \times \tau^{CD}_{ED_i,t}\right)$

If the relevant Option Type is 'Put' then: $\mathbf{OptionVal_{i,t}} = \left(\mathbf{K_i} \times \mathbf{N}\left(-\mathbf{d2_{i,t}}\right) - \mathbf{F_{i,t}} \times \mathbf{N}\left(-\mathbf{d1_{i,t}}\right)\right) \times \boldsymbol{exp}\left(-\boldsymbol{ODR_t} \times \tau^{CD}_{ED_i,t}\right)$

Where:

$$\mathrm{d1_{i,t}} = \frac{1}{\sigma_{i,t} \times \sqrt{\tau^{STD}_{ED_i,t}}} \times \left[\ln\left(\frac{\mathrm{F_{i,t}}}{\mathrm{K_i}}\right) + \frac{1}{2} \times \sigma^2_{i,t} \times \tau^{STD}_{ED_i,t}\right];$$

$$\mathrm{d2_{i,t}} = \mathrm{d1_{i,t}} - \sigma_{i,t} \times \sqrt{\tau^{STD}_{ED_i,t}};$$

"$\mathbf{F_{i,t}}$" means the implied forward corresponding to the Expiry Date of Portfolio Constituent "i" as of the Option Portfolio Business Day "t", as determined in accordance with the provisions herein; and
"$\boldsymbol{\sigma}_{\mathbf{i,t}}$" means the implied volatility level for the Strike and Expiry Date corresponding to Portfolio Constituent "i", as of Option Portfolio Business Day "t", as determined in accordance with the provisions herein; and

If on any Option Portfolio Business Day "t", the Calculation Agent is unable to determine the Option Valuation using the above methodology, then the Calculation Agent will determine the relevant Option Valuation on a best efforts basis in a commercially reasonable manner.

"$\mathbf{ODR_t}$" means the Option Discounting Rate in respect of the Option Portfolio Business Day "t".

6.b. Option Expiration Value ("$\mathbf{OptExpVal_i}$")

For each Portfolio Constituent "i" in respect of each Option Portfolio Business Day “t” that is also the expiry day for the relevant option, the Option Expiration Value is calculated as follows:

If the relevant Option Type is 'Call' then: $\mathbf{OptExpVal_i = max(0, USI_{i,t} - K_i)}$

If the relevant Option Type is 'Put' then: $\mathbf{OptExpVal_i = max(0, K_i - USI_{i,t})}$

Where:

"$\mathbf{USI_{i,t}}$" means, the value of the Underlying Settlement Index corresponding to Portfolio Constituent "i" as of Option Portfolio Business Day "t" which is also the Expiry Date for the relevant Portfolio Constituent "i".

6.c. Option Spread ("$\mathbf{OptSpread_{i,t}}$")

For each Portfolio Constituent "i" in respect of each Option Portfolio Business Day “t”, the Option Spread is calculated as:

$$\mathrm{OptSpread_{i,t}} = \mathrm{UI_{i,t}} \times \left(\max\left[\mathrm{OptCostFloor_i}, \max\left(\mathrm{VegaRatioMin_i}, \mathrm{VegaRatioScale_i} \times \frac{\sigma_{i,t}}{\mathrm{IV\ Barrier_i}}\right) \times \frac{\mathrm{Vega_{i,t}}}{100 \times \mathrm{UI_{i,t}}}\right]\right)$$

Where:

"$\mathbf{UI_{i,t}}$" means the Underlying Index Level corresponding to Portfolio Constituent "i" on the Option Portfolio Business Day “t”;

"$\mathbf{OptionCostFloor_i}$" is detailed for each Portfolio Constituent "i" in Table 2;

"$\mathbf{VegaRatioMin_i}$" is detailed for each Portfolio Constituent "i" in Table 2;

"$\mathbf{VegaRatioScale_i}$" is detailed for each Portfolio Constituent "i" in Table 2;

"$\mathbf{IV\ Barrier_i}$" means as detailed for each Portfolio Constituent "i" in Table 2; and

"$\mathbf{Vega_{i,t}}$" means the vega for Portfolio Constituent "i" on the Option Portfolio Business Day “t”, as determined in accordance with the provisions herein.

