

# LCH LIMITED

# **PROCEDURES SECTION 2I**

# FOREXCLEAR CLEARING SERVICE

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#### 1. INTRODUCTION AND INTERPRETATION

These Procedures govern the ForexClear Service, form part of the Rulebook and must be read in conjunction with the other parts of the Rulebook.

Capitalised terms used in these Procedures not otherwise defined herein have the meanings ascribed to them in the Rulebook.

References to "Sections" shall mean sections in these Procedures.

References to "Business Day", "Calculation Agent", "Disruption Fallback", "Notional Amount", "Reference Currency", "Settlement Currency", "Settlement Currency Amount", "Settlement Date", "Settlement Rate", "Settlement Rate Option", "Trade Date", "Valuation Date", "Valuation Postponement" shall carry the meanings given to them in the Product Specific Contract Terms and Eligibility Criteria Manual as published on the Clearing House's website from time to time with respect to the relevant Currency Pair.

References to "business day" shall carry the meaning given to it in the Rulebook.

References to "Currency Pair" are to the relevant currency pairs specified in the Schedule to the ForexClear Regulations.

**"EMTA"** means EMTA Inc., the trade association for the emerging markets that was formerly known as the Emerging Markets Traders Association, or any successor entity.

"EMTA Template" means, where applicable, the template terms for a Non-Deliverable FX Transaction for a particular Currency Pair that are in effect and published by EMTA on its website on the relevant Trade Date.

### "ForexClear Margin or Settlement Currency" means

- (a) in the case of a ForexClear NDF Contract, USD; or
- (b) in the case of all other ForexClear Contracts, the ForexClear Currency or ForexClear Currencies elected as such by the FXCCM party to such ForexClear STM Contract at registration of such ForexClear STM Contract, provided that the Clearing House has permitted such currency or currencies to be chosen for such purpose.

"LCH G10 NDF Contract Template" means, where applicable, the template terms for a Non-Deliverable FX Transaction for a particular Currency Pair that are set forth in the ForexClear Contract Terms.

"NPV Payment" means, in respect of a business day and a ForexClear STM Contract that is settled-to-market daily in accordance with Regulation 106A, the amount or amounts paid by either the relevant FXCCM or the Clearing House to the other on such business day in respect of the change in the net present value of that ForexClear STM Contract (or the obligations thereunder) in accordance with the ForexClear STM Terms applicable to that ForexClear STM Contract.

"Relevant EMTA Template" means, for a particular ForexClear Contract, the EMTA Template that is incorporated by reference into the ForexClear Contract Terms applicable to such Contract, together with any amendments thereto as set out in the ForexClear Contract Terms.

"Submission Date" means the date on which a given trade is submitted to the Clearing House for registration.

Unless otherwise specified, all times are in local London time.

The liability of the Clearing House is as set out in Regulation 52 (*Exclusion of Liability*), which applies to these Procedures in its entirety unless provided otherwise.

#### 1.1 Users of the ForexClear Service

The ForexClear Service is an interface that processes and stores all ForexClear Transactions. FXCCMs are clearing members who have applied and have been accepted by the Clearing House to clear in the ForexClear Service. FXDs are not FXCCMs, but have met the criteria for registration as a FXD and have entered into a ForexClear Dealer Clearing Agreement with an FXCCM and the Clearing House. FXCCMs, FXDs and ForexClear Clearing Clients are collectively known as ForexClear Participants ("FXPs"). For membership procedures, please see Section 1 (Clearing Member and Dealer Status) of the Procedures.

For identification purposes each FXCCM is assigned a unique three-character mnemonic.

- 1.1.1 *Termination of FXCCM Status*: Clearing Members should contact the Clearing House Onboarding Department (+44 (0)207 426 7891/7627/7063; onboarding@lch.com) for details of how to resign from the ForexClear Service.
- 1.1.2 *Termination of FXD Status*: The ForexClear Dealer Agreement and Regulation 8 (*Dealer Status*) set out how the FXD relationship may be terminated.

### 1.2 **Service Scope**

1.2.1 Eligibility: ForexClear Transactions may be submitted for clearing through the ForexClear Service. To be eligible to be registered as a ForexClear Contract, a trade must meet the applicable ForexClear Eligibility Criteria (as set out in the Product Specific Contract Terms and Eligibility Criteria Manual as published on the Clearing House's website from time to time).

# 1.2.2 Service Operating Hours

- (a) *Opening Days*: The ForexClear Service will be open each day, except weekends, Christmas Day and New Year's Day.
- (b) Opening Hours: The ForexClear Service will be open between 20:00 local London time Sunday night and 01:00 local London time Saturday morning ("**Opening Hours**"). The ForexClear Service will not accept ForexClear Transactions outside of these hours.

#### 1.2.3 Accounts

- (a) Proprietary Accounts and Client Accounts
  - (i) Proprietary Accounts

An FXCCM may request that the Clearing House opens one or more Proprietary Accounts in respect of its House Clearing Business.

Each Proprietary Account will map to two sub-accounts

- (A) a position account; and
- (B) a collateral account
- (ii) Client Accounts
  - (A) Types of Client Account

Subject to Regulation 11 (*Client Clearing Business*) and Section 1.12 (*ForexClear Client Clearing*) below, an FXCCM may request that the Clearing House opens, in respect of its Client Clearing Business, one or more:

- (1) Individual Segregated Accounts;
- (2) Indirect Gross Accounts;
- (3) Non-Identified Client Omnibus Net Segregated Accounts;
- (4) Identified Client Omnibus Net Segregated Accounts;

- (5) Affiliated Client Omnibus Net Segregated Accounts;
- (6) Omnibus Gross Segregated Accounts; and/or
- (7) Indirect Net Accounts.
- (iii) Each Client Account will map to two or more sub-accounts:
  - (A) one or more position accounts; and
  - (B) one or more collateral accounts.
- (b) The ForexClear Service provides for:
  - (i) a single house position-keeping account with the account code "H" in respect of ForexClear Clearing House Business and a collateral account associated with the "H" house position-keeping account;
    - (A) Sub-accounts within the FXCCM's "H" house position-keeping account may be set up (e.g. for branches or FXDs). Each such sub-account will carry the unique Bank Identifier Code ("BIC") of the relevant branch/FXD (please see Section 1.2.4).
    - (B) Sub-accounts within the FXCCM's "H" house position-keeping account will be associated with the single collateral account of the FXCCM and information contained across the house position-keeping sub-accounts is consolidated into the single "H" account of each FXCCM.
  - a single client position-keeping account with the account code (ii) "C" in respect of ForexClear Client Clearing Business and a collateral account associated with the "C" client positionkeeping account. Each client "C" position-keeping account and the client "C" collateral account of a FXCCM may hold any number of segregated sub-accounts. Each Individual Segregated Account of the FXCCM will map onto one such segregated subaccount in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account, each Indirect Gross Account of the FXCCM will map onto one such segregated sub-account in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account and each Omnibus Segregated Account will map onto one such segregated sub-account in the client "C" position-keeping account and one such segregated sub-account in the client "C" collateral account. In the case of Indirect Gross Accounts, the relevant segregated sub-accounts of the client "C" position-keeping account will be further segregated into

- position-keeping sub-accounts for each Indirect Gross Sub-Account (relating to each Indirect Clearing Client).
- (c) The ForexClear Service also provides for a separate account for each FXCCM's ForexClear Default Fund Contribution with the account code "F".
- (d) Only the "H" and "F" accounts are obligatory. The "C" account will be used in respect of any FXCCM which engages in ForexClear Client Clearing Business.

