

**November 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement
to the 1998 ISDA FX and Currency Option Definitions**

(published on November 12, 2018)

*This November 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement (this “**Supplement**”) to the 1998 ISDA FX and Currency Option Definitions as published by International Swaps and Derivatives Association, Inc. (“**ISDA**”) and EMTA, Inc., as amended and supplemented from time to time (the “**1998 FX Definitions**”) incorporates terms and templates for an FX Volatility Swap, an FX Variance Swap and an FX Correlation Swap as an amendment to the 1998 FX Definitions. This Supplement shall only apply to a Transaction for which the Confirmation incorporates the 1998 FX Definitions and this Supplement.*

I. FX Volatility Swap, FX Variance Swap, FX Correlation Swap terms:

A new Article 6 shall be added after Article 5 as follows:

“ARTICLE 6

Terms applicable to FX Volatility Swaps, FX Variance Swaps and FX Correlation Swaps

Section 6.1 Application of Article 6. Article 6 shall only apply to a Transaction if the Confirmation for such Transaction (i) incorporates the 1998 FX Definitions and specifies that such Transactions is a Volatility Swap, a Variance Swap or a Correlation Swap or (ii) otherwise specifies that this Supplement shall apply to such Transaction. If Article 6 applies to a Transaction then to the extent of any inconsistency between this Article 6 and any other terms of the 1998 FX Definitions, the terms of this Article 6 shall govern.

Section 6.2 General Definitions Relating to Volatility Swaps, a Variance Swaps and Correlation Swaps.

(a) “**Business Day**” means for purposes of:

(i) the definition of a Settlement Date, a Transaction Fee Payment Date or any other day defined by reference to a Payment Business Day,

(A) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the place(s) specified in the related Confirmation for Payment Business Days, or, in the case where TARGET Settlement Day or Euro Settlement Date is specified for that purpose in the related Confirmation, a TARGET Settlement Day or Euro Settlement Date, as applicable, and any other place specified for that purpose in the related Confirmation,

(B) if no place(s) is so specified, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the Principal Financial Center of the Settlement Currency; provided that if a place is not so specified and the Settlement Currency is EUR, the date defined as the Principal Financial Center of the Settlement Currency for EUR,

any such a Business Day, a “**Payment Business Day**”.

(ii) the definition of the Initial Observation Date, Observation Date, Valuation Date or any other day defined by reference to an Observation Business Day,

(A) a day on which commercial banks are, as of the Trade Date of the relevant Transaction, scheduled to be open for business (including dealings in foreign exchange in accordance with the market practice of the foreign exchange market) in the place(s) specified in the related Confirmation for Observation Business Days, or, in the case where TARGET Settlement Day or Euro Settlement Date is specified for that purpose in the related Confirmation, a TARGET Settlement Day or Euro Settlement Date, as applicable, and any other place specified for that purpose in the related Confirmation, or

(B) if no place(s) is so specified, (x) a day on which the Rate Source is, as of the Trade Date of the relevant Transaction, scheduled to publish (including, as applicable, through an agent or third party vendor reasonably acceptable to the Calculation Agent) spot rates for the Currency Pair for such Transaction, and, (y) if any such Rate Source does not so publish or provide such days on the Trade Date, a day on which, commercial banks are, as of the Trade Date of the relevant Transaction, scheduled to be open for business (including dealings in foreign exchange in accordance with the market practice of the foreign exchange market) for each of the Principal Financial Centers for each currency in the Currency Pair for such Transaction, as determined by the Calculation Agent,

any such a Business Day, an “**Observation Business Day**”.

Notwithstanding the foregoing, if any Rate Source does not, as of the Trade Date, publish or provide (including, as applicable, through an agent or third party vendor reasonably acceptable to the Calculation Agent) a calendar or dates on which it will publish spot rates for the Currency Pair for a Transaction, but, does publish or provide on the Trade Date, a mechanism for determining such days, such days shall be deemed to be so published or provided.

In respect of a Correlation Swap, an “Observation Business Day” for each Observation Date and the Valuation Date shall mean a day which is an Observation Business Day for both Currency Pairs for such Correlation Swap, determined in each case as if each Currency Pair were the only Currency Pair for such Correlation Swap.