6.d. Option Vega ("$\mathbf{Vega_{i,t}}$")

For each Portfolio Constituent "i" in respect of each Option Portfolio Business Day “t”, the Option Vega is calculated as:

$$\mathrm{Vega_{i,t}} = \mathrm{UI_{i,t}} \times \exp(-\frac{NetCumDiv_{t,ED_i}}{\mathrm{UI_{i,t}}}) \times \mathrm{N'}(\mathrm{d1_{i,t}}) \times \sqrt{\tau^{STD}_{ED_i,t}}$$

Where:

$$\mathrm{d1_{i,t}} = \frac{1}{\sigma_{i,t} \times \sqrt{\tau^{STD}_{ED_i,t}}} \times \left[\ln\left(\frac{\mathrm{F_{i,t}}}{\mathrm{K_i}}\right) + \frac{1}{2} \times \sigma^2_{i,t} \times \tau^{STD}_{ED_i,t}\right];$$

$$\mathrm{d2_{i,t}} = \mathrm{d1_{i,t}} - \sigma_{i,t} \times \sqrt{\tau^{STD}_{ED_i,t}};$$

$NetCumDiv_{t,ED_i} = CumDiv_{t,ED_i} \times TaxAdjustmentMultiplier$

$CumDiv_{t,D} = \sum_{m=1}^{D} GrossDiv_m$ where D represents Calendar Days;

The $\mathrm{CumDiv_{t,D}}$ is calculated using the above formula for $\mathrm{D=ED_i}$;

"$\boldsymbol{GrossDiv_m}$" means gross dividend amount corresponding to Calendar Day m. The time series of the gross dividends (realized and forecasted) for the Underlying Index is as published by Bloomberg on such Option Portfolio Business Day “t” in the field INDX_GROSS_DAILY_DIV for the Underlying Index; and

"$\mathbf{TaxAdjustmentMultiplier}$" means Tax Adjustment Multiplier as provided in Table 1.

6.e. Relevant Near and Far Listed Expiry Dates

On each Option Portfolio Business Day "t" and for each Portfolio Constituent "i", the relevant Near and Far Listed Expiry Dates are determined as:

If the first available Listed Expiry Date falls on or after the relevant option Expiry Date then the first available Listed Expiry Date will be referred to as **"Near Expiry Date ($NED_{i,t}$)"** and immediately following Listed Expiry Date will be the **"Far Expiry Date ($FED_{i,t}$)"**.

Otherwise, two Listed Expiry Dates are selected corresponding to the two closest Listed Expiry Dates enclosing the relevant option Expiry Date, the nearer Listed Expiry Date being the **"Near Expiry Date ($NED_{i,t}$)"** and the farther Listed Expiry Date being the **"Far Expiry Date ($FED_{i,t}$)"**.

6.f. Relevant Target Strikes corresponding to Near and Far Expiry Dates

On each Option Portfolio Business Day "t" and for each Portfolio Constituent "i", the relevant Target Strike corresponding to Near Expiry Date "$\mathbf{K}_{i.t}^{Tgt,NED_{i,t}}$" and the relevant Target Strike corresponding to Far Expiry Date "$\mathbf{K}_{i.t}^{Tgt,FED_{i,t}}$" are determined as:

$$\mathbf{K}_{i.t}^{Tgt,NED_{i,t}} = \left(\mathbf{1} - \sqrt{STD(NED_{i,t}, t)} * \frac{(\mathbf{1} - \frac{K_i}{\mathbf{F}_{i,t}})}{\sqrt{STD(ED_i, t)}}\right) \times \mathbf{F}_t^{NED_{i,t}}$$

