ANNEX V

‘ANNEX V

MARKET RISK BENCHMARK INSTRUMENTS AND PORTFOLIOS

[*The page numbers in this table of contents will not reflect the correct page numbers in the OJ. Therefore, please delete or refer to numbered subdivisions instead.*]

Section 1: Instructions

(a) For the purposes of this Annex, the following shall apply:

(i) 'booking date' means the date and time on which institutions book the transactions for the purposes of the benchmarking exercise;
(ii) 'Initial Market Valuation (IMV)' means the marked-to-market value of the instruments referred to in Section 2 of this Annex, at the IMV reference date and time;
(iii) 'IMV reference date' means the date and time with reference to which institutions shall determine the IMV of the transactions in the benchmarking portfolio;
(iv) 'IMV remittance date' means the date by which institutions shall submit the results of the IMV of the transactions in the benchmarking portfolio;
(v) 'VaR' means the Value at Risk;
(vi) 'sVaR' means the Stressed Value at Risk;
(vii) 'IRC' means the Incremental Risk Charge;
(viii) 'CTP' means the Correlation Trading Portfolio;
(ix) 'APR' means the All Price Risk calculated in accordance with Article 377(2) of Regulation (EU) No 575/2013;
(x) 'Risk Measures' (RM) means the value of the VaR, sVaR, and when required IRC and APR for the portfolios, as set out in Section3 of this Annex, between the RM initial and RM final reference date;
(xi) 'RM initial reference date' means the date on which institutions shall start to compute the RM values;
(xii) 'RM final reference date' means the date on which institutions shall finish to compute the RM values;
(xiii) 'RM remittance date' means the date by which institutions shall submit the results of the RM of the transactions in the benchmarking portfolio;
(xiv) 'Present Value (PV)' means the marked-to-market value of the portfolios, set out in Section 3 of this Annex, at the RM final reference date;
(xv) 'ATM' means 'At The Money' in terms of the relative position of the current or future price of a derivative's underlying asset with respect to the strike price of that derivative;
(xvi) 'OTM' means 'Out of The Money' in terms of the relative position of the current or future price of a derivative's underlying asset with respect to the strike price of that derivative;
(xvii) 'ITM' means 'In The Money' in terms of the relative position of the current or future price of a derivative's underlying asset with respect to the strike price of that derivative;
(xviii) 'long' means 'bought' and 'short' means 'sold';
(xix) 'CDS' means Credit Default Swaps;
(xx) for CDS, 'long' means 'bought protection' and 'short' means 'sold protection';
(xxi) 'MLN' means millions;
(xxii) 'OTC' means Over-The-Counter;
(xxiii) 'SBM' means the Sensitivities-Based Method as referred to in Part Three, Title IV, Chapter 1a, Section 2 of Regulation (EU) No 575/2013.

(b) The following dates shall apply for the 'benchmarking' exercise:

(i) the booking date shall be 15 September 2022;
(ii) the IMV (and initial SBM) reference date shall be 22 September 2022 (at 5:30 pm CET);
(iii) the IMV (and initial SBM) remittance date shall be 4 October 2022;
(iv) the RM initial reference date shall be 16 January 2023;

(v) the RM (and final SBM) final reference date shall be 27 January 2023;
(vi) the RM (and final SBM) remittance date shall be 24 February 2023.

(c) Unless explicitly specified otherwise in Section 2 of this Annex, all positions shall be booked on the booking date referred to in point (b)(i) of this Section. Once positions have been booked, each portfolio shall age for the duration of the benchmarking exercise and shall be calculated under the assumption that the institution does not take any action to manage the portfolio in any way during the entire period of the benchmarking exercise. Unless explicitly stated otherwise in the specifications for a particular instrument, strike prices for option positions shall be determined relative to prices for the underlying as observed at market close on the booking date.

(d) For the purposes of the initial market valuation, the valuation of each instrument shall be submitted to the institution's competent authority by the IMV remittance date. By that date, the institution shall submit an explanatory note accompanying the results, in accordance with point (e). IMV shall be provided in accordance with the institution's front office valuation, where possible. In case IMVs are not provided by the institution's front office, the institution shall specify in the explanatory note who is the IMV data source provider.

(e) The explanatory note that institutions are to submit together with the IMV shall include all of the following for each instrument:

(i) the risk factors used to calculate the instrument's IMV;
(ii) the pricing model used to calculate the instrument's IMV and a description of this pricing model;
(iii) the risk factors included in the VaR model for the instrument;
(iv) the risk factors included in the VaR model that are also valuation inputs for the IMV of the instrument;
(v) the VaR model specifics in relation to the instrument;
(vi) available reference data for the instrument in the institution's own format;
(vii) the aspects referred to in points (h), (i), (l), (n), (o), (p), (w), (x), (z), (hh) and (ll) of this Section.

(f) For the purposes of point (e), sub point (v), all of the following shall be reported:

(i) concise VaR model descriptions;
(ii) revaluation methods applied;
(iii) functional form applied for modelling of returns (such as absolute, relatives, other methods;
(iv) qualitative information on the time series used to calibrate the VaR model in relation to the instrument (such as source, methodology for normalisation, buckets applied, other information deemed relevant by the institutions to explain the results provided).

(g) The explanatory note referred to in point (d) shall be updated with each resubmission of any value, reflecting the changes between submissions. The explanatory note shall contain one section which lists all submission dates and the reasons for resubmissions.

(h) The risks of the positions shall be calculated without taking into account the funding costs. Where applicable, institutions shall use the overnight rate of the instrument currency as the discount rate. Collateral agreement shall be considered in place for the derivatives instruments referred to in Section 2 of this Annex. Where that is not possible, reasons shall be provided in the explanatory note referred to in point (d).

(i) Counterparty credit risk and credit valuation adjustment ('CVA') risk shall not be taken into account in the valuation of the risks of the portfolios. Where that is not possible, reasons shall be provided in the explanatory note referred to in point (d) of this Section. Institutions shall report cases where other typologies of Valuation Adjustments are included in the IMV and explain for each financial instrument the methodology and the impact in the explanatory note referred to in point (d) of this Section.