(b) “**Calculation Agent**” means the party specified as such in the related Confirmation, or if not specified therein, as specified in the Agreement between the parties. Any amount, calculation or determination to be made hereunder shall be determined by the Calculation Agent in good faith and in a commercially reasonable manner.

(c) “**Currency Pair**” means the currencies specified as such in the related Confirmation. For the avoidance of doubt, in respect of a Correlation Swap, there will be two Currency Pairs to be specified as Currency Pair 1 and Currency Pair 2 in the related Confirmation.

(d) “**Fixed Rate**” means the number specified as such in the related Confirmation.

(e) “**Fixed Rate Payer**” means the party specified as such in the related Confirmation; provided that if the related Confirmation specifies a party as Buyer, such party shall be the Fixed Rate Payer.

(f) “**Floating Rate**” means, in respect of a Volatility Swap or a Variance Swap, the Realized Volatility; and in respect of a Correlation Swap, the Realized Correlation.

(g) “**Floating Rate Payer**” means the party specified as such in the related Confirmation; provided that if the related Confirmation specifies a party as Seller, such party shall be the Floating Rate Payer.

(h) “**Specified Time**” means, with respect to the determination of the Spot Rate for a Currency Pair pursuant to the related Settlement Rate Option for such Currency Pair, the time specified as such in the related Confirmation; provided that if no time is specified therein, but a time is set forth in the Settlement Rate Option for such Currency Pair, such time for such Currency Pair. For the avoidance of doubt, in respect of a Correlation Swap, there will be two Specified Times, one for Currency Pair 1 and one for Currency Pair 2.

(i) “**Trading Business Day**” means,

(A) a day on which commercial banks are open for business (including dealings in foreign exchange in accordance with the market practice of the foreign exchange market) in the place(s) specified in the related Confirmation for purposes of Observation Business Days, or

(B) if no place(s) is so specified, a day on which the Rate Source publishes (including, as applicable, through an agent or third party vendor reasonably acceptable to the Calculation Agent) spot rates for the relevant Currency Pair.

In respect of a Correlation Swap, “Trading Business Day” for the Initial Observation Date, each Observation Date and the Valuation Date shall mean a day which is a Trading Business Day for each Currency Pair for such Transaction as if it were the only Currency Pair for such Correlation Swap.

Section 6.2 Transaction Types.

(a) “**Volatility Swap**” means any Transaction specified as such in the related Confirmation.

(b) “**Variance Swap**” means any Transaction specified as such in the related Confirmation.

(c) “**Correlation Swap**” means any Transaction specified as such in the related Confirmation.

Section 6.3 Terms relating to Transaction Fee.

(a) “**Transaction Fee**” means, in respect of any Volatility Swap, Variance Swap or Correlation Swap, the amount, if any, that is specified or otherwise determined as provided in the related Confirmation. The Transaction Fee Payer shall pay the Transaction Fee, if any, to the other party on the Transaction Fee Payment Date or on each Transaction Fee Payment Date if more than one such date is specified in the related Confirmation.

(b) “**Transaction Fee Payment Date**” means, in respect of any Volatility Swap, Variance Swap or Correlation Swap, one or more dates specified as such or otherwise determined as provided in the related Confirmation, subject to adjustment in accordance with the Following Business Day Convention unless another Business Day Convention is specified to be applicable to that Transaction Fee Payment Date.

(c) “**Transaction Fee Payer**” means the party designated as such in the related Confirmation.

Section 6.4 Determining Realized Volatility and Correlation.

(a) **Realized Volatility or RV**

(i) “**Realized Volatility**” or “**RV**” means that the rate calculated on the Valuation Date (or, if later, the date on which the Observation Rate is determined for the Valuation Date), as follows:

(A) Where “**Mean Adjustment**” is specified as Not Applicable in the related Confirmation or where there is no reference to Mean Adjustment in the related Confirmation, Realized Volatility is calculated in accordance with the following formula:

$$RV = \sqrt{\frac{\sum_{i=1}^N (R_i)^2}{N}} \times \sqrt{AF}$$

where:

“**i**” means the relevant Observation Date (excluding the Initial Observation Date);

“**N**” means the number specified in the related Confirmation, or if not specified in the related Confirmation, the number of Observation Dates in the Observation Period, excluding the Initial Observation Date;

“**R_i**” shall be calculated as follows for any Observation Date:

$$R_i = \ln\left(\frac{S_i}{S_{i-1}}\right)$$

where:

“**S_i**” means the Observation Rate for Observation Date;

“**S_{i-1}**” means the Observation Rate for the Observation Date immediately preceding Observation Date_i; or in the case of the first Observation Date, S₀;

“ S_0 ” means the Initial Observation Rate.

