International Swaps and Derivatives Association, Inc.

# Disclosure Annex for Foreign Exchange Transactions

This Annex supplements and should be read in conjunction with the General Disclosure Statement. NOTHING IN THIS ANNEX AMENDS OR SUPERSEDES THE EXPRESS TERMS OF ANY TRANSACTION BETWEEN YOU AND US OR ANY RELATED GOVERNING DOCUMENTATION. Accordingly, descriptions in this Annex of the operation of Foreign Exchange Transactions (as defined below) and the consequences of various events are in all cases subject to the actual terms of a Foreign Exchange Transaction executed between you and us and its governing documentation (whether or not such qualification is expressly stated).

We refer to Transactions in which the Underliers are foreign currencies and involve, or at the option of either party may involve, the exchange of one or more currencies against one or more other currencies or settlement in a single currency based on the rates of exchange between one or more currency pairs as "**Foreign Exchange Transactions.**" The terms of a Foreign Exchange Transaction may incorporate standard definitions published by industry bodies, annexes and supplements thereto, master confirmations and other market standard terms, which may in turn be amended or customized pursuant to the terms of the Foreign Exchange Transaction and its governing documentation. Before entering into a Foreign Exchange Transaction, you should obtain and review carefully any such materials incorporated by reference as their content could materially affect your rights and obligations under the Foreign Exchange Transaction, its value and its appropriateness for your particular objectives.

One of the most common types of Foreign Exchange Transaction is the foreign exchange forward contract ("**FX Forward**"), which is an agreement to buy one currency against the delivery of another currency at a rate set on the trade date for settlement on a specified date in the future. Under a deliverable FX Forward, the Transaction terms provide for an exchange of payments in each of the two currencies on the settlement date. Under a non-deliverable FX Forward ("**NDF**"), the Transaction terms provide for the payment of a net cash settlement amount on the settlement date in lieu of delivery of the notional amounts of the bought currency and the sold currency. The cash settlement amount is determined by converting the notional amount of one of the currencies (the "reference currency") into the other currency (the "settlement currency") at a spot foreign exchange rate that is observed on a pre-agreed pricing source or determined using another pre-agreed method (such source or method, the "settlement rate option") on a date ("valuation date") prior to the settlement date, and netting the currency amounts so that a single net payment in the settlement currency is made on the settlement date by the party owing the excess. In some NDFs, each of the bought currency and the sold currency is converted into a third currency that serves as the settlement currency. In either case, under an NDF no payment or account transfer takes place in the reference currency.

Foreign exchange options ("**FX Options**") are Transactions that give the buyer of the option the right, but not the obligation, to make or take delivery of one currency in exchange for taking or making delivery of another currency at a pre-determined exchange rate. Similar to FX Forwards,

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FX Options may be settled on a deliverable or non-deliverable basis. (We refer to non-deliverable FX Options as "**NDOs**"). FX Options have the risks and characteristics described in Section III.J – "Option Transactions present special considerations" – of the General Disclosure Statement. In particular, you should review and understand the conditions and requirements for exercising options, as described in such Section III.J.

**Settlement Risk**

Settlement risk in Foreign Exchange Transactions is the risk of loss when one party to the Foreign Exchange Transaction delivers the currency it sold but does not receive the corresponding amount of the currency it bought.

Settlement risk arises in deliverable Foreign Exchange Transactions where the parties have not arranged to use a mechanism for payment-versus-payment ("**PVP**") settlement, such as an escrow arrangement or PVP settlement through a member of CLS Bank International (which operates a multi-currency cash settlement system used by many participants in the foreign exchange market) or on the books of a bank at which both parties to a Foreign Exchange Transaction maintain settlement accounts in the relevant currencies. Because a party's payment obligations under a deliverable Foreign Exchange Transaction are denominated in a different currency than those of its counterparty, the payments cannot be netted against one another. Although payment netting across multiple Foreign Exchange Transactions with coinciding settlement dates and currencies is possible in principle, and may be provided for under a master agreement governing the Foreign Exchange Transactions, such multi-transaction payment netting can be effective only to the extent that the same party has offsetting obligations in the same currency on the same date.

A contributing factor to settlement risk in Foreign Exchange Transactions is the time zone difference between the principal financial centers of each currency, particularly when the hours of operation of the payment systems in each country do not overlap or overlap only briefly. Unless PVP settlement is implemented effectively, the settlement exposure under a Foreign Exchange Transaction is the gross amount of a party's payment obligation, which may be far in excess of the market value of the Foreign Exchange Transaction. The insolvency laws of certain jurisdictions may not recognize settlement netting or the finality of settlement payments. See Section III.H – "Transactions may involve legal and documentation risks" – of the General Disclosure Statement.