#### 1.2.4 Branches

- (a) Submission of a static data form to LCH's Onboarding department by an FXCCM will also allow an FXCCM to be provided with one or more sub-accounts for any branch of that FXCCM (for position-keeping purposes) within that FXCCM's "H" position-keeping account.
- (b) Because the single account reflects the consolidated balances and liabilities of the FXCCM, the balances and liabilities associated with ForexClear Transactions submitted by FXDs and/or per branch will be provided as an estimate (if applicable).
- (c) Where a ForexClear Transaction is presented for clearing by a branch of an FXCCM, it is deemed to have been presented by, and in the name of, the relevant FXCCM.

# 1.2.5 Novation and Registration

- (a) A ForexClear Transaction must satisfy the applicable ForexClear Eligibility Criteria (set out in the Product Specific Contract Terms and Eligibility Criteria Manual as published on the Clearing House's website from time to time) at the Registration Time. Upon a ForexClear Transaction being submitted to the Clearing House for registration, the Clearing House will determine whether to accept or reject the ForexClear Transaction within the required timeframe under all Applicable Law. Where the Clearing House determines to accept the ForexClear Transaction, registration shall occur immediately and the ForexClear Transaction shall be automatically replaced with two separate ForexClear Contracts.
- (b) If any FXCCM has not transferred sufficient Collateral in respect of its Liabilities or estimated Liabilities to the Clearing House (taking into account any MER Buffer and MCE provided by the Clearing House, if any) at the time of the relevant Incremental Risk Check (as defined herein), then any submitted and unregistered ForexClear Transaction that the FXCCM has been nominated to clear and that is subject to such Incremental Risk Check will be rejected.
- (c) Once the ForexClear Transaction has passed the Validation Checks (as defined in paragraph (a) of Section 1.3.3 (*Trade Validation and*

Registration)) and the Clearing House has determined to accept the ForexClear Transaction for registration, the Clearing House will send a message confirming the registration of the ForexClear Transaction as two ForexClear Contracts and including a datestamp of the relevant registration time to the entities specified in paragraph (a)(iii) of Section 1.3.3 (*Trade Validation and Registration*). For the purpose of the ForexClear Regulations, the time of dispatch of such message shall be the "**Registration Time**" of such ForexClear Contracts.

- (d) The definitive report of a registered ForexClear Contract will be shown on the "**All Open Contracts**" report issued by ForexClear Reporting.
- (e) If an FXCCM is declared a Defaulter, the Clearing House will not register any ForexClear Contract in the name of such Defaulter (except pursuant to the Default Rules). ForexClear Transactions in respect of non-defaulting FXCCMs will continue to be registered in accordance with, and subject to, the Rulebook.

### 1.3 **Trade Management**

1.3.1 *Trade Capture*: After the execution of a ForexClear Transaction (a "**trade**"), each FXP who is a party to the trade will submit individual instructions to the ForexClear Approved Trade Source System for matching and clearing of the trade. FXPs are not required to submit a confirmation of any trade presented to the Clearing House for registration. Presentation of the matched trade terms through the ForexClear Approved Trade Source System will ensure that the agreed terms of the trade are recorded.

Once the ForexClear Approved Trade Source System receives the trade instructions from the FXPs who are parties to the trade, the ForexClear Approved Trade Source System matches both instructions. The ForexClear Approved Trade Source System validates the trade using the applicable ForexClear Eligibility Criteria and will, if appropriate, present a single message containing the names of the FXPs who are parties to the trade and the terms of the trade to the Clearing House for registration and clearing, such matched trade being known as a "ForexClear Transaction".

The Clearing House will determine whether to accept or reject the ForexClear Transaction within the required timeframe under all Applicable Law. In respect of a ForexClear Transaction which is:

- (a) a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members, Trading Venue and (if the originating ForexClear Approved Trade Source System is different to the Trading Venue) the originating ForexClear Approved Trade Source System of registration or rejection of the ForexClear Transaction (as applicable); and
- (b) not a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members (via the originating ForexClear

Approved Trade Source System or ClearLink API) of registration or rejection of the ForexClear Transaction (as applicable),

in each case within the required timeframe under Applicable Law.

### 1.3.2 The ForexClear Approved Trade Source Systems

FXCCMs must not submit instructions to the Clearing House for trades which will not meet the ForexClear Eligibility Criteria. The Clearing House will register a ForexClear Transaction on the basis of the data provided to it by the ForexClear Approved Trade Source System and has no obligation to verify that the details received from the ForexClear Approved Trade Source System in respect of a ForexClear Transaction properly reflect the trade entered into by the relevant FXPs.

Application for ForexClear Approved Trade Source System status shall be made in accordance with the policies published from time to time on the Clearing House's website. A list of ForexClear Approved Trade Source Systems currently approved by the Clearing House is available on the Clearing House's website. Where the Clearing House approves any additional ForexClear Approved Trade Source System, it will notify FXCCMs via a member circular.

The Clearing House is not able to, and will not, verify the authorisation of the source of any details of any ForexClear Transaction reported to it for registration by the ForexClear Approved Trade Source System. The Clearing House shall have no liability in the event that any FXCCM suffers any loss through the unauthorised input of details into a system of a ForexClear Approved Trade Source System.

Notwithstanding the designation by the Clearing House of a system as a ForexClear Approved Trade Source System, the Clearing House makes no warranty (and will accept no liability) as to the effectiveness, efficiency, performance or any other aspect of the services provided by any ForexClear Approved Trade Source System or the timeliness or otherwise of the delivery of any ForexClear Transaction details by that ForexClear Approved Trade Source System to the Clearing House. Such matters form part of the relationship between the FXCCM and the ForexClear Approved Trade Source System to suspend the ability of an FXCCM to make submissions from time to time.

The Clearing House accepts no liability for any error within or corruption of any data sent by the ForexClear Approved Trade Source System to the Clearing House or to an FXCCM or any delay in or failure of the transmission of such data to the Clearing House. In the event that the Clearing House registers any ForexClear Contract(s) on the basis of incorrect or corrupted data sent to it by a ForexClear Approved Trade Source System, the FXCCM(s) concerned shall be bound by the terms of such ForexClear Contract(s), unless the ForexClear Contract is subsequently cancelled in accordance with Regulation 92 (Cancellation of ForexClear Contracts).

#### 1.3.3 Trade Validation and Registration

## (a) Process Flow Description

- (i) The Clearing House performs a validation check on each trade submitted by FXPs to ensure that each such trade meets the applicable ForexClear Eligibility Criteria and the Counterparty Technical Validation Check (as defined below), Incremental Risk Checks (as defined below) required for ForexClear Transactions and, with respect to each ForexClear Option Transaction, ForexClear Spot Transaction, ForexClear Swap Transaction and ForexClear Deliverable Forward Transaction, a Settlement Exposure Limit Check (as described herein) (together, the "Validation Checks").
- (ii) The Clearing House will create two trade records for a ForexClear Transaction which passes the Validation Checks and is accepted for clearing by the Clearing House: one for the ForexClear Contract between the Clearing House and the relevant FXCCM and the other for the ForexClear Contract between the Clearing House and the same or another relevant FXCCM.
- (iii) In respect of a ForexClear Transaction which is:
  - (A) a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members, Trading Venue and (if the originating ForexClear Approved Trade Source System is different to the Trading Venue) the originating ForexClear Approved Trade Source System of registration or rejection of the ForexClear Transaction (as applicable); and
  - (B) not a Trading Venue Transaction, the Clearing House will notify the ForexClear Clearing Members (via the originating ForexClear Approved Trade Source System or ClearLink API) of registration or rejection of the ForexClear Transaction (as applicable),

in each case within the required timeframe under all Applicable Law.