“ AF ” means the number specified in the related Confirmation as “ AF ” or as the “Annualization Factor” or if not so specified therein, 252.

- (B) Where “**Mean Adjustment**” is specified as Applicable in the related Confirmation, Realized Volatility is calculated in accordance with the following formula:

$$RV = \sqrt{\frac{\sum_{i=1}^N (R_i - R_m)^2}{N - 1}} \times \sqrt{AF}$$

where:

“ i ” means the relevant Observation Date (excluding the Initial Observation Date);

“ N ” means the number specified in the related Confirmation, or if not specified in the related Confirmation, the number of Observation Dates in the Observation Period, excluding the Initial Observation Date;

“ R_i ” shall be calculated as follows for any Observation Date _{i} :

$$R_i = \ln\left(\frac{S_i}{S_{i-1}}\right)$$

where:

“ S_i ” means the Observation Rate for Observation Date _{i} ;

“ S_{i-1} ” means the Observation Rate for the Observation Date immediately preceding Observation Date _{i} or in the case of the first Observation Date, S_0 ;

“ S_0 ” means the Initial Observation Rate.

“ R_m ” means the “mean return” calculated as follows:

$$R_m = \frac{\sum_{i=1}^N R_i}{N}$$

“**AF**” means the number specified in the related Confirmation as “**AF**” or as the “**Annualization Factor**” or if not so specified therein, 252.

(b) **Correlation.**

(i) “**Realized Correlation**” or “**RC**” means that the amount for a Valuation Date, calculated on the Valuation Date (or, if later, the date on which the Observation Rate is determined for the Valuation Date) as follows:

(A) Where “**Mean Adjustment**” is specified as Not Applicable in the related Confirmation, Realized Correlation is calculated in accordance with the following formula:

$$RC = \frac{\sum_{i=1}^N (R_{a,i})(R_{b,i})}{\sigma_a \sigma_b}$$

where:

“**i**” means the relevant Observation Date;

“**a**” means Currency Pair 1;

“**b**” means Currency Pair 2;

“**N**” means the number specified in the related Confirmation, or if not specified in the related Confirmation, the number of Observation Dates in the Observation Period, excluding the Initial Observation Date;

“**R_{a,i}**” shall be calculated in respect of Currency Pair 1 and any Observation Date_i, as follows:

$$\ln \left(\frac{S_{a,i}}{S_{a,i-1}} \right)$$

where:

“**S_{a,i}**” means the Observation Rate of Currency Pair 1 on Observation Date_i;

“ $S_{a,i-1}$ ” means the Observation Rate of Currency Pair 1 on the Observation Date that immediately preceding Observation Date_i;

“ $R_{b,i}$ ” shall be calculated in respect of Currency Pair 2 and any Observation Date_i, as follows:

$$\ln\left(\frac{S_{b,i}}{S_{b,i-1}}\right)$$

where:

“ $S_{b,i}$ ” means the Observation Rate of Currency Pair 2 on Observation Date_i;

“ $R_{b,i-1}$ ” means the Observation Rate of Currency Pair 2 on the Observation Date that immediately preceding Observation Date_i;

“ σ_a ” means, in respect of Currency Pair 1, the amount determined in accordance with the following formula:

$$\sqrt{\sum_{i=1}^N (R_{a,i})^2}$$

“ σ_b ” means, in respect of Currency Pair 2, the amount determined in accordance with the following formula:

$$\sqrt{\sum_{i=1}^N (R_{b,i})^2}$$

- (B) Where “Mean Adjustment” is specified as Applicable in the related Confirmation, Realized Correlation is calculated in accordance with the following formula:

$$RC = \frac{\sum_{i=1}^N (R_{a,i} - \bar{R}_a)(R_{b,i} - \bar{R}_b)}{\sigma_a \sigma_b}$$

where:

“ i ” means the relevant Observation Date;

“ a ” means Currency Pair 1;

“**b**” means Currency Pair 2;

“**N**” means the number specified in the related Confirmation, or if not specified in the related Confirmation, the number of Observation Dates in the Observation Period, excluding the Initial Observation Date;

“**R_{a,i}**” shall be calculated in respect of Currency Pair 1 and any Observation Date_i, as follows:

$$\ln\left(\frac{S_{a,i}}{S_{a,i-1}}\right)$$

where:

“**S_{a,i}**” means the Observation Rate of Currency Pair 1 on Observation Date_i;

“**S_{a,i-1}**” means the Observation Rate of Currency Pair 1 on the Observation Date that immediately preceding Observation Date_i;

“**R_a**” means, in respect of Currency Pair 1, the average of daily returns determined in accordance with the following formula:

$$\frac{1}{N} \sum_{i=1}^N R_{a,i}$$

where:

“**R_{b,i}**” shall be calculated in respect of Currency Pair 2 and any Observation Date_i, as follows:

$$\ln\left(\frac{S_{b,i}}{S_{b,i-1}}\right)$$

where:

“**S_{b,i}**” means the Observation Rate of Currency Pair 2 on Observation Date_i;

“**S_{b,i-1}**” means the Observation Rate of Currency Pair 2 on the Observation Date that immediately preceding Observation Date_i;

“ R_b ” means, in respect of Currency Pair 2, the average of daily returns determined in accordance with the following formula:

$$\frac{1}{N} \sum_{i=1}^N R_{b,i}$$

“ σ_a ” means, in respect of Currency Pair 1, the amount determined in accordance with the following formula:

$$\sqrt{\sum_{i=1}^N (R_{a,i} - \bar{R}_a)^2}$$

“ σ_b ” means, in respect of Currency Pair 2, the amount determined in accordance with the following formula:

$$\sqrt{\sum_{i=1}^N (R_{b,i} - \bar{R}_b)^2}$$

Section 6.5 Definitions Relating to Valuation.

(a) Valuation.

(i) “**Initial Observation Date**” means the date specified as such in the related Confirmation or if such date or a means of determining such date is not so specified, the Trade Date.

(ii) “**Initial Observation Rate**” means, for a Currency Pair, (A) if the Initial Observation Rate for such Currency Pair is agreed by the parties, the number specified as such in the related Confirmation; and (B) otherwise, the Observation Rate for such Currency Pair determined on the Initial Observation Date; provided that if such Observation Rate cannot be so determined on such date, the Initial Observation Rate shall be the Observation Rate for such Currency Pair as of the preceding Trading Business Day on which such rate is available at the Specified Time, as determined by the Calculation Agent as if such preceding Trading Business Day were an Observation Date; provided that for a Correlation Swap, if the Initial Observation Rate for each Currency Pair is determined as the Observation Rate for the relevant Currency Pair on the Initial Observation Date, then if the Observation Rate cannot be so determined for either Currency Pair on such date, the Initial Observation Rate shall be determined for each Currency Pair as of the preceding Trading Business Day on which such rate is available for both Currency Pairs at the Specified Time, as determined by the Calculation Agent.

(iii) “**Observation Dates**” means, unless otherwise specified in the related Confirmation, each Observation Business Day during the Observation Period. For the avoidance of doubt, unless the parties have specified otherwise in the related

Confirmation, any date identified as an Observation Date in accordance with the previous sentence shall constitute an Observation Date notwithstanding that (i) such date may fall on a date which is not a Trading Business Day and the market was not aware of such fact at any time on, prior to or after the Trade Date, or (ii) the Spot Rate cannot be determined on such date for any other reason.

(iv) “**Observation Period**” means the period from, but excluding, the Initial Observation Date to, and including the Valuation Date.