(j) The 10-day 99% VaR shall be calculated on a daily basis. sVaR and the IRC may be calculated on a weekly basis. The sVaR and IRC shall be based on end-of-day prices for each Friday in the time window of the benchmarking exercise.

(k) For transactions that include long positions in CDS, institutions shall assume an immediate up-front fee is paid to enter the position as per the market standards and conventions. The maturity date for all CDS shall correspond to conventional quarterly termination dates.

(l) Additional specifications needed in order to carry out pricing calculations required for CDS positions shall be consistent with commonly used market standards and conventions and shall be explained in the explanatory note referred to in point (d) of this Section.

(m) The maturity date shall ensure that the transaction is closest to the term-to-maturity specified in accordance with market standards and conventions.

(n) With respect to the details of instruments not referred to in Section 2 of this Annex, institutions shall provide the assumptions that have been used, including the day count convention and the choice for a tradable and liquid instrument, where permitted, along with the results in the explanatory note referred to in point (d) of this Section.

(o) Institutions that believe that assumptions in addition to those specified in this Section are relevant to the interpretation of the results of its exercise, including close of business timing, coupon rolls, mapping against indices and others, shall submit a description of those assumptions in the explanatory note referred to in point (d) of this Section.

(p) The explanatory note referred to in point (d) of this Section shall include explanations for risks not captured by the model for the instruments referred to in Section 2 of this Annex.

(q) All options shall be treated as if they are traded OTC, unless explicitly specified otherwise.

(r) The standard timing conventions for OTC options shall be followed. The time to maturity for an 'n-month' option shall be in n months. Where options expire on a non-trading day, institutions shall adjust the expiration date per business date, in accordance with market standards and conventions.

(s) All OTC options shall be treated as follows:

  (i) as American for single name equities and commodities;

  (ii) as European for equity indices, foreign exchange and swaptions.

(t) All OTC options shall be considered 'naked' so that the premium shall be excluded from the initial market valuation.

(u) Regarding the CTPs, institutions that have permission to use the APR model for CTPs shall provide details about their most relevant assumptions, market standards and conventions

regarding the CTP instruments referred to in Section 2 of this Annex, including the hedge ratios they have calculated to make the CTP instruments CS01 neutral at the booking date.

(v) The IMV for each instrument shall be provided in the base currency specified in Section 2 of this Annex for that instrument.

(w) For positions denominated in a common base currency but composed of one or more instruments denominated in a different currency, the result shall be converted into the reported base currency of the portfolio, using the appropriate foreign exchange spot rate as per standard market practice. The converted result shall be explained in the explanatory note referred to in point (d) of this Section.

(x) When booking positions, institutions shall follow appropriate market conventions, unless otherwise specified in these instructions in the Instruments descriptions (Section 2 of this Annex).

(y) Where an instrument, or the underlying instrument for a derivative, is subject to a corporate action that affects the benchmarking exercise, such as a call from the issuer, a default or similar actions, institutions shall exclude such instrument from the exercise together with any related CDS or option.

(z) With regard to an index series, 'on-the-run' shall refer to the most liquid and tradable series of that index available in the market. Institutions shall explain their choice of 'on-the-run' series along with the related results in the accompanying explanatory note referred to in point (d) of this Section.

(aa) Where necessary, institutions shall apply the EU Benchmarks Regulation for the interest rate in order to substitute the reference rate ('EURIBOR') and ('LIBOR') stated in Section 2 of this Annex. Institutions shall specify the alternative rate they use instead of the reference rate ('EURIBOR') and ('LIBOR') in the explanatory note referred to in point (d) of these instructions.

(bb) Risk measures for the portfolios referred to in Section 3 and Section 4 of this Annex, together with the Present Value, shall be computed from the 'RM initial reference date' to the 'RM final reference date'. 'SBM' shall be computed for the 'RM final reference date'. Institutions shall submit the results of those calculations to their competent authority by RM remittance date.

(cc) IMV and SBM shall be reported for each instrument. Risk measures, SBM and Present Value, where applicable, shall be reported for each portfolio, both individual and aggregated. All results shall be reported with respect to the base currency.

(dd) Only institutions which have been granted permission to model specific risk shall report credit spread portfolios. For interest rate portfolios which include risk as part of certain instruments, individual and aggregated portfolios shall be modelled by institutions which have been granted the permission to model the general interest risk as well as institutions which have been granted the permission to model the general and the specific interest risk.

(ee) The results for both individual and the aggregated portfolios shall be submitted only where the results of the instruments that are part of them are also being submitted.

(ff) In Section 2 of this Annex (Instruments) 'Year T' shall mean '2023' and Year T + X shall mean 2023 + X, with X as specified in Section 2.

(gg) In Section 2 of this Annex (Instruments), institutions shall determine the day of expiry/maturity in accordance with the following instructions:

(i) Where the date is specified, that specific date shall be used;
(ii) Where no date is specified, market convention, where available, shall be used. If for example there is a market convention that the day of expiry/maturity is the 3rd Friday of the month, then 'June Year T' shall mean the 3rd Friday of the month of the year T;
(iii) At the end of the month, where it is specified 'End of', it shall mean the last calendar day in the month;
(iv) For a fix period of time following the 'booking date', if the period is defined as a number of days, it is the last day of the period. If the period is defined in weeks, months or years, it is the same day of the following week, month or year with respect to the booking date, or, if the last month or year of the period is shorter, the last day of that month or year; if the 'booking date + x period' is a holiday day, then select the following working day;
(v) In case it is not specified otherwise the following assumptions shall be used: Day count convention: Act/360, Holiday calendar: Target2.

(hh) In Section 2 of this Annex (Instruments), for all CDS, unless explicitly specified otherwise, the following requirements shall apply:

(i) Coupon frequency: Quarterly;
(ii) Coupon(bps): 100;
(iii) Day count: ACT/360;
(iv) ISDA Definitions year: 2014;
(v) Restructuring clause: Modified-Modified Restructuring (MMR);
(vi) Maturity: December Year T+4;
(vii) Debt type: Senior;
(viii) Tenor: 5 Year;
(ix) Effective date as booking date;
(x) The used discount curve and recovery rate shall be indicated in the explanatory note referred to in point (d) of this Annex.