- (iv) As provided in paragraph 1.2.5(c) (*Novation and Registration*), in respect of messages confirming registration, the time of dispatch of such message shall be the Registration Time of that ForexClear Contract.
- (v) The internal sub-account (i.e. FXCCM, branch, or FXD) into which each trade record is booked is derived from the BIC code within the message from the ForexClear Approved Trade Source System. The BIC links to the FXCCM reference data.

- (vi) Both new trade records arising out of the ForexClear Transaction have the same unique ForexClear ID (the "ForexClear ID").
  Any further events or actions are applied on the basis of this ForexClear ID, to ensure consistency.
- (b) "Counterparty Technical Validation Check" The counterparties to each trade (a) are both parties submitted trade particulars FXPs, (b) are each a Non-Defaulting FXCCM and (c) are approved by the Clearing House to clear the relevant trade type.
  - (i) Valuation Date and Settlement Date: in respect of a ForexClear NDF Transaction, (A) the Valuation Date and Settlement Date for the ForexClear Transaction must fall on a valid Business Day for the Currency Pair to which the ForexClear Transaction relates; and (B) the Settlement Date must fall on a Business Day after the Valuation Date. FXCCMs should refer to the Relevant EMTA Template for further details of the relevant Business Days for determining the Valuation Date and the Settlement Date:

#### Risk and Settlement Limit Checks

- (ii) The Clearing House will apply an "Incremental Risk Check" to each individual ForexClear Transaction which is not a Sub-Block Trading Venue Transaction. The Incremental Risk Check uses a suitable approximation methodology to estimate an FXCCM's Liabilities (including the new ForexClear Transaction) against available Collateral (taking into account any MER Buffer and MCE made available by the Clearing House, if any). However, any ForexClear Transaction submitted by that FXCCM that is risk reducing (i.e. results in a reduction of that FXCCM's Liabilities) will always pass the Incremental Risk Check, even if the FXCCM has not transferred sufficient Collateral in respect of its Liabilities to the Clearing House. The Clearing House will apply an additional "Settlement Exposure Limit Check" on a per currency basis to each individual ForexClear Spot Transaction, ForexClear Deliverable Forward Transaction, ForexClear Option Transaction and ForexClear Swap Transaction, as the case may be. The Settlement Exposure Limit Check uses an approximation methodology to assess an FXCCM's Settlement Exposure Amount for each Settlement Exposure Date against a pre-determined Settlement Exposure Limit.
- (iii) In the case of a ForexClear Settlement Event, the Clearing House will apply additional checks to each ForexClear Spot Transaction by reference to its impact on the Settlement Position Amount of the Impacted ForexClear Option Clearing Member.

<sup>&</sup>lt;sup>1</sup> As amended from time to time as per relevant EMTA Template.

- (iv) Both FXCCMs to the ForexClear Transaction must pass the Incremental Risk Check and Settlement Exposure Limit Check in order for the Clearing House to register two ForexClear Contracts in those FXCCM's names.
- (v) If either (or both) FXCCM(s) to a ForexClear Transaction fail(s) the Incremental Risk Check(s) and/or Settlement Exposure Limit Check(s), then the ForexClear Transaction will be rejected immediately and a notification sent in accordance with Section 1.3.3(a)(iii).

## (c) Necessary Consent

- (i) In the case of an FXCCM which has been nominated to register a ForexClear Transaction on behalf of a third party Executing Party other than an FXD, the Clearing House will (only where such ForexClear Transaction is not a Trading Venue Transaction) provide notification to such FXCCM of the relevant ForexClear Transaction and that it has been so nominated, via member reports, the ClearLink API or otherwise ("Notification"). Where an FXCCM is nominated to clear both ForexClear Contracts arising from the registration of a ForexClear Transaction in the capacities described in this paragraph, such FXCCM will receive two separate Notifications from the Clearing House in relation to such ForexClear Transaction. All Notifications shall be provided within the required timeframe under all Applicable Law. In all other cases, no Notification will be provided to any FXCCM.
- (ii) In respect of a ForexClear Transaction that is not a Trading Venue Transaction, following receipt of a Notification, an FXCCM may choose to grant or refuse consent to register the ForexClear Transaction. It is a condition for registration of such a ForexClear Transaction that an FXCCM grants a separate consent (each, a "Necessary Consent") in respect of each Notification received by it in relation to the registration of such ForexClear Transaction. The Clearing House has an automated system which it operates on each business day for the purposes of rejecting ForexClear Transactions which have been presented for clearing but in respect of which any Necessary Consent has not been notified to the Clearing House prior to the LCH Cut-off Time. The "LCH Cut-off Time" in respect of a ForexClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FXCCM has not notified the Clearing House of a Necessary Consent by the LCH Cut-off Time, it will be deemed to have rejected the relevant ForexClear Transaction. Any Necessary Consent of a ForexClear Transaction notified by an FXCCM to the Clearing House prior to the LCH Cut-off Time is irrevocable. Any Necessary Consent notified by an FXCCM to the Clearing House after the LCH Cut-off Time shall be invalid.

- (iii) In circumstances where the registration of a ForexClear Transaction is conditional upon one or more Necessary Consent(s) being notified by the applicable FXCCM(s), the relevant ForexClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FXCCM at the time when it notifies the Clearing House of its Necessary Consent. In all other circumstances, a ForexClear Transaction shall be "submitted" to the Clearing House by the applicable FXCCM upon being presented to the Clearing House for clearing by or on behalf of such FXCCM or by or on behalf of a ForexClear Dealer (acting in such capacity with respect to the relevant ForexClear Transaction) approved to clear ForexClear Transactions through the relevant FXCCM.
- (iv) The Clearing House will (where applicable) apply a "Consent Validation Check" in respect of a ForexClear Transaction presented for clearing that is not a Trading Venue Transaction in order to ensure that the Clearing House has received all required Necessary Consents, in accordance with Section 1.3.3(d)(ii).

## (d) Registration

- (i) Once it is confirmed that a ForexClear Transaction has passed the Validation Checks, and the Clearing House has determined to accept the ForexClear Transaction for registration, the Clearing House registers the ForexClear Transaction as two ForexClear Contracts and changes the status for each ForexClear Transaction to "NOVATED".
- (ii) The Clearing House acknowledges the ForexClear Contract status and sends a message to the entities specified in Section 1.3.3(a)(iii) that the ForexClear Transaction is registered and "NOVATED".

### 1.3.4 Trade Rejection

Trades presented for registration that do not meet the ForexClear Eligibility Criteria or any other requirement for registration under the Rulebook, including a trade (a) presented by or on behalf of an FXCCM in respect of a third party Executing Party other than an FXD where such trade was executed on a Trading Venue that was not at the time of execution of such trade an Eligible Trading Venue in respect of such FXCCM, (b) presented by or on behalf of an FXCCM that was executed on a trading venue or facility that had not at the time of the execution of such trade been approved by the Clearing House as a Trading Venue, (c) which contains invalid or incomplete message data, or (d) that is not a Sub-Block Trading Venue Transaction and with respect to which the Clearing House has not received sufficient Collateral (taking into account any MER Buffer and MCE provided by the Clearing House, if any) will, in each case, be rejected.

If a trade is presented to the Clearing House for registration and rejected, it may be re-presented for registration in the form of a new trade but with the same economic terms in accordance with, and subject to, the Rulebook and all Applicable Law, and such trade will, for the purposes of the Rulebook and upon such re-presentation, constitute a new trade.

#### 1.3.5 Package Transactions

Subject to Clearing House availability, a ForexClear Clearing Member may, via an Approved Trade Source System, present to the Clearing House, in a single submission, a group of two or more ForexClear Transactions for simultaneous registration (such group of ForexClear Transactions being a "Package Transaction"). A Package Transaction must be identified to the Clearing House at the time of its presentation in the format prescribed by the Clearing House. Where the Package Transaction is not presented in the prescribed format, each constituent ForexClear Transaction within the Package Transaction will be rejected.