(v) “**Observation Rate**” means,

(x) for any Currency Pair and any Observation Date other than the Valuation Date, the Spot Rate for such Currency Pair on such Observation Date; provided that if the Spot Rate cannot be determined for such Currency Pair on such Observation Date, for any reason, including such day not being a Trading Business Day, the Observation Rate for such Currency Pair for such Observation Date will be the Observation Rate for such Currency Pair on the immediately preceding Observation Date (or in the case of the first Observation Date, the Initial Observation Rate for such Currency Pair); provided further that for a Correlation Swap, if the Spot Rate cannot be so determined for either Currency Pair on such Observation Date, then the Observation Rate for each Currency Pair for such Observation Date will be the Observation Rate for each Currency Pair on the immediately preceding Observation Date (or in the case of the first Observation Date, the Initial Observation Rate for each Currency Pair), notwithstanding that the Spot Rate may be available for one of the Currency Pairs on such Observation Date; and

(y) for any Currency Pair and the Valuation Date, the Spot Rate for such Currency Pair on the Valuation Date; provided that if the Spot Rate for such Currency Pair (or for either Currency Pair in the case of a Correlation Swap) cannot be determined on the Valuation Date, for any reason, including such day not being a Trading Business Day, the Observation Rate for such Currency Pair (or for both Currency Pairs in the case of a Correlation Swap) for the Valuation Date will be the Spot Rate on the immediately following Trading Business Day on which the Spot Rate for such Currency Pair (or for both Currency Pairs in the case of a Correlation Swap) can be determined; provided further that if such rate cannot be determined for such Currency Pair (or for both Currency Pairs in the case of a Correlation Swap) by the 5th Observation Business Day following the Valuation Date (the “Outside Date”), then the Calculation Agent shall determine the Observation Rate for the Valuation Date on the Outside Date as its good faith estimate of the exchange rate of such Currency Pair on the Outside Date, notwithstanding its unavailability (or, of both Currency Pairs in the case of a Correlation Swap, unless the Observation Rate can be determined for one of the Currency Pairs on the Outside Date in which case that rate shall be the Observation Rate for that Currency Pair and the Calculation Agent shall estimate the exchange rate of the other Currency Pair on the Outside Date). For the avoidance of doubt, if pursuant to this clause (y), the Observation Rate for the Valuation Date is determined on a date which falls after the Valuation Date (such date, the “Final Determination Date”), this shall not increase N.

(vi) “**Rate Calculation Date**” means, in relation to a Transaction, the Initial Observation Date, any Observation Date, including, the Valuation Date and any other date as of which the Spot Rate is to be determined as set forth in this Supplement.

(vii) “**Rate Source**” means, for a Currency Pair, the entity that provides and determines the Spot Rate for such Currency Pair determined solely in accordance with the definition of Settlement Rate Option.

(viii) “**Spot Rate**” means, in relation to a Currency Pair for any date, the rate as at the Specified Time on such date, determined by the Calculation Agent utilizing the Settlement Rate Option for such Currency Pair; provided that if such rate is not then available for such Currency Pair but the spot foreign exchange market for such Currency Pair is then freely trading through normal legal channels for domestic and foreign market participants, then the Calculation Agent shall determine the Spot Rate for such Currency Pair at the Specified Time on such date as the mid-market spot currency exchange rate for such Currency Pair at the Specified Time on such date on the basis of another publically available source(s) or other publically available information.

(ix) “**Valuation Date**” means the date specified in the related Confirmation, regardless of whether or not such day is a Trading Business Day or a Payment Business Day; provided that if such day is not an Observation Business Day, the Valuation Date shall be the following Observation Business Day.

(x) “**Vega Notional Amount**” means, the amount specified as such in the related Confirmation, if so specified therein.

(xi) “**Notional Amount**” means, the amount specified in the related Confirmation, or if not specified therein,

(a) in the case of a Variance Swap, the amount calculated as follows:

$$\text{Notional Amount} = \frac{\text{Vega Notional Amount}}{0.02 \times \text{Fixed Rate}}$$

(b) in the case of a Volatility Swap, the amount calculated as follows:

$$\text{Notional Amount} = \text{Vega Notional Amount} \times 100$$

(c) in the case of a Correlation Swap, the amount specified in the related Confirmation.

Section 6.6 Terms relating to Settlement.

(a) **Settlement Obligation.**

(i) On the Settlement Date in respect of a Volatility Swap, Variance Swap or Correlation Swap,

(A) if the Settlement Amount is a positive number, the Fixed Rate Payer will pay that amount in the Settlement Currency on the Settlement Date to the Floating Rate Payer or,

(B) if the Settlement Amount is a negative number, the Floating Rate Payer will pay the absolute value of that amount in the Settlement Currency on the Settlement Date to the Fixed Rate Payer.