And

$$\mathbf{K}_{i.t}^{Tgt,FED_{i,t}} = \left(\mathbf{1} - \sqrt{STD(FED_{i,t}, t)} * \frac{(\mathbf{1} - \frac{K_i}{\mathbf{F}_{i,t}})}{\sqrt{STD(ED_i, t)}}\right) \times \mathbf{F}_t^{FED_{i,t}}$$

Where:

"$\mathbf{F}_t^{NED_{i,t}}$" means the implied forward corresponding to the '$NED_{i,t}$' as of the Option Portfolio Business Day "t";

"$\mathbf{F}_t^{FED_{i,t}}$" means the implied forward corresponding to the '$FED_{i,t}$' as of the Option Portfolio Business Day "t";and

The Target Strikes calculated above will be rounded to 2 decimal places.

6.g. Relevant Low and High Listed Strikes corresponding to Near and Far Expiry Dates

On each Option Portfolio Business Day "t" and for each Portfolio Constituent "i":

The Low Listed Strike for the Near Expiry Date: $\mathbf{K}_{i.t}^{Low,NED_{i,t}} = \mathbf{Nearest}^-(\mathbf{K}_{i.t}^{Tgt,NED_{i,t}}, \textbf{Listed Target Strike Interval}, \mathbf{Z}_{NED_{i,t},t-1})$;

The High Listed Strike for the Near Expiry Date: $\mathbf{K}_{i.t}^{High,NED_{i,t}} = \mathbf{Nearest}^+(\mathbf{K}_{i.t}^{Tgt,NED_{i,t}}, \textbf{Listed Target Strike Interval}, \mathbf{Z}_{NED_{i,t},t-1})$;

The Low Listed Strike for the Far Expiry Date: $\mathbf{K}_{i.t}^{Low,FED_{i,t}} = \mathbf{Nearest}^-(\mathbf{K}_{i.t}^{Tgt,FED_{i,t}}, \textbf{Listed Target Strike Interval}, \mathbf{Z}_{FED_{i,t},t-1})$;

The High Listed Strike for the Far Expiry Date: $\mathbf{K}_{\boldsymbol{i.t}}^{\boldsymbol{High,FED_{i,t}}} = \mathbf{Nearest}^{+}(\mathbf{K}_{\boldsymbol{i.t}}^{\boldsymbol{Tgt,FED_{i,t}}}, \textbf{Listed Target Strike Interval}, \mathbf{Z}_{\boldsymbol{FED_{i,t},t-1}});$

Where:

"$\mathbf{Z}_{\boldsymbol{NED_{i,t},t-1}}$" means, the set of all Listed Strikes corresponding to Listed Expiry Date '$NED_{i,t}$' as of the Option Portfolio Business Day immediately preceding the Option Portfolio Business Day 't'; and

"$\mathbf{Z}_{\boldsymbol{FED_{i,t},t-1}}$" means, the set of all Listed Strikes corresponding to Listed Expiry Date '$FED_{i,t}$' as of the Option Portfolio Business Day immediately preceding the Option Portfolio Business Day 't'.

6.h. Implied Forward corresponding to Portfolio Constituent "i"

On each Option Portfolio Business Day Day "t" and for each Portfolio Constituent "i", the relevant Implied Forward is determined as:

$$\boldsymbol{F_{i,t}} = \left(F_{NED_{i,t},t} + NetCumDiv_{t,NED_{i,t}}\right) \times \exp\left(ln\left(\frac{F_{FED_{i,t},t} + NetCumDiv_{t,FED_{i,t}}}{F_{NED_{i,t},t} + NetCumDiv_{t,NED_{i,t}}}\right) \times \frac{\mathrm{CD}(\mathrm{ED}_{i,t}, \mathrm{NED}_i)}{\mathrm{CD}(\mathrm{FED}_{i,t}, \mathrm{NED}_{i,t})}\right) - NetCumDiv_{t,ED_i}$$

Where:

$NetCumDiv_{t,ED_i} = CumDiv_{t,ED_i} \times TaxAdjustmentMultiplier$

$NetCumDiv_{t,NED_{i,t}} = CumDiv_{t,NED_{i,t}} \times TaxAdjustmentMultiplier$

$NetCumDiv_{t,FED_{i,t}} = CumDiv_{t,FED_{i,t}} \times TaxAdjustmentMultiplier$

$$CumDiv_{t,D} = \sum_{m=1}^{D} GrossDiv_m$$

D represents Calendar Days;

The $CumDiv_{t,D}$ is calculated using the above formula for D=$NED_{i,t}$; D=ED_i and D= $FED_{i,t}$;

"$\boldsymbol{GrossDiv_m}$" means gross dividend amount corresponding to Calendar Day m. The time series of the gross dividends (realized and forecasted) for the Underlying Index is as published by Bloomberg on such Option Portfolio Business Day "t" in the field INDX_GROSS_DAILY_DIV for the Underlying Index; and

"TaxAdjustmentMultiplier" means Tax Adjustment Multiplier as provided in Table 1.

6.i. Implied Volatility corresponding to Portfolio Constituent "i"

On each Option Portfolio Business Day "t" and for each Portfolio Constituent "i", the relevant Implied Volatility is determined as:

If the Near Expiry Date is on or after the Expiry Date corresponding to Portfolio Constituent 'i', then:

$\sigma_{i,t} = \sigma_{i,t}^{Tgt,NED}$

Otherwise:

$$\sigma_{i,t} = \sqrt{\left(\left(\sigma_{i,t}^{Tgt,NED_{i,t}}\right)^2 \times \tau_{NED_{i,t},t}^{STD} + \left[\left(\sigma_{i,t}^{Tgt,FED_{i,t}}\right)^2 \times \tau_{FED_{i,t},t}^{STD} - \left(\sigma_{i,t}^{Tgt,NED_{i,t}}\right)^2 \times \tau_{NED_{i,t},t}^{STD}\right] \times \frac{\mathrm{STD}(\mathrm{ED}_i, NED_{i,t})}{\mathrm{STD}(FED_{i,t}, NED_{i,t})}\right) \times \frac{STDCC}{\mathrm{STD}(\mathrm{ED}_i, \mathrm{t})}}$$

Where:

$$\boldsymbol{\sigma}_{i,t}^{Tgt,NED_{i,t}} = \boldsymbol{\sigma}_{NED_{i,t},K_{i,t}^{Low,NED_{i,t}}} + \left[\boldsymbol{\sigma}_{NED_{i,t},K_{i,t}^{High,NED_{i,t}}} - \boldsymbol{\sigma}_{NED_{i,t},K_{i,t}^{Low,NED_{i,t}}}\right] \times \frac{K_{i,t}^{Tgt,NED_{i,t}} - K_{i,t}^{Low,NED_{i,t}}}{K_{i,t}^{High,NED_{i,t}} - K_{i,t}^{Low,NED_{i,t}}};$$

$$\boldsymbol{\sigma}_{i,t}^{Tgt,FED_{i,t}} = \boldsymbol{\sigma}_{FED_{i,t},K_{i,t}^{Low,FED_{i,t}}} + \left[\boldsymbol{\sigma}_{FED_{i,t},K_{i,t}^{High,FED_{i,t}}} - \boldsymbol{\sigma}_{FED_{i,t},K_{i,t}^{Low,FED_{i,t}}}\right] \times \frac{K_{i,t}^{Tgt,FED_{i,t}} - K_{i,t}^{Low,FED_{i,t}}}{K_{i,t}^{High,FED_{i,t}} - K_{i,t}^{Low,FED_{i,t}}};$$

"$\boldsymbol{\sigma}_{NED_{i,t},K_{i,t}^{Low,NED_{i,t}}}$" means the implied volatility level for Strike '$K_{i,t}^{Low,NED_{i,t}}$' and Expiry Date '$NED_{i,t}$' corresponding to Portfolio Constituent "i", as of Option Portfolio Business Day "t", as determined in accordance with the provisions herein;