Where the Clearing House receives a Package Transaction for registration it shall treat each ForexClear Transaction that forms part of the Package Transaction as a new ForexClear Transaction in accordance with the Rulebook and, where each constituent ForexClear Transaction within the Package Transaction meets the registration requirements as set out in the Rulebook (including the provision of Collateral, where applicable), the Clearing House will simultaneously register all of the ForexClear Transactions within that Package Transaction. Where one or more of the constituent ForexClear Transactions does not meet the Clearing House's registration requirements then all of the constituent ForexClear Transactions of the Package Transaction shall be rejected.

Where a constituent ForexClear Transaction of a Package Transaction is a US Trading Venue Transaction, it is a condition of registration that all of the constituent ForexClear Transactions be US Trading Venue Transactions; where such condition is not met, all constituent ForexClear Transactions of the Package Transaction will be rejected. In respect of a Package Transaction comprising ForexClear Transactions that are not executed on any US Trading Venue, the Clearing House will send a Notification to the relevant ForexClear Clearing Member(s) for the acceptance of each such constituent ForexClear Transaction.

In respect of a Package Transaction submitted in a ForexClear Clearing Member's name, such ForexClear Clearing member's margin requirement will

be assessed based on the net margin call for all of the constituent ForexClear Transactions of such Package Transaction.

The Clearing House may limit the number of ForexClear Transactions that may be included in a Package Transaction by way of member circular.

- 1.3.6 Manual Trade Rejection, Novation and Cancellation (Exceptional Event)
  - (a) From time to time, as an exceptional event, it may be necessary for the Clearing House to: (i) reject a trade presented for registration; (ii) register a ForexClear Transaction; or (iii) accept or reject a cancellation request for a ForexClear Contract or a ForexClear Transaction, in each case, manually prior to a Margin and Settlement Run (e.g. in the case of a Default, when a ForexClear Transaction needs to be registered immediately to expedite the hedging and auction process or to reject a ForexClear Transaction received from an FXCCM which is a Defaulter).
  - (b) The Clearing House acknowledges the action:
    - (i) in respect of trades being manually rejected or manually registered, by notifying the entities specified in Section 1.3.3(a)(iii) of such rejection or registration (as applicable); and
  - (c) in respect of a ForexClear Contract or a ForexClear Transaction being manually cancelled, by sending a message to the ForexClear Approved Trade Source System that it is "CANCELLED".

#### 1.3.7 Trade Cancellation

- (a) The Clearing House accepts cancellation messages from FXPs against both non-novated trades (ForexClear Transactions) and novated trades (ForexClear Contracts).
- (b) Cancellation messages may be submitted via the ForexClear Approved Trade Source System (i), with respect to any ForexClear NDF Contract, until such ForexClear Contract is "**fixed**" i.e. when its Settlement Rate has been determined on the relevant Valuation Date, (ii) with respect to any ForexClear Option Contract, until the end of day on the Business Day preceding the relevant Expiration Date and (iii) with respect to any ForexClear Spot Contract, ForexClear Swap Contract or ForexClear Deliverable Forward Contract, until the end of day two Business Days immediately preceding the Settlement Date.
- (c) A successful cancellation message results in a "CANCELLED" status message if the ForexClear Transaction or the ForexClear Contract (as the case may be) is cancelled during the Opening Hours. The status messages are sent from the Clearing House to the FXCCM via the ForexClear Approved Trade Source System.
- (d) There is no ForexClear Contract or ForexClear Transaction amendment functionality.

#### (e) Process Flow Description

- (i) The Clearing House accepts trade cancellation instructions from the ForexClear Approved Trade Source System for ForexClear Transactions or ForexClear Contracts (as the case may be) that have previously been submitted to the ForexClear Service. Cancellation instructions must include the ForexClear ID.
- (ii) The Clearing House checks that the cancellation instruction contains a valid ForexClear ID which relates to: (a) a ForexClear Transaction or ForexClear Contract (as the case may be) that has not been previously cancelled; and (b) in the case of a ForexClear NDF Contract only, a ForexClear Contract with respect to which the relevant Valuation Date has not yet occurred.
- (iii) Where a trade has already been rejected (e.g. as a result of having failed a Counterparty Technical Validation Check), the ForexClear Service sends a "CANCEL REJECTED" message to the ForexClear Approved Trade Source System for the relevant FXPs.
- (iv) All trade cancellation instructions must pass the Incremental Risk Check and Settlement Exposure Limit Check, where applicable. If any FXCCM has not transferred sufficient Collateral in respect of its Liabilities or estimated Liabilities to the Clearing House (taking into account any MER Buffer and MCE provided by the Clearing House, if any) at the time of the relevant Incremental Risk Check or Settlement Exposure Limit Check, as applicable, then any ForexClear trade cancellation instruction to which it is a party will be rejected immediately. However, any ForexClear trade cancellation instruction that is risk reducing (i.e. results in a reduction of that FXCCM's Liabilities) will always pass the Incremental Risk Check, even if the FXCCM has not transferred sufficient Collateral in respect of its Liabilities to the Clearing House.
- 1.3.8 *Valuation Date Event Management*: The Clearing House is the Calculation Agent and will store and apply the Settlement Rate Option and the Valuation Date for each ForexClear NDF Contract.

On the Valuation Date with respect to each ForexClear NDF Contract, the Settlement Rate will be retrieved as set forth in paragraph (a) below. The Market Data provider for Settlement Rates is Reuters.

ForexClear applies the relevant Settlement Rate to ForexClear NDF Contracts using the following criteria:

- (a) Settlement Rate Option source; and
- (b) Valuation Date.

The Clearing House applies the Settlement Rate to all relevant ForexClear NDF Contracts at a predefined time following its publication.

The Clearing House calculates the Settlement Currency Amount in the Settlement Currency per ForexClear NDF Contract. FXCCMs can retrieve the Settlement Rate and Settlement Currency Amount in the Settlement Currency via ForexClear Reporting (as defined in Section 1.7 (*ForexClear Reporting*)) on the ForexClear Service Portal and on MemWeb, which are internet services onto which information is loaded and can be accessed by FXCCMs.

## (c) Process Flow Description

- (i) After the Registration Time for a ForexClear NDF Contract, the ForexClear Service links a Settlement Rate Option to it in accordance with the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.
- (ii) On the Valuation Date, the Clearing House uses the Settlement Rate for the Currency Pair for the ForexClear NDF Contract when it is published by Reuters, and calculates the Settlement Currency Amount for each ForexClear NDF Contract in the Settlement Currency by applying the relevant Settlement Rate Option as referenced in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable.
- 1.3.9 If the Settlement Rate Option set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable, is unavailable at the relevant time, Disruption Fallback alternatives for the determination of the Settlement Rate will apply as set out in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable. Notwithstanding the foregoing, in the event the Clearing House determines (in its sole discretion) that a Settlement Rate Option is unavailable, the Clearing House will determine an alternative Settlement Rate Option.
- 1.3.10 *Settlement*: With respect to each ForexClear NDF Contract, the Settlement Currency Amount is calculated by the application of the Settlement Rate to the Notional Amount in accordance with the ForexClear NDF Contract Terms.