**Trading Hours May Not Align**

The interbank market in foreign currencies is a global, twenty-four hour market. Therefore, your and our hours of operation, during which you and we may transact in and value Foreign Exchange Transactions, calculate margin and settlement amounts, issue margin calls and settle collateral delivery or return amounts, may not conform to the hours during which the underlying currencies are most traded. To the extent this occurs, significant changes in foreign exchange rates as well as market, economic and political conditions, and thus the value of Foreign Exchange Transactions and the amount of credit exposure they create between us, may take place during times when it may be difficult for you to monitor or react to them.

Relevant information relating to conditions affecting underlying foreign exchange markets may not be as well known or as rapidly or thoroughly reported in your country as is the case with comparable information regarding domestic developments. Information regarding developments in certain emerging market jurisdictions may be even less readily available, if at all.

**Non-Business Day Risk**

Trading in a currency may be substantially less liquid on days when banks in the principal financial center of the currency are not open for business. Diminished liquidity may affect bid-offer spreads and/or the level of exchange rates, which may adversely affect the Transaction Economics of a Foreign Exchange Transaction for which the trade date, a valuation date, exercise date or other economically relevant date occurs on a day when such banks are not open for business, including as the result of banking holidays designated after the Foreign Exchange Transaction has been entered into.

**Market Disruptions and Restrictions due to Government Action or Other Factors**

Foreign currency exchange rates may be volatile and subject to intermittent market disruptions or distortions due to numerous factors specific to each foreign country, including among others government regulation and intervention, lack of liquidity and the types of entities participating in the market. Foreign currency exchange rates can be fixed by the sovereign government, allowed to float within a range of exchange rates set by the government, or left to float freely. Governments (including those of developed economies) may intervene in the currency markets through their central banks. Governments also may impose regulatory controls or taxes on foreign currency transactions, issue a new currency to replace an existing currency, or fix the exchange rate or alter the exchange rate or relative exchange rate characteristics by devaluation or revaluation of a currency. In addition, governments may designate banking holidays, restrict or suspend convertibility or transferability of a currency, or restrict participation in foreign exchange markets and funding markets, either in general or based on the nature of specific participants or transactions. The currencies of emerging economies may be subject to more frequent and larger central bank interventions than the currencies of developed economies and are also more likely to be affected by sudden changes in monetary or exchange rate policies, or by the actions of significant market participants.

Disruptions may also occur as a result of non-governmental events, such as actions taken by, or force majeure events affecting, foreign exchange dealers, relevant exchanges or price sources.

The foregoing events may generally be classified according to their effect, such as "price source risks," "convertibility and transferability risks," "sovereign risks" and "material adverse change" and are commonly referred to as "**disruption events**." Any of the foregoing events may adversely affect the Transaction Economics of a Foreign Exchange Transaction. You should be aware of the potential risks of any market disruptions and should understand their effect on each prospective Foreign Exchange Transaction, including the consequences, if any, of any such event specified under the terms of the Foreign Exchange Transaction as well as the possibility that certain events might not be expressly provided for. In some cases, market practice statements by industry bodies or provisions published by industry bodies and incorporated by reference into

transaction terms may influence the treatment of disruption events under Foreign Exchange Transactions.

Additional risks concerning "price sources" include material changes to the methodology applied by an administrator of a price source or an impact to the price published by a price source resulting from an unannounced government intervention or actions of unauthorized third parties. While these actions may have an impact on the rate displayed by the particular price source, they may not trigger a "disruption event" in a given transaction and may have a potential adverse effect on the Transaction Economics.

**Consequences of Certain Disruption Events**

Developments and conditions affecting the market for a currency, such as some of the disruptions discussed immediately above, may (a) prevent or delay the calculation of amounts payable under your Foreign Exchange Transaction, or your or our ability to make or receive payments in the settlement currency and/or (b) result in the application of alternative valuation and settlement mechanisms.