"$\boldsymbol{\sigma}_{NED_{i,t},K_{i,t}^{High,NED_{i,t}}}$" means the implied volatility level for Strike '$K_{i,t}^{High,NED_{i,t}}$' and Expiry Date '$NED_{i,t}$' corresponding to Portfolio Constituent "i", as of Option Portfolio Business Day "t", as determined in accordance with the provisions herein;

"$\boldsymbol{\sigma}_{FED_{i,t},K_{i,t}^{Low,FED_{i,t}}}$" means the implied volatility level for the Strike '$K_{i,t}^{Low,FED_{i,t}}$' and Expiry Date '$FED_{i,t}$' corresponding to Portfolio Constituent "i", as of Option Portfolio Business Day "t", as determined in accordance with the provisions herein; and

"$\boldsymbol{\sigma}_{FED_{i,t},K_{i,t}^{High,FED_{i,t}}}$" means the implied volatility level for the Strike '$K_{i,t}^{High,FED_{i,t}}$' and Expiry Date '$FED_{i,t}$' corresponding to Portfolio Constituent "i", as of Option Portfolio Business Day "t", as determined in accordance with the provisions herein.

7. Calculation of parameters corresponding to each Listed Option

a. Nearest ATM listed strikes corresponding to each Listed Expiry Date

On each Option Portfolio Business Day "t" and for each Listed Expiry Date "j", the closest at-the-money strikes $K_{j,t}^{ATM+}$ and $K_{j,t}^{ATM-}$ are determined as:

> $K_{j,t}^{ATM+}$ is the Listed Strike corresponding to Listed Expiry Date 'j' for which the difference in the Listed Option Valuation corresponding to this Listed Strike for Option Type 'Put' minus Option Type 'Call' is the least positive amount (i.e. it must be strictly positive)

and:

> $K_{j,t}^{ATM-}$ is the Listed Strike corresponding to Listed Expiry Date 'j' for which the difference in the Listed Option Valuation corresponding to this Listed Strike for Option Type 'Call' minus Option Type 'Put' is the least non-negative amount (i.e. it may be exactly zero)

b. Box rate corresponding to each Listed Expiry Date

On each Option Portfolio Business Day "t" and for each Listed Expiry Date "j", the box rate $r_{j,t}^{box}$ is determined as:

$$r_{j,t}^{box} = -Ln\left\{\frac{\left(LOptVal_t^{j,C,K_{j,t}^{ATM-}}, - LOptVal_t^{j,P,K_{j,t}^{ATM-}}\right) - \left(LOptVal_t^{j,C,K_{j,t}^{ATM+}}, - LOptVal_t^{j,P,K_{j,t}^{ATM+}}\right)}{K_{j,t}^{ATM+} - K_{j,t}^{ATM-}}\right\} \times \frac{1}{\tau_{j,t}^{CD}}$$

Where:

"$LOptVal_t^{j,X,K}$" means Listed Option Valuation as of the current Option Portfolio Business Day “t” for an option with option expiry date 'J', Option Type 'X' (where X∈ {'C=Call','P=Put'}) and option strike 'K', as determined in accordance with the provisions herein.

c. Implied forward corresponding to each Listed Expiry Date

On each Option Portfolio Business Day “t” and for each Listed Expiry Date "j", the implied forward $F_{j,t}$ is determined as:

$$F_{j,t} = K_{j,t}^{ATM+} + \left(LOptVal_t^{j,C,K_{j,t}^{ATM+}} - LOptVal_t^{j,P,K_{j,t}^{ATM+}}\right) \times exp\left(r_{j,t}^{box} \times \tau_{j,t}^{CD}\right)$$

d. Implied volatility corresponding to each Listed Strike

On each Option Portfolio Business Day “t”, for each Listed Expiry Date "j" and for each Listed Strike 'K' the implied volatility $\boldsymbol{\sigma}_{j,K,t}$ is determined by minimising the following objective function by using the NAG nag_opt_one_var_deriv (E04BBC) optimization function:

If $F_{j,t} \leq K$: $\left|BS_t^{j,C,K} - LOptVal_t^{j,C,K}\right|$

Else if $F_{j,t} > K$: $\left|BS_t^{j,P,K} - LOptVal_t^{j,P,K}\right|$

Subject to following constraints:

1. Relative/Absolute accuracy: 1e-12
2. $0.5\% \leq \boldsymbol{\sigma} \leq \mathbf{500}\%$
3. Maximum number of iterations: 150

Where:

$$BS_t^{j,C,K} = \exp\left(-r_{j,t}^{box} \times \tau_{j,t}^{CD}\right) \times \left(F_{j,t} \times N\left(d1_{j,t}\right) - K \times N\left(d2_{j,t}\right)\right);$$

$$BS_t^{j,P,K} = \exp\left(-r_{j,t}^{box} \times \tau_{j,t}^{CD}\right) \times \left(K \times N\left(-d2_{j,t}\right) - F_{j,t} \times N\left(-d1_{j,t}\right)\right);$$

$$d1_{j,t} = \frac{1}{\sigma \times \sqrt{\tau_{j,t}^{STD}}}\left[\ln\left(\frac{F_{j,t}}{K}\right) + \frac{1}{2} \times \sigma^2 \times \tau_{j,t}^{STD}\right];$$

$$d2_{j,t} = d1_{j,t} - \sigma \times \sqrt{\tau_{j,t}^{STD}};$$

Where:

"σ" means the current input implied volatility during the optimizing process.

e. Listed Option Valuation

On any Option Portfolio Business Day “t”, the Listed Option Valuation (**"$LOptVal_t^{J,X,K}$"**) for an option with option expiry date 'J', Option Type 'X' (where X∈ {'C=Call','P=Put'}) and option strike 'K' is equal to the Option Settlement Price of the corresponding option as of that Option Portfolio Business Day “t”.

If on any Option Portfolio Business Day “t”, the Calculation Agent is unable to determine the Option Valuation using the above methodology, then the Calculation Agent will determine the relevant Option Valuation on a best efforts basis in a commercially reasonable manner.

ANNEX 2

i	Strike in EUR	Option Type	Option Maturity Date	Option Unit	Option Valuation
1	3397.58	Put	07/10/2019	-0.0137247222578471	4.2402031679051
2	3407.81	Put	08/10/2019	-0.0136853120921095	10.8412995082014
3	3407.64	Put	09/10/2019	-0.0136855971404385	14.9740824499379
4	3411.52	Put	10/10/2019	-0.0136701760789106	19.6944672052258
5	3428.9	Put	11/10/2019	-0.0136028090552198	29.1863072175023
6	3450.39	Put	14/10/2019	-0.0135252180560608	41.6357536390319
7	3461.36	Put	15/10/2019	-0.0134861911189747	50.0298713984689
8	3430.49	Put	16/10/2019	-0.0135984724095280	38.6688505760501
9	3433.23	Put	17/10/2019	-0.0135862608618334	42.3375974417192
10	3439.84	Put	18/10/2019	-0.0135656461402312	47.5489430227734
11	3463.83	Put	21/10/2019	-0.0134807951386200	60.9053321323860
12	3482.11	Put	22/10/2019	-0.0134157726766061	72.6093287741918
13	3448.55	Put	23/10/2019	-0.0135347456644719	57.3196264968015
14	3443.75	Put	24/10/2019	-0.0135506857701257	57.0062661244644
15	3425.2	Put	25/10/2019	-0.0136052229031118	51.1950024272482
16	3443.88	Put	28/10/2019	-0.0135516048161957	60.7029985593518
17	3457.23	Put	29/10/2019	-0.0135120104112507	68.3900718950254
18	3480.21	Put	30/10/2019	-0.0134369914937739	82.2918768269586
19	3430.29	Put	31/10/2019	-0.0136050824927565	60.9594263808200
20	3327.98	Put	01/11/2019	-0.0138833992433647	31.9831809617823
21	3331.94	Put	04/11/2019	-0.0138712599516581	34.1906130810365