From (and including) the Registration Time to (and including) the business day immediately preceding the Settlement Date, changes in the daily value of open ForexClear NDF Contracts will have resulted in variation margin credits and debits or NPV Payments between the parties (as set out at Section 1.5.2 (Variation Margin and NPV Payments)). With respect to each ForexClear NDF Contract, on the business day immediately preceding the Settlement Date, the Clearing House nets the Settlement Currency Amount against the aggregate net variation margin or aggregate NPV Payments (as applicable) which have been paid/received through the term of the ForexClear NDF Contract, the result of which is a Net Settlement Amount ("NSA"), which will be reflected in the FXCCMs' cash accounts with the Clearing House on the Settlement Date. As such, with respect to each ForexClear NDF Contract, the transfer to the Clearing House of either (i) all the Collateral in respect of the variation margin in respect

that ForexClear NDF Contract, or (ii) all the NPV Payments required pursuant to the ForexClear NDF STM Terms of that ForexClear NDF Contract shall satisfy the relevant party's obligation to pay the Settlement Currency Amount on the Settlement Date of such ForexClear NDF Contract. For the purpose of providing Nostro reconciliations, to the relevant parties, the Clearing House will provide Reporting (as defined in Section 1.7 (ForexClear Reporting)) which will reflect an entry for the "Settlement Currency Amount" and a separate entry for the reversal of the aggregate net variation margin or NPV Payments which have been paid/received through the term of the ForexClear NDF Contract. This paragraph applies even if the Settlement Date has been adjusted in accordance with the ForexClear NDF Contract Terms.

1.3.11 *Portfolio Management*: The Clearing House allows portfolios of ForexClear Contracts to be transferred between FXCCMs (e.g., in the event of merger, or where agreed between the relevant FXPs).

The portfolio transfer capability allows the transfer of:

- (a) A single ForexClear Contract.
- (b) Part of an FXCCM's portfolio (which includes the ability to transfer ForexClear Contracts to various other FXCCMs, e.g. Bank A to Bank B for USD/RUB, Bank A to Bank C for USD/KRW and Bank A to Bank D for USD/BRL).
- (c) Portfolio transfer (i.e. the transfer of all or just one of the portfolios belonging to an FXCCM).
- (d) Multiple portfolio transfers (i.e. the transfer of several portfolios of an FXCCM).

The Clearing House will carry out the portfolio transfer. For transfers under (b), (c) and (d), this can be on either (i) a ForexClear Contract by ForexClear Contract basis, or (ii) in respect of ForexClear NDF Contracts, on a Currency Pair basis.

Before the completion of a portfolio transfer, the Clearing House will perform a margin impact analysis of the transfer to the source and destination portfolios. The Clearing House will advise the relevant FXCCM regarding any additional Collateral that may be required in order to complete the portfolio transfer.

(e) Legal Documentation: The transfer of ForexClear Contracts will be documented in accordance with the standard legal documentation for the transfer of ForexClear Contracts provided by the Clearing House to FXPs. Any such transfer must be authorised by all relevant parties and executed by individuals with appropriate signing authority.

#### 1.3.12 Reference Data

(a) Holiday Event Calendar:

The ForexClear Service uses the SwapsMonitor Financial Calendar (as published by Swaps Monitor Publications, INC.) ("SwapsMonitor Financial Calendar") in order to determine holidays. This requires all ForexClear Participants to be licensees of the SwapsMonitor Financial Calendar.

If a change is declared that affects the SwapsMonitor Financial Calendar then, subject to paragraph (b) below, a corresponding calendar adjustment will be made in the ForexClear system, unless the Clearing House notifies FXCCMs otherwise that the relevant change will not apply to ForexClear Contracts. The Clearing House may temporarily close the ForexClear Service to process a calendar adjustment in its clearing system. FXCCMs will be notified in advance of the date, time and expected duration of such closure.

# (b) Date Adjustment:

As a result of the calendar adjustment process, (i) the Valuation Date and/or the Settlement Date of any affected ForexClear NDF Contracts will automatically be date adjusted in accordance with the provisions of the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable and (ii) the Settlement Date of any affected ForexClear Spot Contract, ForexClear Swap Contract, ForexClear Deliverable Forward Contract, or ForexClear Option Contract and the Premium Payment Date of any affected ForexClear Option Contract will automatically be date adjusted in accordance with the Following Business Day Convention, as detailed in the Relevant EMTA Template.

Without limiting the foregoing, the Clearing House reserves the right to amend the Valuation Date and/or Settlement Date of a ForexClear Contract to reflect or account for a public holiday (or anticipated public holiday), in its sole discretion.

The Clearing House will notify the FXCCMs of any date adjustments made to any ForexClear Contract.

#### 1.4 Market Data

- 1.4.1 Sources used by ForexClear Service: With respect to each ForexClear Contract, the ForexClear Service collates instrument quotes for the following from multiple market sources (as detailed in Section 1.4.2 (Market Data Sources and Frequencies)) in relation to each Currency Pair or ForexClear Currency Pair:
  - (a) FX spot rates ("**FX Spot Rates**");
  - (b) FX swap points ("**FX Swap Points**");
  - (c) FX implied volatility points ("**FX Volatility Points**");
  - (d) FX NDF Settlement Rate Option;

- (e) Interest rate swap curves and Overnight index swap curves ("Interest Rate Curves");
- (f) PAI rates ("PAI Rates") or PAA rates ("PAA Rates"), as applicable;
- (g) Country credit spreads ("Country Credit Spreads"); and
- (h) FX spot reference prices ("FX Spot Reference Prices"),

together, "Market Data".

FX Spot Rates, FX Swap Points and FX Volatility are received by the Clearing House via a live link from all eligible FXCCMs during the Opening Hours (as defined in paragraph (b) of Section 1.2.2 (Service Operating Hours)).

- 1.4.2 *Market Data Sources and Frequencies*: The Clearing House receives the following updated raw prices:
  - (a) FX Spot Rates:
    - (i) Source contributing FXCCMs.
    - (ii) Frequency every time updated by contributing FXCCMs up to a maximum rate of once every five minutes.
  - (b) FX Swap Points:
    - (i) Source all contributing FXCCMs.
    - (ii) Frequency every time updated by contributing FXCCMs up to a maximum rate of once every five minutes.
    - (iii) FX NDF tenors as shown in the table below.

Tenor		
S/N		
1 week		
1 month		
2 months		
3 months		
6 months		
12 months		
24 months		

(iv) FX Deliverable tenors – as shown in the table below:

Tenor
O/N
T/N
S/N
1 week
2 weeks

Tenor
1 month
2 months
3 months
6 months
9 months
12 months
18 months
24 months

# (c) FX Volatility Points:

- (i) Source all contributing FXCCMs.
- (ii) Frequency every time updated by contributing FXCCMs up to a maximum rate of once every five minutes.
- (iii) Deltas and Tenors as shown in the tables below. All delta points should be contributed for each tenor.

Tenor		
O/N		
1 week		
2 weeks		
1 month		
2 months		
3 months		
6 months		
9 months		
12 months		
18 months		
24 months		

Deltas
ATM
25-RR
25-Fly
10-RR
10-Fly

# (d) FX NDF Settlement Rates:

- (i) Source Reuters.
- (ii) Frequency when published (as referenced in the Relevant EMTA Template or given LCH G10 NDF Contract Template, as applicable).