(ii) Settlement Amount.

“Settlement Amount” means:

(A) for a Volatility Swap, an amount expressed in the Settlement Currency calculated as follows:

$$\text{Settlement Amount} = \text{Notional Amount} \times (\text{Fixed Rate} - \text{Floating Rate})$$

(B) for a Variance Swap an amount expressed in the Settlement Currency calculated as follows:

$$\text{Settlement Amount} = \text{Notional Amount} \times (\text{Fixed Rate}^2 - \text{Floating Rate}^2)$$

(C) for a Correlation Swap, an amount expressed in the Settlement Currency calculated as follows:

$$\text{Settlement Amount} = \text{Notional Amount} \times (\text{Fixed Rate} - \text{Floating Rate})$$

(iii) “Settlement Date” means

(A) the date specified in the Confirmation, or if such day is not a Payment Business Day, the following Payment Business Day; or

(B) if not specified therein, the number of Payment Business Days following the Valuation Date which is the number of days and the type of day for settlement of spot transactions in the Currency Pair in accordance with market practice for the relevant Currency Pair, or in the case of a Correlation Swap, in accordance with market practice for the relevant Currency Pairs or if applicable, the later of such dates determined for each Currency Pair (in any case, the “Settlement Cycle”), or if such day is not a Payment Business Day, the following Payment Business Day;

provided that, **in any case**, if the Observation Rate for the Valuation Date is postponed as provided herein, then the Settlement Date shall be postponed to be the Settlement Cycle following the Final Determination Date, or if such day is not a Payment Business Day, the following Payment Business Day.”

II. FX Volatility Swap, FX Variance Swap, FX Correlation Swap terms:

The following new Exhibits on the following pages shall be added after end of the 1998 Definitions:

“Exhibit I

FX Volatility Swap Transaction template

EXHIBIT I to the November 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the 1998 FX and Currency Option Definitions

**Additional Provisions for a Confirmation of
a Volatility Swap**

[See Exhibit I of the 1998 FX and Currency Option Definitions for the introduction, standard paragraphs and closing for the letter agreement and Exhibit II-E of the 1998 FX and Currency Option Definitions for terms relating to Article 5.]

2. The terms of the particular Transaction to which this Confirmation relates are as follows:

(a) General Terms:

Trade Date:	[date]
[Date of Annex A:]	[date] ¹
[Incorporation of the 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the FX Definitions:	Applicable] ²
Transaction Type:	Volatility Swap
[Notional Amount:	[CCY] [amount]] ³
[Vega Notional Amount:	[CCY] [amount] ⁴
Currency Pair:	[CCY]/[CCY]
Fixed Rate Payer ⁵ :	[Party A][Party B]

¹ Delete if defaulting to the Annex A in effect as of the Trade Date.

² For the Supplement to be incorporated into a Confirmation, either it should be incorporated in the opening paragraph or specified here as Applicable.

³ If the Vega Notional Amount is specified, the Notional Amount may be specified or determined formulaically as per the Supplement from the Vega Notional Amount. At least one of the Vega Notional Amount or Notional Amount must be specified.

⁴ If the Notional Amount is specified, the Vega Notional Amount need not be specified. At least one of the Vega Notional Amount or Notional Amount must be specified.

⁵ If parties wish to define the Fixed Rate Payer as the Buyer, this term can be changed to Buyer and the Supplement shall deem the Buyer to be the Fixed Rate Payer.

Fixed Rate:	[number]
Floating Rate Payer ⁶ :	[Party B][Party A]
Settlement Currency:	[CCY]
[Settlement Date:	[date]] ⁷
Settlement Rate Option:	[]
Valuation Date:	[date]
Specified Time:	[] [a.m./p.m.] (local time in [Name of City])
[Mean Adjustment:	[Applicable][Not applicable]] ⁸
[N:	[number]] ⁹
[Annualization Factor:	[number]] ¹⁰
[Initial Observation Date:	[date]] ¹¹
[Initial Observation Rate:	[number]] ¹²
[Observation Dates:	[dates][The dates set forth in the schedule attached hereto]] ¹³
[Transaction Fee:	[CCY] [amount]]
[Transaction Fee Payment Date:	[date]]
[Transaction Fee Payer:	[Party A][Party B]]] ¹⁴
3. Calculation Agent:	[Party A][Party B][As per the Agreement][other]
4. Business Days:	

⁶ If parties wish to define the Floating Rate Payer as the Seller, this term can be changed to Seller and the Supplement shall deem the Seller to be the Floating Rate Payer.