(ii) The IMV for an index future shall be reported as the market price at the IMV reference date, multiplied by the number of contracts.

(jj) For Credit Spread Instruments, instruments 52-67 and 69, as referred to in Section 2 of this Annex, standard ISDA definitions and standard restructuring clauses shall apply.

(kk) Institutions shall provide the information related to the time of valuation of the PV mentioning the time in the explanatory note referred to in point (d) of this Section. Where possible, valuation of the PV shall be computed at close of business day.

(ll) The risk measures of the portfolios shall be calculated in the same currency of the portfolio currency, not including any FX Risk, also related to the reporting currency of the institutions. The FX Risk shall be considered only when intrinsically included in the instruments.

Section 2: Instruments

Institutions shall provide IMV, in accordance with the instructions laid down in Section 1 of this Annex, for the following financial instruments:

EQUITY

101. Long 1 000 EURO STOXX 50 index (Ticker: SX5E) Futures.
Exchange: Eurex
Expiry date: June Year T
Base currency: EUR

102. Long 10 000 BAYER (Ticker: BAYN GR) shares.
Exchange: Xetra
Base currency: EUR

103. Short 1 000 Futures BAYER (Ticker: BAYN GR).
Exchange: Eurex
Expiry date: June Year T
Base currency: EUR

104. Short 1 000 Futures, STELLANTIS (Ticker: STLA FP).
Exchange: Euronext
Expiry date: June Year T
Base currency: EUR

105. Short 1 000 Futures, ALLIANZ (Ticker: ALV GR).
Exchange: Eurex
Expiry date: June Year T
Base currency: EUR

106. Short 1 000 Futures BARCLAYS (Ticker: BARC LN).
Exchange: Eurex
Expiry date: June Year T
Base currency: GBP

107. Short 1 000 Futures DEUTSCHE BANK (Ticker: DBK GR).
Exchange: Eurex
Expiry date: June Year T
Base currency: EUR

108. Short 1 000 Futures CRÉDIT AGRICOLE (Ticker: ACA FP).
Exchange: Euronext
Expiry date: June Year T
Base currency: EUR

109. Long 100 Call Options. Underlying BAYER (Ticker: BAYN GR), ATM (1 contract = 100 shares).
Expiry date: June Year T
Base currency: EUR

110. Short 100 Call Options. Underlying BAYER (Ticker: BAYN GR), ATM (1 contract = 100 shares).
Expiry date: December Year T
Base currency: EUR

111. Long 100 Call Options. Underlying PFIZER (Ticker PFE US) 10% OTM, (1 contract = 100 shares).
Expiry date: June Year T
Base currency: USD

112. Long 100 Put Options. Underlying PFIZER (Ticker PFE US) 10% OTM, (1 contract = 100 shares).
Expiry date: June Year T
Base currency: USD

113. Long 100 Call Options. Underlying BAYER (Ticker: BAYN GR), 10% OTM (1 contract = 100 shares).
Expiry date: December Year T
Base currency: EUR

114. Short 100 Call Options. Underlying BAYER (Ticker: BAYN GR), 10% OTM (1 contract = 100 shares).
Expiry date: June Year T
Base currency: EUR

115. Long 100 Call Options. Underlying AVIVA (Ticker: AV/LN), 10% OTM (1 contract = 100 shares).
Expiry date: December Year T
Base currency: GBP

116. Long 100 Put Options. Underlying AVIVA (Ticker: AV/LN), 10% OTM (1 contract = 100 shares).
Expiry date: December Year T
Base currency: GBP

117. Short 1 000 Futures NIKKEI 225 (Ticker NKY).
Exchange: CME
Expiry date: 11 June Year T
Base currency: JPY

118. Auto-callable Equity product
Long position
Booking on 'Booking date'
Notional amount ('Capital'): EUR 1 000 000
Underlying: Index EURO STOXX 50 (Ticker: SX5E)
Base currency: EUR
Maturity: 5 years
Annual Pay-out and annual observation ('Booking date + 1 year', 'Booking date + 2 years', 'Booking date + 3 years', 'Booking date + 4 years', 'Booking date + 5 years'). Pay-out occurs 10 days after reference date.
Coupon: 6%
Autocall level ('Initial value'): End of day Booking date + 1 month
Barrier coupon payment 60% of autocall level
Protection barrier: 55% of autocall level
- Capital not guaranteed if the index is below the protection barrier (capital returned on year 5 will be pro-rata where the level is below the protection barrier: for instance, if the SX5E = 40% of its initial level then the capital returned is 40%);

- If SX5E ≥ 60% (barrier coupon) of initial value at the end of any year, then the coupon paid out is 6%;
- If SX5E ≥ 100% of initial value at the end of any year, then the product is called and the pay out is the coupon plus the capital (100%);
- If SX5E < 60% (barrier coupon) of initial value at the end of any year, then no coupon is paid;
- If SX5E < 55% (protection barrier) of initial value at the end of year 5, then the capital is only paid pro-rata. Else if SX5E>= 55% (protection barrier) of initial value at the end of year 5, then the capital is fully paid.

119. Long 100 Call Options. Underlying EURO STOXX 50 index (Ticker: SX5E), ATM.
Notional: EUR 1 000 000
Expiry date: June Year T
Base currency: EUR

120. Long 100 Call Options. Underlying EURO STOXX 600 index (Ticker: SXXP), ATM.
Notional: EUR 1 000 000
Expiry date: June Year T
Base currency: EUR

121. Long 20 000 Call Options. Underlying VIX (CBOE), ATM (VIX contract multiplier $100).
Expiry date: June Year T
Base currency: USD

122. Long Capped index variance swap. Underlying EURO STOXX 50 index (Ticker: SX5E), ATM.
Notional: EUR 1 000 000
Base currency: EUR

123. Long Total Return Swap 20 000 BAYER (Ticker: BAYN GR) shares. (Long Default)
Expiry date: June Year T
Pay 1 000 000 EURIBOR - 20 bps on ACT/360-day count, and receive price return and dividend (@ 85% withholding tax rate) on a monthly basis
Swap is accrual valued in risk book
Fixing monthly interest upfront T-2 Euribor fixing convention from Accrual start date
Base currency: EUR