- (e) Interest Rate Curves:
  - (i) Source internal Clearing House.
  - (ii) Frequency at each SwapClear Margin or Settlement Run.
- (f) PAI Rates and PAA Rates:
  - (i) Source LCH Treasury.
  - (ii) Frequency daily.
- (g) Country Credit Spreads:
  - (i) Source Bloomberg.
  - (ii) Frequency when published.
- (h) FX Spot Reference Prices:
  - (i) Source the source published on the ForexClear website from time to time.
  - (ii) Frequency at each expiration time.
- 1.4.3 *Market Data Provision to FXCCMs*: Market Data used in a Margin or Settlement Run is made available to FXCCMs via ForexClear Reporting (as defined in Section 1.7 (*ForexClear Reporting*)).
- 1.4.4 Curve Building in ForexClear
  - (a) FX Curve (Zero Coupon/Market Rate Curve): The Clearing House builds for each Currency Pair an FX curve (zero coupon/market rate curve) using the FX Spot Rates, FX Swap Points and the USD LIBOR Curve. The currency zero coupon curves are implied from the FX curve and the USD LIBOR Curve; the FX curve is used for capitalisation of forward cash flows. Cross rates spot and forward curves will be triangulated from the non cross currency pairs (i.e., the currency pairs where USD is one of the currencies). Linear interpolation is applied on zero coupon curves.
  - (b) Implied Volatility Surface: The Clearing House builds for each Currency Pair or ForexClear Currency Pair an FX Implied Volatility Surface using the FX Volatility Points. Implied volatility interpolation is performed along both the delta and tenor axes. Interpolation is firstly applied on the delta axis of the two neighbouring implied volatility smiles, and then tenor axis interpolation is applied. To prevent arbitrages on the input volatility surfaces impacting on margining calculations, a de-arbitraging methodology is applied where an arbitrage exists on any reference volatility surfaces.

- (c) Interest Rate Curve: The Clearing House applies standard bootstrap method to build the Interest Rate Curve. Linear interpolation is applied on zero coupon curves.
- (d) *Curve Use*: End of day is defined as 22.00 local London time ("**EOD**"). The following EOD data is used in the calculation of risk analytics for an EOD Margin and Settlement Run (as defined in paragraph (b) of Section 1.6.1 (*Types of Margin or Settlement Runs*)):
  - (i) FX Spot Rates;
  - (ii) FX Swap Points; and
  - (iii) FX Volatility Points.
- 1.4.5 *Country Credit Spreads*: The Clearing House takes country credit spreads (in relation to Brazil, Russia, India, China, Chile, South Korea, Colombia, Indonesia, Malaysia, Philippines and Taiwan) from Bloomberg for use in risk multiplier calculations.

## 1.5 Variation Margin and NPV Payments

- 1.5.1 Product Valuation
  - (a) ForexClear NDF Contract: From (and including) the Registration Time to the EOD Margin and Settlement Run on the business day preceding the Valuation Date, each ForexClear NDF Contract is valued in USD using the current market rates and discounted from the future Settlement Date to its present value (being valued using the data submitted by FXCCMs, in accordance with Section 1.4.2 (Market Data Sources and Frequencies).

At EOD on the Valuation Date, the Settlement Rate is used to value the ForexClear NDF Contract.

If Valuation Postponement applies, the ForexClear NDF Contract is valued using the current forward price (based on the data submitted by FXCCMs, in accordance with Section 1.4.2 (*Market Data Sources and Frequencies*) to (and including) the date on which the Settlement Rate is determined in accordance with the ForexClear NDF Contract Terms.

In the event a Settlement Rate or market rate is unavailable, as determined by the Clearing House in its sole discretion, the Clearing House will determine an alternative Settlement Rate or market rate.

(b) ForexClear Spot Contracts, ForexClear Deliverable Forward Contracts and ForexClear Swap Contracts: From (and including) the Registration Time to the EOD Margin and Settlement Run on the business day preceding the Settlement Date, each ForexClear Spot Contract, ForexClear Deliverable Forward Contract and ForexClear Swap Contract is valued in either USD or EUR using the current market

- rates and discounted from the future Settlement Date to its present value (using the data submitted by FXCCMs, in accordance with Section 1.5.2 (*Market Data Sources and Frequencies*)).
- (c) ForexClear Option Contracts: From (and including) the Registration Time to the Expiration Date, each ForexClear Option Contract is valued in USD or EUR using the Garman-Kohlhagen option pricing model (using the data submitted by FXCCMs, in accordance with Section 1.5.2 (Market Data Sources and Frequencies)).
- 1.5.2 Variation Margin and NPV Payments: A single separate calculation in respect of the variation margin or NPV Payment owed by or to the relevant FXCCM is performed for that FXCCM's Proprietary Account, each Client Account (other than an Indirect Gross Account) and each Indirect Gross Sub-Account within an Indirect Gross Account. No offset between the Proprietary Accounts and Client Accounts accounts is allowed (except pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

The (i) variation margin requirement in respect of each ForexClear CTM Contract and (ii) the NPV Payments in respect of each ForexClear STM Contract are calculated at EOD as the change from the preceding business day in its net present value. The net sum of the variation margin requirements or NPV Payments (as applicable) with respect to all of the open ForexClear Contracts is credited or debited (separately for the Proprietary Account and each Client Account of the relevant FXCCM) once a day, following the EOD Margin and Settlement Run.

Collateral in respect of variation margin (adjusted by PAI, as set out below) will be transferred each business day by or to each FXCCM in respect of all of its open ForexClear CTM Contracts. The variation margin will be calculated in, and must be paid in the ForexClear Margin or Settlement Currency applicable to that ForexClear CTM Contract. For the avoidance of doubt, in the case of a ForexClear CTM Contract, any transfers of cash Collateral by an FXCCM to the Clearing House in respect of the FXCCM's variation margin obligations or by the Clearing House to an FXCCM in respect of the Clearing House's variation margin obligations shall be for the purposes of collateralisation and not settlement of obligations under the relevant contracts.

The NPV Payment (adjusted by PAA, as set out below), will be transferred each business day by or to each FXCCM in respect of all of its open ForexClear STM Contracts denominated in a given currency. Each NPV Payment in respect of a given ForexClear STM Contract will be calculated in, and must be paid in the ForexClear Margin or Settlement Currency applicable to that ForexClear STM Contract.

With respect to each ForexClear Contract, the variation margin requirement or NPV Payment (as applicable) is calculated every business day from (and

including) the Registration Time to (and including) the EOD on the business day immediately preceding the Settlement Date.

For the avoidance of doubt, "variation margin" and "NPV Payment" as used herein shall include variation margin and NPV Payments in respect of both the and premium owed under a ForexClear Option Contract and all other obligations under the terms of that ForexClear Option Contract.

Any NPV Payment made by an FXCCM to the Clearing House under a ForexClear STM Contract, or by the Clearing House to an FXCCM under a ForexClear STM Contract, shall be for the purpose of settlement of the applicable party's obligation to pay the required NPV Payment pursuant to the terms of that ForexClear STM Contract and not for the purpose of collateralising any obligations of either party under that ForexClear STM Contract.

- 1.5.3 Reporting Breakdown: ForexClear margin reports show the portfolio of open ForexClear NDF Contracts of each FXCCM and of each FXD by Currency Pairs and in the Settlement Currency (i.e., USD). ForexClear margin reports also show the portfolio of open ForexClear Option Contracts, ForexClear Spot Contracts and ForexClear Deliverable Forward Contracts of each FXCCM and of each FXD by ForexClear Currency Pair.
- 1.5.4 Price Alignment Interest ("PAI"): The effect of daily transfers of cash Collateral in respect of variation margin on ForexClear CTM Contracts results in the need for PAI. Without this adjustment, the pricing of ForexClear CTM Contracts would differ from identical uncleared trades, as cash earned from favourable daily price moves would be priced into the product.
  - (a) PAI Calculation Methodology: PAI is calculated at EOD on each business day from (and including) the first business day after the Trade Date to (and including) the business day immediately preceding the Settlement Date, and the currency in which the PAI payment is denominated for a given ForexClear CTM Contract shall be the ForexClear Margin or Settlement Currency of that ForexClear CTM Contract.