⁷ Delete if the default in the Supplement applies.

⁸ If the Confirmation is silent, Mean Adjustment will not apply.

⁹ If the Confirmation is silent, N will be defined as per the Supplement.

¹⁰ Delete if defaulting to 252 as per the Supplement.

¹¹ Insert the Initial Observation Date if it is a date other than the Trade Date.

¹² Delete if a number is not agreed at the time of trading and this defaults to the determination in the Supplement.

¹³ May be deleted if the definition fallback in the Supplement is being used. If Observation Dates are defined by a schedule of dates, such schedule of dates should be included.

¹⁴ Delete the Transaction Fee terms where there is no such fee.

Observation Business Days: []¹⁵

Payment Business Days: []¹⁶

¹⁵ Delete if the default provisions of the Supplement will apply.

¹⁶ Delete if the default provisions of the Supplement will apply.

Exhibit II

FX Variance Swap Transaction template

EXHIBIT II to the November 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the 1998 FX and Currency Option Definitions

**Additional Provisions for a Confirmation of
a Variance Swap**

[See Exhibit I of the 1998 FX and Currency Option Definitions for the introduction, standard paragraphs and closing for the letter agreement and Exhibit II-E of the 1998 FX and Currency Option Definitions for terms relating to Article 5.]

2. The terms of the particular Transaction to which this Confirmation relates are as follows:

(a) General Terms:

Trade Date:	[date]
[Date of Annex A:]	[date] ¹⁷
[Incorporation of the 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the FX Definitions:	Applicable] ¹⁸
Transaction Type:	Variance Swap
[Notional Amount:	[CCY] [amount]] ¹⁹
[Vega Notional Amount:	[CCY] [amount]] ²⁰
Currency Pair:	[CCY]/ [CCY]
Fixed Rate Payer ²¹ :	[Party A][Party B]
Fixed Rate:	[number]
Floating Rate Payer ²² :	[Party B][Party A]

¹⁷ Delete if defaulting to the Annex A in effect as of the Trade Date.

¹⁸ For the Supplement to be incorporated into a Confirmation, either it should be incorporated in the opening paragraph or specified here as Applicable.

¹⁹ If the Vega Notional Amount is specified, the Notional Amount may be specified or determined formulaically as per the Supplement from the Vega Notional Amount. At least one of the Vega Notional Amount or Notional Amount must be specified.

²⁰ If the Notional Amount is specified, the Vega Notional Amount need not be specified. At least one of the Vega Notional Amount or Notional Amount must be specified.

²¹ If parties wish to define the Fixed Rate Payer as the Buyer, this term can be changed to Buyer and the Supplement shall deem the Buyer to be the Fixed Rate Payer.

²² If parties wish to define the Floating Rate Payer as the Seller, this term can be changed to Seller and the Supplement shall deem the Seller to be the Floating Rate Payer.

Settlement Currency:	[CCY]
[Settlement Date:	[date]] ²³
Settlement Rate Option:	[]]
Valuation Date:	[date]
Specified Time:	[] [a.m./p.m.] (local time in [Name of City])
[Mean Adjustment:	[Applicable][Not Applicable]] ²⁴
[N:	[number]] ²⁵
[Annualization Factor:	[number]] ²⁶
[Initial Observation Date:	[date] ²⁷
[Initial Observation Rate:	[number] ²⁸
[Observation Dates:	[dates][The dates set forth in the schedule attached hereto]] ²⁹
[Transaction Fee:	[CCY] [amount]]
[Transaction Fee Payment Date:	[date]]
[Transaction Fee Payer:	[Party A][Party B]]] ³⁰
3. Calculation Agent:	[Party A][Party B][As per the Agreement][other]
4. Business Days:	
Observation Business Days:	[]] ³¹
Payment Business Days:	[]] ³²

²³ Delete if the default in the Supplement applies.

²⁴ If the Confirmation is silent, Mean Adjustment will not apply.