124. Short 20 000 BAYER (Ticker: BAYN GR) shares.
Exchange: Xetra
Base currency: EUR

IR

201. 5-year IRS EUR – Receive fixed rate and pay floating rate
Fixed leg: receive annually
Floating rate: 3-month EURIBOR, pay quarterly
Notional: EUR 10 000 000
Roll convention and calendar: standard

Effective date as booking date (i.e. the rates to be used shall be those at the market close as of the booking date)
Maturity: September Year T+4.
Base currency: EUR

202. Two-year EUR swaption on 5-year interest rate swap.
Notional: EUR 10 000 000.
The institution is the seller of the option on the swap. The counterparty of the institution buys the right to enter a swap with the institution; if the counterparty exercises its right, the counterparty shall receive the fixed rate while the institution shall receive the floating rate.
Swaption with maturity of two years (Booking date + 2 years) on IRS defined in instrument n. 2001
Maturity of the underlying swap: Booking date + 7 years
Premium paid at the booking date (Booking date). Cash settled
The strike price is based on the IRS rate defined in instrument n. 2001 (i.e. the strike price is the fixed rate as IRS defined in instrument n. 2001)
Base currency: EUR

203. 5-year IRS USD. Receive fixed rate and pay floating rate.
Fixed rate: receive annually
Floating rate: 3-month USD LIBOR rate, pay quarterly
Notional: USD 10 000 000
Roll convention and calendar: standard
Effective date as booking date (i.e. the rates to be used shall be those at the market close as of the booking date)
Maturity date: September Year T+4.
Base currency: USD

204. 2-year IRS GBP. Receive fixed rate and pay floating rate.
Fixed rate: receive annually
Floating rate: 3-month GBP LIBOR rate, pay quarterly
Notional: GBP 10 000 000
Roll convention and calendar: standard
Effective date as booking date (i.e. the rates to be used shall be those at the market close as of the booking date)
Maturity: Booking date + 2 years
Base currency GBP

205. Collared 10y floating rate note sold by UBS
Notional (Principal) Amount: USD 1 000 000.
Floating Rate Notes (the 'Notes') are senior unsecured obligations of UBS AG ('UBS').

- The Notes shall bear interest at a per annum rate equal to USD 3-Month LIBOR plus 1.5% per annum (the 'Floating Interest Rate'), subject to a maximum interest rate of 7.5% per annum (the 'Interest Rate Cap') and a minimum interest rate of 2.5% per annum (the 'Interest Rate Floor').
- Any payment on the Notes, including interest and principal at maturity, shall be subject to the creditworthiness of UBS AG. Institutions are asked to use an appropriate discounting curve, motivating that in the explanatory note.
- Income: The Notes will pay interest quarterly at a rate equal to the Floating Interest Rate, provided that if on any Coupon Determination Date (i) the Floating Interest Rate is less than the Interest

Rate Floor, then the applicable interest rate for the related Interest Period will be equal to the Interest Rate Floor, or (ii) the Floating Interest Rate is greater than the Interest Rate Cap, then the applicable interest rate for the related Interest Period will be equal to the Interest Rate Cap.

Interest Payment Amount	The amount of interest to be paid on the Notes for an Interest Period shall be equal to the product of (a) the principal amount of the Notes, (b) the Applicable Interest Rate for that Interest Period and (c) a fraction, the numerator of which is the number of days in the Interest Period (calculated on the basis of a 360-day year of twelve 30-day months) and the denominator of which is 360.
Trade and Settlement Date	'Booking date'
Interest Payment Dates	Quarterly, on the Booking date + 3 months, Booking date + 6 months, Booking date + 9 months and Booking date + 1 year, commencing on Booking date + 3 months, during the term of the Notes (subject to adjustments, as described herein).
Maturity Date	Booking date + 10 years
Currency	USD
Daycount Basis	30/360
Business Day Convention	Following Unadjusted
Coupon Determination Date	For each Interest Period, the second London Banking day immediately preceding the relevant Interest Date. 'London Banking Day' means any day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London and on which dealings in U.S. dollars are transacted in the London interbank market.

206. Long GERMANY GOVT EUR 1 000 000 (ISIN DE0001030583)
Maturity: 15 April 2033
Base currency: EUR

207. Short GERMANY GOVT EUR 1 000 000 (ISIN DE0001135044)
Maturity: 4 July 2027
Base currency: EUR

208. Long ITALY GOVT EUR 1 000 000 (ISIN IT0005138828)
Maturity: 15 September 2032
Base currency: EUR

209. Long ITALY GOVT EUR 1 000 000 (ISIN IT0005210650)
Maturity: 1 December 2026
Base currency: EUR

210. Long SPAIN GOVT EUR 1 000 000 (ISIN ES00000127A2)
Maturity: 30 July 2030
Base currency: EUR

211. Short FRANCE GOVT EUR 1 000 000 (ISIN FR0012993103)
Maturity: 25 May 2031
Base currency: EUR

212. Short GERMANY GOVT EUR 1 000 000 (ISIN DE0001135176)
Maturity: 4 January 2031

Base currency: EUR

213. Long UNITED KINGDOM GOVT GBP 1 000 000 (ISIN GB0004893086)
Maturity: 7 June 2032
Base currency: GBP

214. Long PORTUGAL GOVT EUR 1 000 000 (ISIN PTOTEXOE0024)
Maturity: 15 June 2029
Base currency: EUR

215. Short UNITED STATES GOVT USD 1 000 000 (ISIN US9128283F58)
Maturity: 15 November 2027
Base currency USD

216. Long BRAZIL GOVT 1 000 000 USD (ISIN US105756BZ27)
Maturity: 13 January 2028
Base currency: USD

217. Long MEXICO GOVT 1 000 000 USD (ISIN US91087BAC46)
Maturity: 28 March 2027
Base currency USD

218. 10-year IRS EURO – Receive floating rate and pay fixed rate.
Fixed leg: pay annually
Floating rate: 3-month EURIBOR, receive quarterly
Notional: EUR 10 000 000
Roll convention and calendar: standard
Effective date as the booking date (i.e. rates to be used are those at the market close on booking date)
Maturity: Booking date + 10 years
Base currency: EUR