In this Section 1.5.4 (*Price Alignment Interest*), "T" means any given business day; "T-1" means the business day immediately preceding T; "T+1" means the business day immediately following T; and "MTM" means the total value (expressed in the relevant currency) of an FXCCM's portfolio open of ForexClear CTM Contracts after valuation in accordance with Section 1.5.2 (*Variation Margin and NPV Payments*) at close of business on any business day. The Clearing House calculates PAI in USD once a day at EOD.

- (i) Principles:
  - (A) MTM is calculated at EOD on T-1.

- (B) Change in MTM (net variation margin obligations in respect of an FXCCM's portfolio of open ForexClear CTM Contracts) is paid/received on the morning of T.
- (C) PAI Rate for T to be applied is known at EOD T.
- (D) PAI is calculated on the night of T, for MTM of T-1 for ForexClear CTM Contracts up to the business day before their Settlement Date.
- (E) PAI is paid / received on morning of T+1 via PPS.
- (ii) Components:
  - (A) PAI Rate (annualised interest applied to an FXCCM's MTM).
  - (B) MTM.
  - (C) Accrual Factor (factor used to convert the PAI Rate from an annual rate to a daily rate, on a basis of a year of 360 days).
- (iii) So:
  - (A) PAI T = PAIT Rate x MTMT-1 x Accrual Factor.

The Clearing House uses the PAI Rate from the relevant EOD overnight index swap curves, which is sourced from the Clearing House.

- (b) Variation Margin/PAI Adjustment: With respect to each FXCCM, the Clearing House makes the following adjustment to the EOD variation margin:
  - (i) if, with respect to its portfolio of open ForexClear CTM Contracts, such FXCCM has (to but excluding the relevant EOD) paid an amount of Collateral in respect of variation margin greater than the amount of Collateral in respect of variation margin it has received, such FXCCM will receive PAI; and
  - (ii) if, with respect to its portfolio of open ForexClear CTM Contracts, such FXCCM has (to but excluding the relevant EOD) received an amount of Collateral in respect of variation margin greater than the amount of Collateral in respect of variation margin it has provided, such FXCCM will pay PAI.
- 1.5.5 Price Alignment Amount ("PAA"): The payment of NPV Payments by the applicable party on a daily basis would, without adjustment, distort the pricing for certain ForexClear STM Contracts cleared through the Clearing House. In order to minimise the impact of such NPV Payments, the Clearing House will, for an FXCCM, either (i) charge a Price Alignment Amount if that FXCCM has, on a cumulative net basis, received NPV Payments from the Clearing House, or

- (ii) pay a Price Alignment Amount if that FXCCM has, on a cumulative net basis, paid NPV Payments to the Clearing House. In a negative interest rate environment where the applicable Price Alignment Amount is negative, the Clearing House will, for an FXCCM either (i) pay a Price Alignment Amount if that FXCCM has, on a cumulative net basis, received NPV Payments from the Clearing House, or (ii) charge a Price Alignment Amount if that FXCCM has, on a cumulative net basis, paid NPV Payments to the Clearing House.
- (a) PAA Calculation Methodology: PAA is calculated at EOD on each business day from (and including) the first business day after the Trade Date to (and including) the business day immediately preceding the Settlement Date, and the currency in which the PAA payment is denominated for a given ForexClear STM Contract shall be the ForexClear Margin or Settlement Currency of that ForexClear STM Contract.

In this Section 1.5.5 (*Price Alignment Amount*), "T" means any given business day; "T-1" means the business day immediately preceding T; "T+1" means the business day immediately following T; and "MTM" means the total value (expressed in the relevant currency) of an FXCCM's portfolio open of ForexClear STM Contracts after valuation in accordance with Section 1.5.2 (*Variation Margin and NPV Payments*) at close of business on any business day. The Clearing House calculates PAA once a day at EOD.

- (i) Principles:
  - (A) MTM is calculated at EOD on T-1.
  - (B) Change in MTM (net NPV Payment obligations in respect of an FXCCM's portfolio of open ForexClear STM Contracts) is paid/received on the morning of T.
  - (C) PAA Rate for T to be applied is known at EOD T.
  - (D) PAA is calculated on the night of T, for MTM of T-1 for ForexClear Contracts up to the business day before their Settlement Date.
  - (E) PAA is paid / received on morning of T+1 via PPS.
- (ii) Components:
  - (A) PAA Rate (annualised interest applied to an FXCCM's MTM).
  - (B) MTM.
  - (C) Accrual Factor (factor used to convert the PAA Rate from an annual rate to a daily rate, on a basis of a year of 360 days).

- (iii) So:
  - (A)  $PAAT = PAAT Rate \times MTMT-1 \times Accrual Factor.$

The Clearing House uses the PAA Rate from the relevant EOD overnight index swap curves, which is sourced from the Clearing House.

- 1.5.6 *Initial Margin:* The Clearing House will require FXCCMs to transfer Collateral to the Clearing House in respect of initial margin. Each FXCCM's initial margin obligation will comprise the aggregate of the initial margin obligations separately calculated in relation to (i) the ForexClear NDF Service and (ii) the ForexClear Option Service.
  - (a) Calculation of Initial Margin: Separate initial margin calculations are performed for an FXCCM's Proprietary Account, each Client Account (other than an Indirect Gross Account) and each Indirect Gross Sub-Account within an Indirect Gross Account. No offset between the Proprietary Accounts and the Client Accounts is allowed (except pursuant to Rule 8(d) of the Default Rules or any Insufficient Resources Determination Rule) and no offset between any Client Accounts is allowed (except pursuant to Rule 15(a)(ii) of the Default Rules, a Cross-ISA Client Excess Deduction or any Insufficient Resources Determination Rule).

The initial margin obligation is calculated on a real-time (or near real-time) basis throughout each day. With respect to each FXCCM, it is calculated for the portfolio of open ForexClear Contracts and ForexClear Transactions using ForexClear's Portfolio Analysis and Risk ("FxPAR") margining model. FxPAR is based on a modified historical simulation expected shortfall methodology. All open ForexClear Contracts and ForexClear Transactions in each Currency Pair are revalued under a series of FX rate and yield curve scenarios to estimate the potential portfolio profit and loss and therefore the initial margin requirement.

The adequacy of the initial margin calculation is reviewed daily. ForexClear Clearing Members will usually be notified by the Clearing House of alterations to margin model parameters no later than the day before calls are made based on the new parameters. Further details of this method are available upon request from the ForexClear Risk team.

FxPAR uses the market data submitted by FXCCMs pursuant to paragraph 1.5.1(a) (*Product Valuation*).

*Initial Margin Add-ons*: Credit risk, liquidity risk and sovereign risk margin add-ons are measured and applied to FXCCMs as part of the initial margin requirement calculation.