²⁵ If the Confirmation is silent, N will be defined as per the Supplement.

²⁶ Delete defaulting to 252 as per the Supplement.

²⁷ Insert the Initial Observation Date if it is a date other than the Trade Date.

²⁸ Delete if a number is not agreed at the time of trading and this defaults to the determination in the Supplement.

²⁹ May be deleted if the definition fallback in the Supplement is being used. If Observation Dates are defined by a schedule of dates, such schedule of dates should be included.

³⁰ Delete the Transaction Fee terms where there is no such fee.

³¹ Delete if the default provisions of the Supplement will apply.

³² Delete if the default provisions of the Supplement will apply.

Exhibit III

FX Correlation Swap Transaction template

EXHIBIT II to the November 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the 1998 FX and Currency Option Definitions

Additional Provisions for a Confirmation of a Correlation Swap

[See Exhibit I of the 1998 FX and Currency Option Definitions for the introduction, standard paragraphs and closing for the letter agreement and Exhibit II-E of the 1998 FX and Currency Option Definitions for terms relating to Article 5.]

2. The terms of the particular Transaction to which this Confirmation relates are as follows:

(a) General Terms:

Trade Date:	[date]
[Date of Annex A:]	[date] ³³
[Incorporation of the 2018 Volatility Swap, Variance Swap and Correlation Swap Supplement to the FX Definitions:	Applicable] ³⁴
Transaction Type:	Correlation Swap
Notional Amount:	[CCY] [amount]
Currency Pair 1:	[CCY]/[CCY]
Currency Pair 2:	[CCY]/[CCY]
Fixed Rate Payer ³⁵ :	[Party A][Party B]
Fixed Rate:	[number]
Floating Rate Payer ³⁶ :	[Party B][Party A]
Settlement Currency:	[CCY]

³³ Delete if defaulting to the Annex A in effect as of the Trade Date.

³⁴ For the Supplement to be incorporated into a Confirmation, either it should be incorporated in the opening paragraph or specified here as Applicable.

³⁵ If parties wish to define the Fixed Rate Payer as the Buyer, this term can be changed to Buyer and the Supplement shall deem the Buyer to be the Fixed Rate Payer.

³⁶ If parties wish to define the Floating Rate Payer as the Seller, this term can be changed to Seller and the Supplement shall deem the Seller to be the Floating Rate Payer.

Settlement Date: [date]³⁷
 Settlement Rate Option for Currency Pair 1: []
 Settlement Rate Option for Currency Pair 2: []
 Valuation Date: [date]
 Specified Time for Currency Pair 1: [] [a.m./p.m.] (local time in [[Name of City]])
 Specified Time for Currency Pair 2: [] [a.m./p.m.] (local time in [[Name of City]])
 Mean Adjustment: [Applicable][Not applicable]
 [N: [number]]³⁸
 [Initial Observation Date: [date]]³⁹
 [Initial Observation Rate for Currency Pair 1: [number]]⁴⁰
 [Initial Observation Rate for Currency Pair 2: [number]]⁴¹
 [Observation Dates: [dates][The dates set forth in the schedule attached hereto]]⁴²
 [Transaction Fee: [CCY] [amount]]
 [Transaction Fee Payment Date: [date]]
 [Transaction Fee Payer: [Party A][Party B]]⁴³
 3. Calculation Agent: [Party A][Party B][As per the Agreement][other]
 4. Business Days:
 Observation Business Days: []⁴⁴
 Payment Business Days: []⁴⁵

³⁷ Delete if the default in the Supplement applies.

³⁸ If the Confirmation is silent, N will be defined as per the Supplement.

³⁹ Insert the Initial Observation Date if it is a date other than the Trade Date.

⁴⁰ Delete if a number is not agreed at the time of trading and this defaults to the determination in the Supplement.

⁴¹ Delete if a number is not agreed at the time of trading and this defaults to the determination in the Supplement.

⁴² May be deleted if using the definition fallback in the Supplement. If Observation Dates are defined by a schedule of dates, such schedule of dates should be included.

⁴³ Delete the Transaction Fee terms where there is no such fee.

⁴⁴ Delete if the default provisions of the Supplement will apply.

⁴⁵ Delete if the default provisions of the Supplement will apply.