219. 5-year IRS EURO – Receive floating rate and pay fixed rate.
Fixed leg: pay annually
Floating rate: 6-month EURIBOR, receive every 6 months
Notional: EUR 10 000 000
Roll convention and calendar: standard
Effective date as the booking date (i.e. rates to be used are those at the market close on booking date)
Maturity: Booking date + 5 years
Base currency: EUR

220. 5-year Mark to Market (MtM) Cross Currency EUR/USD SWAP. Receive USD and pay EUR.
EUR: 3-month EURIBOR, pay quarterly
USD: 3-month USD LIBOR rate, receive quarterly
Notional EUR 10 000 000 adjusted on a quarterly basis
Roll convention and calendar: standard
Effective date as booking date
Maturity: Booking date + 5 years
Base currency: EUR
See also Section 5 of this Annex – Instrument additional specifications

221. 10-year IRS EURO – Receive ESTER and pay floating rate
ESTER leg: receive annually
Floating rate: 3-month EURIBOR + Basis, pay quarterly
Notional: EUR 10 000 000
Roll convention and calendar: standard
Effective date as booking date (i.e. the rates to be used shall be those at the market close as of the booking date)
Maturity: September Year T + 9 years.
Base currency: EUR

222. Long ITALY GOVT EUR 1 000 000 (ISIN IT0005387052)
Maturity: 15 May 2030
Base currency: EUR

223. 5-year Zero Coupon Inflation swap EUR – Receive Inflation indexed return and pay fixed rate (r)
Inflation Index: CPI (HICPxT)
Fixed leg (Pay fixed): $[(1+r)^5 - 1]$
Rec Inflation indexed return: $[(\frac{CPI \text{ at the end (maturity) date}}{CPI \text{ at the start date}}) - 1]$
Notional: EUR 10 000 000
Base fixing date: August Year T
Final Fixing: August Year T+4
Maturity: September Year T+4.

224. Two-year EUR swaption on 5-year interest rate swap.
Notional: EUR 10 000 000.
The institution is the seller of the option on the swap. The counterparty of the institution buys the right to enter a swap with the institution; if the counterparty exercises its right, the counterparty shall receive the fixed rate while the institution shall receive the floating rate.
Swaption with maturity of two years (Booking date + 2 years) on IRS defined in instrument n. 2019
Maturity of the underlying swap: Booking date + 7 years
Premium paid at the booking date (Booking date). Cash settled
The strike price is based on the IRS rate defined in instrument n. 2019 + 100 bps (i.e. the strike price is the fixed rate as IRS defined in instrument n. 2019)
Base currency: EUR

FX

301. 6-month USD/EUR forward contract. Cash settled. Long USD – Short EUR; Notional USD 10 000 000; EUR/USD ECB reference spot rate as of end of the booking date.
Base currency: EUR

302. 6-month EUR/GBP forward contract. Cash settled. Long EUR – Short GBP; Notional 10 000 000 GBP; EUR/GBP ECB reference spot rate as of end of the booking date.

Base currency: EUR

303. Long 1 000 000 USD Cash.
Cash position
Base currency: EUR

304. Long Call option. EUR 10 000 000. Equivalent amount based on EUR/USD ECB reference spot rate as of end of the booking date
Strike price: 110% of EUR/USD ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

305. Long Call option. EUR 10 000 000. Equivalent amount based on EUR/USD ECB reference spot rate as of end of the booking date
Strike price: 90% of EUR/USD ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

306. Short Call option. EUR 10 000 000. Equivalent amount based on EUR/USD ECB reference spot rate as of end of the booking date
Strike price: 100% of EUR/USD ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

307. Short Call option. EUR 10 000 000. Equivalent amount based on EUR/GBP ECB reference spot rate as of end of the booking date
Strike price: 110% of EUR/GBP ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

308. Long Put option. EUR 10 000 000. Equivalent amount based on EUR/JPY ECB reference spot rate as of end of the booking date
Strike price: 110% of EUR/JPY ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

309. Short Put option. EUR 10 000 000. Equivalent amount based on EUR/AUD ECB reference spot rate as of end of the booking date
Strike price: 110% of EUR/AUD ECB reference rate as of end of the booking date
Expiry date: Booking date + 1 year
Base currency: EUR

310. 6-month EUR/DKK forward contract. Cash settled. Long EUR – Short DKK; Notional EUR 10 000 000; EUR/DKK ECB reference spot rate as of end of the booking date.
Base currency: EUR

311. 6-month EUR/BRL Non deliverable forward contract. Cash settled. Long EUR – Short BRL; Notional EUR 10 000 000; EUR/BRL ECB reference spot rate as of end of the booking date.

Base currency: EUR

COMMODITIES

401. Long 3 500 000 6-month ATM London Gold Forwards contracts (1 contract = 0.001 troy ounces, notional: 3 500 troy ounces).
Cash Settlement
Base currency: USD

402. Short 3 500 000 12-month ATM London Gold Forwards contracts (1 contract = 0.001 troy ounces, notional: 3 500 troy ounces).
Cash Settlement
Base currency: USD

403. Long 30 contracts of 6-month WTI Crude Oil Call option with strike equals 12-month end-of-day forward price on the booking date (1 contract = 1 000 barrels. Total notional 30 000 barrels).
Cash Settlement
Base currency USD

404. Short 30 contracts of 6-month WTI Crude Oil Put option with strike equals 12-month end-of-day forward price on the booking date (1 contract = 1 000 barrels. Total notional 30 000 barrels).
Cash Settlement
Base currency USD

405. Long Call option. 5 000 0zt of London Gold.
Strike price: ATM as of end of the booking date
Expiry date: Booking date + 18 months
Cash Settlement
Base currency: USD