The terms and conditions of a Foreign Exchange Transaction may specify alternative methods, or "**disruption fallbacks**", that apply when such disruption events occur for determining any affected currency exchange rate and/or settling payment obligations. Application of disruption fallbacks (including related determinations by the calculation agent, if applicable) may have a significantly detrimental effect on the Transaction Economics. The existence of such disruption events and their consequences may be subject to discretionary determinations by the calculation agent, which may involve subjective judgment and uncertainty. If the applicable disruption fallback so provides, consequences such as the following may occur, among others:

- the price sources used by the calculation agent under your Foreign Exchange Transaction for determining any affected currency exchange rates may not be the same as those used prior to the disruption event;
- the calculation agent may determine any affected currency exchange rates in a manner specified under the terms of the Foreign Exchange Transaction, which may include taking into account unpublished or unannounced sources and other information the calculation agent deems relevant, and employing its own calculations and estimates;
- the value of the affected currency exchange rate used by the calculation agent to determine any amount payable may be materially different from the value of any previously used published price source;
- the determination of the affected currency exchange rate may be deferred until the relevant disruption event is no longer continuing, as determined by the calculation agent, and may therefore occur on unscheduled valuation dates;
- the value of the currency exchange rate may be determined long before or after the date on which it was originally scheduled to be determined;

- alternative methods for settlement of payments may be used, including postponing settlement of your Foreign Exchange Transaction until the relevant disruption event is no longer outstanding, as determined by the calculation agent;

- the Foreign Exchange Transaction may be converted from a deliverable contract to a non-deliverable contract or alternatively from a non-deliverable contract to a deliverable contract, obligating the party owing the currency that can be delivered to make such payment and the other party to wait to receive payment;

- settlement of your Foreign Exchange Transaction may occur by payment of an equivalent amount in a different currency or by delivery of a security denominated in the original currency; and/or

- the terms of the Foreign Exchange Transaction may require the parties to negotiate fallback arrangements in good faith.

The determinations or negotiations called for by a disruption fallback may need to occur under uncertain market conditions. Depending on the terms of your Foreign Exchange Transaction, postponement of a valuation or settlement date may be for an indefinite time period, or subject to a specified maximum duration, after which time a different disruption fallback, such as calculation agent determination or termination of the Foreign Exchange Transaction, may apply.

You should evaluate carefully the interaction of various disruption fallbacks with one another and with any impossibility, illegality or force majeure provisions of the master agreement, if any, governing the Foreign Exchange Transaction.

## Additional Considerations for Specific Product Types

The following is a discussion of certain material risks, terms and characteristics of some common types of Foreign Exchange Transactions. The categories employed below are illustrative only, and are intended to assist you in understanding key features of certain prospective Foreign Exchange Transactions. The discussion should not be viewed as a comprehensive description of any particular Foreign Exchange Transaction that may be under discussion between you and us. Although certain nomenclature may be standardized according to definitions published by an industry body, this may not be the case across all transactions. A particular Foreign Exchange Transaction may have additional or different risks, terms and characteristics than described below, even if it is referred to by one of the following category names.

### NDFs and NDOs

NDFs and NDOs may incorporate by reference various industry standard terms, some of which are particular to a given reference currency or transaction type.

The settlement payments under an NDF or NDO are determined by reference to the price source or other methodology by which the conversion rate for the reference currency is determined. There can be no assurance that you (or any affiliate of yours operating in the jurisdiction of the reference currency) will be able to sell or purchase the reference currency at this conversion rate

or on the valuation date or at all. Any difference between the conversion rate determined under an NDF or NDO and your actual conversion rate (or, if relevant, the conversion rate applied in measuring your assets or liabilities) is a source of basis risk. Due to restrictions on participation in currency and funding markets, different onshore and offshore rates may apply to the reference currency, and the forward exchange rates that are implicit in the market value of the NDF or NDO may differ considerably from the values implied by the spot exchange rate and interest rate differentials between the two currencies. Such differences can be affected by market expectations regarding changes in the exchange rate regime.

In addition, in certain markets there may be the risk of a disruption event occurring where the relevant rate source continues to be published, but active participants in the market view that published rate as not representative of the actual spot rate.

**Dealer-Poll Currency Rates**

If the terms of a Foreign Exchange Transaction provide that the value of an exchange rate or fallback exchange rate is determined based on a dealer poll, we or an affiliate may be requested to provide quotations from time to time in such dealer polls. Any such quotations may affect, materially or otherwise, the settlement of a Foreign Exchange Transaction. If we or an affiliate provide such quotations and also act as principal in Foreign Exchange Transactions that refer to the corresponding exchange rate, then we face an inherent conflict of interest.