CREDIT SPREAD

501. Long (i.e. Buy protection) USD 1 000 000 CDS on PORTUGAL
Restructuring clause: FULL
Base currency: USD

502. Long (i.e. Buy protection) USD 1 000 000 CDS on ITALY
Restructuring clause: FULL
Base currency: USD

503. Short (i.e. Sell protection) USD 1 000 000 CDS on SPAIN
Restructuring clause: FULL

Base currency: USD

504. Long (i.e. Buy protection) USD 1 000 000 CDS on MEXICO
Restructuring clause: FULL
Base currency: USD

505. Long (i.e. Buy protection) USD 1 000 000 CDS on BRAZIL
Restructuring clause: FULL
Base currency: USD

506. Long (i.e. Buy protection) USD 1 000 000 CDS on UK
Restructuring clause: FULL
Base currency: USD

507. Short (i.e. Sell protection) EUR 1 000 000 CDS on Telefonica (Ticker TEF SM)
Base currency: EUR

508. Long (i.e. Buy protection) EUR 1 000 000 CDS on Telefonica (Ticker TEF SM)
Maturity: December Year T+2
Base currency: EUR

509. Short (i.e. Sell protection) EUR 1 000 000 CDS on Aviva (Ticker AV LN)
ISDA Definitions year 2003
Base currency: EUR

510. Long (i.e. Buy protection) EUR 1 000 000 CDS on Aviva (Ticker AV LN)
ISDA Definitions year 2003
Maturity: December Year T+2
Base currency: EUR

511. Short (i.e. Sell protection) EUR 1 000 000 CDS on Vodafone (Ticker VOD LN)
Base currency: EUR

512. Short (i.e. Sell protection) EUR 1 000 000 CDS on ENI SpA (Ticker ENI IM)
Base currency: EUR

513. Short (i.e. Sell protection) USD 1 000 000 CDS on Eli Lilly (Ticker LLY US)
Restructuring clause: No restructuring (XR14)
Base currency: USD

514. Short (i.e. Sell protection) EUR 1 000 000 CDS on Unilever (Ticker UNA NA)
Base currency: EUR

515. Long (i.e. Buy protection) EUR 1 000 000 CDS on Total SA (Ticker FP FP)
Base currency: EUR

516. Long (i.e. Buy protection) EUR 1 000 000 CDS on Volkswagen Group (Ticker VOW GR)
Base currency: EUR

517. Long position on TURKEY Govt. notes USD 1 000 000 (ISIN US900123CT57)
Maturity: 26 April 2029
Base currency: USD

518. Long (i.e. Buy protection) USD 1 000 000 CDS on TURKEY. Effective date as booking date.
Restructuring clause: FULL
Base currency: USD

519. Long position on Telefonica notes EUR 1 000 000 (ISIN XS1681521081)
Maturity: 12 January 2028
Base currency: EUR

520. Long position on Volkswagen Group notes EUR 1 000 000 (ISIN XS1944390597)
Maturity: 31 July 2026
Base currency: EUR

521. Short position Volkswagen Group notes EUR 1 000 000 (ISIN XS1944390241)
Maturity: 31 January 2024
Base currency: EUR

522. Long position on Total SA notes EUR 1 000 000 (ISIN XS1048519679)
Maturity: 25 March 2026
Base currency: EUR

523. Long AUSTRIA GOVT EUR 1 000 000 (ISIN AT0000A04967)
Maturity: 15 March 2037
Base currency: EUR

524. Long (i.e. Buy protection) USD 1 000 000 CDS on AUSTRIA
Maturity: June Year T+15
Base currency: USD

525. Long NETHERLANDS GOVT EUR 1 000 000 (ISIN NL0013552060)
Maturity: 15 January 2040
Base currency: EUR

526. Long (i.e. Buy protection) USD 1 000 000 CDS on NETHERLANDS
Maturity: June Year T+20
Base currency: USD

527. Long BELGIUM GOVT EUR 1 000 000 (ISIN BE0000348574)
Maturity: 22 June 2050
Base currency: EUR

528. Long (i.e. Buy protection) USD 1 000 000 CDS on BELGIUM
Maturity: June Year T+30
Base currency: USD

529. Long (Buy protection) EUR 10 000 000 CDS on iTraxx Europe index on-the-run series

Maturity: June Year T+5
Base currency: EUR

530. Short Put option. EUR 10 000 000. Underlying iTraxx Europe index on-the-run series (same instrument of 529)
Strike price: ATM
Expiry date: Booking date + 1 year
Base currency: EUR

531. Long AXA SA (callable) EUR 1 000 000 (ISIN XS1799611642)
Maturity: 28 May 2049
Base currency: EUR

532. Long AT&T Bond (callable) 1 000 000 (ISIN US00206RFW79)
Maturity: 15 August 2037
Base currency: USD

533. Long BAYER AG (callable) 1 000 000 (ISIN XS2199266268)
Maturity: 06 January 2030
Base currency: EUR

534. Long AT&T Bond (callable) 1 000 000 (ISIN XS0993148856)
Maturity: 17 December 2025
Base currency: EUR

CTP

601. Short (i.e. Sell protection) position in iTraxx Europe index on-the-run series
Attachment point: 3%
Detachment point: 6%
Notional: EUR 5 000 000
Maturity: 5 years
Base currency: EUR

602. Long (i.e. Buy protection) EUR 5 000 000 CDS on iTraxx Europe index on-the-run series
Maturity: June Year T+5
Base currency: EUR
Notional adj. to fully hedge CS01 of 6002

603. Long (i.e. Buy protection) position in iTraxx Europe index on-the-run series
Attachment point: 3%
Detachment point: 6%
Notional: EUR 5 000 000
Maturity: 5 years
Base currency: EUR

604. Short (i.e. Sell protection) EUR 5 000 000 CDS on iTraxx Europe index on-the-run series
Maturity: June Year T+5

Base currency: EUR
Notional adj. to fully hedge CS01 of 6004

605. Short (i.e. Sell protection) position in iTraxx Europe index on-the-run series
Attachment point: 22%
Detachment point: 100%
Notional: EUR 5 000 000
Maturity: 5 years
Base currency: EUR

606. Long (i.e. Buy protection) EUR 5 000 000 CDS on iTraxx Europe index on-the-run series
Maturity: June Year T+5
Base currency: EUR
Notional adj. to fully hedge CS01 of 6006

607. Long (i.e. Buy protection) position in iTraxx Europe index on-the-run series
Attachment point: 22%
Detachment point: 100%
Notional: EUR 5 000 000
Maturity: 5 years
Base currency: EUR

608. Short (i.e. Sell protection) EUR 5 000 000 CDS on iTraxx Europe index on-the-run series
Maturity: June Year T+5
Base currency: EUR
Notional adj. to fully hedge CS01 of 6008

609. Short (i.e. Sell protection) position in iTraxx Europe index on-the-run series
Attachment point: 3%
Detachment point: 6%
Notional: EUR 5 000 000
Maturity: 5 years
Base currency: EUR
Recovery rate: 40% fixed.