**Barrier FX Options**

Barrier options are options on currencies under which the right to exercise may be created or extinguished, or the terms of which may change in some other pre-defined manner, upon the occurrence of an event or condition (a "**barrier event**") defined by reference to observed values of the exchange rate during the term of the option. A barrier event may consist, for example, of an exchange rate reaching or passing through a pre-agreed barrier price or may require more complex conditions on the path of the relevant exchange rate. A barrier option that becomes potentially exercisable upon the occurrence of a barrier event is known as a "knock-in option", while a barrier option that is extinguished upon the occurrence of a barrier event is known as a "knock-out" option. Other examples of barrier options include "one-touch" barrier options (the holder of the option receives a payment if the exchange rate reaches or surpasses a pre-agreed barrier price by its expiration date) and "no-touch" binary options (the holder of the option receives a payment if the exchange rate never reaches a pre-agreed barrier price by its expiration date) and "multi-cross" options. The value of a barrier option may change non-linearly and abruptly, particularly as the relevant exchange rate approaches the level that triggers the barrier event.

Barrier events are defined under the terms of a Foreign Exchange Transaction, which may provide that the calculation agent or another designated party will determine whether a barrier event has occurred. Barrier events may occur unexpectedly and, subject to the terms of the Foreign Exchange Transaction and its governing documentation, based on information available to the calculation agent or other designated party that is not contemporaneously (if at all) observable by you. You should review and understand thoroughly the applicable definition of barrier event, including such factors as whether there is a requirement that an actual transaction

at the same price or level as the observation that triggers a barrier event (the "**barrier price**") has occurred, and whether a specified minimum size or other criteria apply to the observed triggering transaction. There can be no assurance that you will be able to execute a spot or other transaction at the barrier price, even if you have placed a limit order at such price with us or in an unrelated trading venue. Accordingly, any trading or hedging strategy that relies on the execution of a transaction at the barrier price (such as reliance on a stop-loss order to mitigate losses in the event that a purchased barrier option is extinguished) may not be effective.

Subject to any express agreement in the documentation governing a barrier option between us, we may, in our discretion, decide to engage in hedging activities with respect to the barrier option. Such activities may include buying and selling, on a dynamic basis, the underlying currency in the spot market or entering into derivatives on such currency. Our hedging strategy may entail unwinding our hedge when a barrier event occurs under your option. We may anticipate the barrier event and begin unwinding our hedge before the barrier event occurs, or our hedging strategy may require greater and more frequent dynamic adjustments to our hedge as market prices approach the barrier price. Unwinding or adjusting the hedge typically consists of buying or selling a quantity of the currency underlying the barrier option, or terminating or entering into derivatives positions with market counterparties. This activity may affect the likelihood of the barrier event occurring or not occurring. In addition, currency or currency derivative transactions that we execute in other capacities (such as those described in Section IV.A.2 – "Trade for our own account or the account of customers" – of the General Disclosure Statement) may affect the probability that a barrier event will occur.

**Complex or Exotic FX Options and other Structured FX Products**

There is a wide range of complex, exotic or structured Foreign Exchange Transactions which contain features not specifically described above. Such features may accentuate the risks described elsewhere in this Annex and in the General Disclosure Statement, particularly in Section III – "Material Risks". Many of these products have option-like features. Please refer to Section III.J – "Option Transactions present special considerations" – of the General Disclosure Statement, in particular the discussion under the subheading "Complex or Exotic Options".

**Volatility and Variance-linked Foreign Exchange Transactions**

*Variance Swaps*

A variance swap typically is a Foreign Exchange Transaction under which a "variance buyer" and a "variance seller" agree to exchange payments based on the difference between (i) an amount proportional to the observed level of variance (as defined under the terms of the variance swap) of the exchange rate for a specified currency pair realized over a stated observation period and (ii) a fixed amount of variance that is agreed upon at execution. Typically, (i) if the amount proportional to the observed variance of the relevant exchange rate over the stated observation period, on an annualized basis, exceeds the specified variance level, which may reflect an estimate or projection of variance for the stated observation period, the variance seller (which may be referred to in the confirmation as the "floating FX rate payer") will make a payment to the variance buyer (which may be referred to in the confirmation as the "fixed FX rate payer") equal to the amount of such excess multiplied by the specified notional amount (which may be

referred to in the confirmation as the "vega notional amount") expressed in a specified currency, or (ii) if such specified variance level exceeds such observed variance, the variance buyer will make a payment to the variance seller equal to the amount of such excess multiplied by such notional amount. If specified under the terms of the transaction, the realized variance may be measured in relation to the mean return of the relevant exchange rate over the stated observation period. If specified in the terms of the variance swap, the payment by the variance seller may be subject to an agreed upon cap. In the absence of a cap, the variance seller's potential loss under a variance swap is not quantifiable and is potentially unlimited. Variance is not a measure of a rate of return on an exchange rate. Variance differs from other measures, such as volatility, of the variability of exchange rates.