610. Long (i.e. Buy protection) EUR 5 000 000 CDS on iTraxx Europe index on-the-run series
Maturity: June Year T+5
Base currency: EUR
Notional adj. to fully hedge CS01 of 6002

611. Long (i.e. Buy protection) USD 1 000 000 First to Default Basket Swap on {Brazil, Mexico and Turkey}.
Effective date as booking date
Restructuring clause: FULL
Maturity: September Year T+4
Base currency: USD

Section 3: Individual Portfolios

Institutions shall provide the required risk measures, along with the Present Value, of the following individual portfolios:

Portfolio	***Combination of instruments:*** **The first figure represents the instrument (as referred to in Section 2 of this Annex). The second figure represents the quantity of each instrument or number of contracts, as applicable.**	**Base Currency**	**Risk measures required**
1001	101 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1002	103 – 1 instrument 104 – 1 instrument 105 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1003	113 – 1 instrument 110 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1004	115 – 1 instrument 116 – 1 instrument	GBP	VaR; Stressed VaR; SBM
1005	117 – 1 instrument	JPY	VaR; Stressed VaR; SBM
1006	109 – 1 instrument 110 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1007	118 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1008	111 – 1 instrument 112 – 1 instrument	USD	VaR; Stressed VaR; SBM
1009	102 – 1 instrument 114 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1010	106 – 1 instrument 107 – 1 instrument 108 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1011	101 – 1 instrument 103 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1012	101 – 1 instrument 103 – 1 instrument 104 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1013	102– 1 instrument 104 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1014	119 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1015	120 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1016	121 – 1 instrument	EUR	VaR; Stressed VaR; SBM

1017	122 – 1 instrument	EUR	VaR; Stressed VaR; SBM
1018	123 – 1 instrument 124 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2001	201 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2002	202 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2003	203 – 1 instrument	USD	VaR; Stressed VaR; SBM
2004	204 – 1 instrument	GBP	VaR; Stressed VaR; SBM
2005	205 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
2006	206 – 1 instrument 207 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2007	206 – 1 instrument 207 – 1 instrument 208 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2008	206 – 1 instrument 207 – 1 instrument 208 – 1 instrument 209 – 1 instrument 210 – 1 instrument 211 – 1 instrument 212 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2009	201 – 1 instrument 218 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2010	201 – 1 instrument 219 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2011	218 – 1 instrument 219 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2012	201 – 1 instrument 202 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2013	213 – 1 instrument	GBP	VaR; Stressed VaR; IRC; SBM
2014	215 – 1 instrument 216 – 1 instrument 217 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
2015	203 – 1 instrument 215 – 1 instrument	USD	VaR; Stressed VaR; SBM
2016	208 – 1 instrument 209 – 1 instrument 210 – 1 instrument 214 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2017	220 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2018	209 – 10 instruments	EUR	VaR; Stressed VaR; IRC; SBM
2019	209 – 10 instruments 219 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2020	221 – 1 instrument	EUR	VaR; Stressed VaR; SBM
2021	222 – 1 instrument	EUR	VaR; Stressed VaR; SBM

2022			
2023	201 – 1 instrument 223 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
2024	224 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3001	301 – 1 instrument 302 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3002	303 – 1 instrument 304 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3003	304 – 1 instrument 305 – 1 instrument 306 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3004	307 – 1 instrument 308 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3005	309 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3006	310 – 1 instrument	EUR	VaR; Stressed VaR; SBM
3007	311 – 1 instrument	EUR	VaR; Stressed VaR; SBM
4001	401 – 1 instrument 402 – 1 instrument	USD	VaR; Stressed VaR; SBM
4002	403 – 1 instrument 404 – 1 instrument	USD	VaR; Stressed VaR; SBM
4003	401 – 1 instrument 404 – 1 instrument	USD	VaR; Stressed VaR; SBM
4004	405 – 1 instrument	EUR	VaR; Stressed VaR; SBM
5001	501 – 1 instrument 502 – 1 instrument 503 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5002	504 – 1 instrument 505 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5003	507 – 1 instrument 508 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5004	503 – 1 instrument 504 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5005	509 – 1 instrument 510 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5006	511 – 1 instrument 512 – 1 instrument 514 – 1 instrument 515 – 1 instrument 516 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5007	517 – 1 instrument 518 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5008	519 – 1 instrument 520 – 1 instrument 522 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5009	520 – 1 instrument 521 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5010	519 – 1 instrument 508 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5011	515 – 1 instrument 522 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM

5012	513 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5013	520 – 1 instrument 521 – 1 instrument 516 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5014	506 – 1 instrument 503 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5015	502 – 1 instrument 209 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5016	504 – 1 instrument 217 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5017	505 – 1 instrument 216 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5018	504 – 1 instrument 217 – 1 instrument 505 – 1 instrument 216 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5019	502 – 10 instruments 209 – 10 instruments 219 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5020	523 – 1 instrument 525 – 1 instrument 527 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5021	524 – 1 instrument 526 – 1 instrument 528 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5022	523 – 1 instrument 524 – 1 instrument 525 – 1 instrument 526 – 1 instrument 527 – 1 instrument 528 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5023	529 – 1 instrument 530 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5024	531 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5025	532 – 1 instrument	USD	VaR; Stressed VaR; IRC; SBM
5026	533 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
5027	534 – 1 instrument	EUR	VaR; Stressed VaR; IRC; SBM
6001	601 – 1 instrument 602 – 1 instrument	EUR	VaR; Stressed VaR; APR; SBM
6002	603 – 1 instrument 604 – 1 instrument		VaR; Stressed VaR; APR; SBM
6003	605 – 1 instrument 606 – 1 instrument		VaR; Stressed VaR; APR; SBM
6004	607 – 1 instrument 608 – 1 instrument		VaR; Stressed VaR; APR; SBM
6005	609 – 1 instrument 610 – 1 instrument		VaR; Stressed VaR; APR; SBM
6006	611 – 1 instrument	USD	VaR; Stressed VaR; APR; SBM

6007	612 – 1 instrument 517 – 1 instrument 216 – 1 instrument 217 – 1 instrument	USD	VaR; Stressed VaR; APR; SBM

Section 4: Aggregated Portfolios

Institutions shall provide the required risk measures, along with the Present Value, of the following financial aggregated portfolios:

Aggreg. Portfolio	**Description**	***Combination of Individual Portfolios* (individual portfolios as stated by their numbers as referred to in Section 3 of this Annex)**	**Base Currency**	**Risk Measures requested**
10000	ALL-IN no-CTP	1001, 1002, 1006, 1007, 1009, 2001, 2002, 2008, 2011, 3001, 3002, 3003, 3004, 4001, 4002, 5003, 5006, 5008, 5022	EUR	VaR; Stressed VaR; IRC; SBM
11000	EQUITY Cumulative	1001, 1002, 1006, 1007, 1009	EUR	VaR; Stressed VaR; SBM
12000	IR Cumulative	2001, 2002, 2008, 2011	EUR	VaR; Stressed VaR; SBM
13000	FX Cumulative	3001, 3002, 3003, 3004	EUR	VaR; Stressed VaR; SBM
14000	Commodity Cumulative	4001, 4002	USD	VaR; Stressed VaR; SBM
15000	Credit Spread cumulative	5003, 5006, 5008, 5022	EUR	VaR; Stressed VaR; IRC; SBM
16000	CTP cumulative EUR	6001, 6007	EUR	VaR; Stressed VaR; APR; SBM

Section 5: Additional specifications for instruments

Institutions shall apply the following additional specifications to the financial instruments described in Section 2 of this Annex:

Instrument:	122
Description:	Long Capped index variance swap (ATM)
Underlying Index:	EURO STOXX 50 index (Ticker: SX5E)
Notional amount:	EUR 100 000
Base currency:	EUR
Volatility strike:	65%
Cap:	2.5
Volatility Cap Amount:	$Cap \times Volatility\ Strike\ Price = 162.5\%$
Payoff (Buyer payment to Seller):	$Notional\ amount\ \times Max[0, Volatility\ Strike^2 - Min(Final\ Realized\ Volatilitye^2, Volatility\ Cap\ Amounte^2)]$
Seller payment to buyer:	$Notional\ amount\ \times Max[0, Min(Final\ Realized\ Volatilitye^2, Volatility\ Cap\ Amounte^2) - Volatility\ Strike^2]$
Initial index level:	the closing index level on the booking date - Section 1, letter (b),(i) of this Annex
Observation Start Date:	The booking - Section 1, letter (b),(i) of this Annex
Observation End Date:	The RM (and final SBM) reference date - Section 1, letter (b),(v) of this Annex
Observation frequency:	Daily
Final Realized Volatility (FRV):	$100 \times \sqrt{\frac{252 \times \sum_{t=1}^{N} \left(ln \frac{Index_t}{Index_{t-1}}\right)^2}{N}}$ $Where$: *t: means the relevant Observation Day;* *N: means number of observations (including the first observation and the final observation);* $Index_t$: means, in respect of any Observation Day, the index value at the Valuation Time on such Observation Day; $Index_{t-1}$: the index value on the immediately preceding Observation Day; if, for any reason, the closing price of reference shares is not published, then the index Level (i) will be set to index Level(i-1).
Cash Settlement:	applicable

Instrument:	220
Description:	5-year Mark to Market (MtM) Cross Currency EUR/USD SWAP Receive USD and pay EUR Notional: EUR 10 000 000, USD (EUR 10 000 000 * FX USD/EUR)
Pay:	Float leg 2
Rec:	Float leg 1

Notional Exchange and Reset:	On effective date and maturity date. Further, on every coupon payment date, an additional payment corresponding to adjustment of the USD notional on Float leg 2 is made. The USD notional is adjusted to equal 10 000 000 EUR, at spot rate 2 business days in advance of each payment date.
Cash balance	Included
Float Leg 1	
Notional:	10 000 000 EUR converted to USD at spot on effective date
Effective Date:	Booking date
Maturity Date:	Booking date + 5 years
Payment Date Generation:	Forward from Effective Date
Coupon Payment Frequency:	Quarterly
Coupon Rate:	3 000 000 USD LIBOR + 0bps.
Coupon Rate Reset Freq:	Quarterly
Coupon Rate Fixing Convention:	2 days in advance of each coupon period
Coupon Rate Compounding Frequency:	Simple Interest
Day Count:	ACT/360
Payment Business Day:	LON, NYC, TARGET
Payment Business Day Convention:	Modified Following
Notional Reset Business Day:	LON, NYC, TARGET
Notional Reset Business Day Convention:	Previous
Coupon Rate Reset Business Day:	LON, NYC, TARGET
Coupon Rate Reset Business Day Convention:	Previous
Float Leg 2	
Notional:	10 000 000 EUR
Effective Date:	Booking date
Maturity Date:	Booking date + 5 years
Payment Date Generation:	Forward from Effective Date
Coupon Payment Frequency:	Quarterly
Coupon Rate:	3 000 000 EURIBOR + 0 bps.
Coupon Rate Reset Frequency:	Quarterly
Coupon Rate Fixing Convention:	2 days in advance of each coupon period
Coupon Rate Compounding Frequency:	Simple Interest
Day Count:	ACT/360
Payment Business Day:	LON, NYC, TARGET

Payment Business Day	Modified Following
Notional Reset Business Day:	LON, NYC, TARGET
Notional Reset Business Day Convention:	Previous
Coupon Rate Reset Business Day:	LON, NYC, TARGET
Coupon Rate Reset Business Day Convention:	Previous’