A variance swap referencing an exchange rate will generally have the characteristics and risks described in Section II.J – "General characteristics of variance- and volatility-linked Transactions" in the General Disclosure Statement.

Variance may be affected by a number of factors. For example, governmental intervention in the market for its currencies to fix the relevant exchange rate or to confine it to a particular band will tend to decrease the variance of the exchange rate. However, sudden changes in monetary or exchange rate policies may cause significant increases in variance of the relevant exchange rate. Variance may also be affected by the announcement and the frequency of announcement of other macroeconomic events.

In some cases, your objective in entering into a variance swap may be to hedge currency exposure or to hedge assets or liabilities that are related to exchange rates. There can be no assurance that prior observed relationships, if any, between variance and the behavior of such assets or liabilities will continue. See Section II.H – "No assurance of Transactions achieving your desired hedging objectives" – of the General Disclosure Statement.

*Volatility Swaps*

A volatility swap is similar to a variance swap, except that payments under a volatility swap are determined by reference to the observed volatility, rather than variance, in the relevant exchange rate over the specified observation period. Please refer to "Variance swaps" above and Section II.J – "General characteristics of volatility swaps and variance swaps" in the General Disclosure Statement.

In some cases, your objective in entering into a volatility swap may be to hedge currency exposure or to hedge assets or liabilities that are related to exchange rates. There can be no assurance that prior observed relationships, if any, between volatility and the behavior of such assets or liabilities will continue. See Section II.H – "No assurance of Transactions achieving your desired hedging objectives" – of the General Disclosure Statement.

*Forward Volatility Agreements*

Under a typical foreign-exchange forward volatility agreement, the parties agree on the trade date to enter into a "straddle" on a specified future date (the "reference date") with terms that will be based on a volatility level that is agreed by the parties on the trade date. A "straddle" is a combination of a put option and a call option on a specified currency pair, both of which are

purchased by the same party (the "option buyer"). The premiums for the options will be determined by the calculation agent on the reference date based on the specified volatility level and other option pricing inputs as of the reference date. The strike prices for the options may also be determined by the calculation agent on the reference date based on such specified volatility level and/or other specified variables, or may be specified in the transaction documentation.

The specified volatility level may reflect an estimate or projection, as of the trade date, of what the implied volatility will be, on the reference date, for the specified currency pair with respect to the period between the reference date and the expiration date. If the implied volatility for the specified currency pair with respect to such period, based on market prices for similar options on the reference date, is less than the specified volatility level, then the premiums paid by the option buyer will generally be greater than the market price of similar options on the reference date, and *vice versa*. For considerations relevant to the calculation of volatility, please refer to Section II.J – "General characteristics of variance- and volatility-linked Transactions" – of the General Disclosure Statement.

The calculation agent may be required to exercise judgment in determining the premiums and strike prices of the options, and the calculation agent may make those determinations in a manner that is adverse to your interests. Please refer to Section IV.A.6 – "Act as calculation agent, valuation agent, collateral agent, or determining party" – of the General Disclosure Statement.

**Correlation Swaps**

Foreign exchange correlation swaps are swaps where each party agrees to pay to the other an amount equal to a specified notional amount multiplied by the difference between a specified level and the observed correlation between exchange rates for specified currency pairs over a specified observation period. Typically, (i) if the correlation between the relevant exchange rates over the specified observation period exceeds the specified correlation level, which may reflect an estimate or projection of correlation of the specified currency pairs for the specified observation period, the correlation seller will make a payment to the correlation buyer equal to the amount of such excess multiplied by a notional amount expressed in a specified currency, or (ii) if such specified correlation level exceeds such observed correlation, the correlation buyer will make a payment to the correlation seller equal to the amount of such excess multiplied by the specified notional amount.

A correlation swap referencing an exchange rate will generally have the characteristics and risks described in Section II.K – "General characteristics of correlation-linked Transactions" – of the General Disclosure Statement.

If the same currency is included in more than one specified currency pair, then macroeconomic events affecting that currency may have a significant impact on the correlation of the specified currency pairs, even though the value of the other currencies included in the specified currency pairs may remain relatively stable in relation to one another or to currencies that are not included in the specified currency pairs. In addition, governmental intervention in the market for any of the currencies included in the specified currency pairs, or other sudden changes in monetary or

exchange rate policies, may have a significant impact on the correlation of the specified currency pairs.

If terminated early, the termination value of a correlation swap may be significantly affected by the expectations of the determining party with respect to correlation of the relevant exchange rates. These expectations may vary among market participants and may change over time. Please refer to Section II.I – "Termination of Transactions" – of the General Disclosure Statement.