(b) Credit Risk Margin ("CRiM"): CRiM reflects the additional risk related to the FXCCM's credit quality. The CRiM calculation considers the

- FXCCM's credit worthiness, initial margin obligation level and/or stress testing exposures in accordance with LCH.Clearnet Credit Risk Policy.
- (c) Liquidity Risk Margin ("LRM"): LRM reflects the additional risk due to the FXCCM having concentrated risk exposures above set thresholds in a particular Currency Pair or ForexClear Currency Pair or tenor of ForexClear Contracts. The LRM is calculated in accordance with parameters set by the ForexClear Default Management Group (the "FXDMG").
- (d) Sovereign Risk Margin ("SRM"): SRM reflects the additional risk related to a potential country default or a change in a country's currency regime which would impact ForexClear Contracts transacted in certain Reference Currencies. The SRM calculation considers the probability of sovereign default occurring and the depreciation or appreciation risk of the Reference Currencies. The SRM sovereign default probability is calculated by assessing the three-month probability of default for the different sovereign countries, based on the country's 5-year credit default swap (CDS) spread.
- (e) Settlement Management Margin ("SMM"): SMM reflects the additional risk associated with a potential settlement failure. The SMM calculation considers the FXCCM's future settlement obligations in each of the relevant currencies and the potential cost of utilising and replenishing liquidity provisions, where required, to fulfil those settlement obligations.
- (f) Additional Margin: The Clearing House may require an FXCCM to transfer additional Collateral to the Clearing House (in addition to amounts of Collateral already transferred to the Clearing House in respect of any initial margin and variation margin obligations) as security for the performance by an FXCCM of its obligations to the Clearing House in respect of ForexClear Contracts to which such FXCCM is a party in accordance with Regulation 20 (Margin and Collateral). This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in ForexClear Contracts to which such FXCCM is a party not adequately covered by the Collateral transferred in respect of the initial margin or any variation margin obligations. This may cover instances where stress testing losses under various scenarios provided in the ForexClear Default Rules have increased.
- (g) Minimum Excess Requirement Buffer ("MER Buffer"): To facilitate the intraday registration of ForexClear Contracts, at each EOD Margin and Settlement Run, the Clearing House will call from each FXCCM an amount of Collateral in respect of the initial margin obligation referred to as "Minimum Excess Requirement Buffer" ("MER Buffer") in respect of that FXCCM's potential intraday Liabilities (as defined below at Section 1.6.2 (Margin or Settlement Run Process)) for the following day.

The required amount of MER Buffer for an FXCCM is expressed as a percentage of the FXCCM's start-of-day portfolio initial margin, and is calibrated daily based on recent member activity such that higher levels of intraday trade volumes lead to a proportionally higher MER Buffer requirement and vice versa. The MER Buffer percentage is calculated as a given percentile of intraday peak relative initial margin changes over a given number of historical business days.

The parameters of the MER model are: MER percentile, MER lookback period, relative MER cap and absolute MER floor. The values of these parameters are calibrated based on the quantitative analysis of the FXCCMs' initial margin history across the ForexClear Service.

As ForexClear Contracts are registered in an FXCCM's name, the Clearing House will, in accordance with the Margin or Settlement Run process, calculate an FXCCM's intraday Liabilities (or, in the case of an Incremental Risk Check, the FXCCM's estimated Liabilities), taking into account any MER Buffer.

At each EOD Margin and Settlement Run, the Clearing House will recalculate and call the FXCCM's MER Buffer for the following day.

1.5.7 Mutualised Credit Extension ("MCE"): If an FXCCM has insufficient Collateral to enable the registration of further ForexClear Contracts in its name, then the Clearing House may make available to an FXCCM intraday credit by way of a Mutualised Credit Extension ("MCE") to enable the FXCCM to register further ForexClear Contracts. An FXCCM may utilise MCE intraday on a one-to-one basis to the value of the Collateral in respect of initial margin that would have been required to cover that FXCCM's Liabilities (or, in the case of Incremental Risk Checks, the FXCCM's estimated Liabilities). The amount of the MCE made available to an FXCCM in aggregate during any one day must not exceed an amount that is the lesser of: (a) 50% of the ForexClear MCE Default Fund Buffer; or (b) the sum of the FXCCM's Collateral in respect of initial margin and ForexClear Contribution. The amount of the "ForexClear MCE Default Fund Buffer" is currently zero and therefore the Clearing House will not provide MCE to any FXCCM until further notice.

For the avoidance of doubt, MCE is provided in the form of intraday initial margin forbearance and an FXCCM's utilisation of MCE does not give rise to any payment or transfer of collateral by the Clearing House nor does it result in any use of the ForexClear Fund Amount (except in events of default).

All MCE credit extended on any given day shall be revoked at the close of business on such day (unless revoked earlier in accordance with the following paragraph). As part of each EOD Margin and Settlement Run, the Clearing House will call Collateral in respect of initial margin obligations from each FXCCM to replace any utilised MCE and that FXCCM's MCE will be reset for the following day (assuming such FXCCM has satisfied any margin calls). Any failure of an FXCCM to satisfy an initial margin call relating to the replacement of MCE constitutes a default by such FXCCM – just as any failure by an FXCCM to satisfy any other type of initial margin call constitutes a default.

The MCE is made available at the Clearing House's sole discretion. In particular (but without limitation), the Clearing House may refuse to extend MCE to any or all FXCCMs on risk management grounds, and may at any time require an FXCCM to provide Collateral in respect of initial margin in place of any utilised MCE.

1.5.8 Initial Margin Management Events Service ("IMMES"): IMMES aims to find risk and initial margin reducing ForexClear Contracts amongst participating FXCCMs. IMMES can be run on all Currency Pairs that are cleared through the ForexClear Service, although the primary focus will be on those Currency Pairs that contribute to the largest Collateral requirement.

FXCCMs who wish to obtain further information about, or to participate in, IMMES should contact ForexClear Risk on 0207 426 7527. To be eligible to participate in IMMES, an FXXCM must enter into an IMMES agreement with the Clearing House (the "IMMES Agreement").

# 1.6 **General Margining Process**

A "Margin and Settlement Run" is the process by which the Clearing House calculates an FXCCM's initial margin requirement (if any) and, during an EOD Margin and Settlement Run (i) in respect of each ForexClear CTM Contract, its variation margin requirement and PAI adjustment (if required) or (ii) in respect of each ForexClear STM Contract, its NPV Payment and PAA adjustment (if required) (together the "Margin or Settlement Requirements"), and in the case of (i) only, applies that FXCCM's Collateral to satisfy the Margin Requirements for that FXCCM in respect of the ForexClear Contracts within that FXCCM's portfolio.

- 1.6.1 *Types of Margin and Settlement Runs*: There are three types of Margin and Settlement Run:
  - (a) ITD/Ad Hoc Day Margin and Settlement Run
    - (i) ITD/Ad-hoc London daytime Margin and Settlement Runs are initiated as and when dictated by the schedule published by the Clearing House and notified to FXCCMs from time to time (the "Schedule") or as necessary, and are performed in the time period during which a PPS call can be made (the "ITD/Ad-hoc Day Margin and Settlement Run"). PPS times are published on the Clearing House's website at: <a href="http://www.lch.com/en/risk-collateral-management/collateral-management/protected-payments-system/pps-concentration-activities">http://www.lch.com/en/risk-collateral-management/collateral-management/protected-payments-system/pps-concentration-activities</a>.
    - (ii) ITD/Ad-hoc Margin Runs are calls in respect of the initial margin obligation only. The variation margin obligation, NPV Payment obligation, PAI and PAA are not included in ITD/Adhoc Margin Runs.

- (b) EOD Margin and Settlement Run
  - (i) The EOD Margin and Settlement Run is the final ITD/Ad-hoc Day Margin and Settlement Run that completes by 24:00 local London time on that business day (the "EOD Margin and Settlement Run").
  - (ii) EOD Margin and Settlement Runs are calls in respect of initial margin as well as (i) in the case of ForexClear CTM Contracts, variation margin obligations and PAI; and (ii) in the case of ForexClear STM Contracts, NPV Payment obligations and PAA.
- (c) ITD / Ad Hoc Night Margin Run
  - (i) ITD/Ad-hoc London overnight Margin Runs are initiated as and when dictated by the Schedule or as necessary, and are performed in the time period during which a PPS call cannot be made (the "ITD/Ad-hoc Night Margin Run").
  - (ii) ITD/Ad-hoc Night Margin Runs are calls in respect of the initial margin obligation only. The variation margin obligation, NPV Payment obligation, PAI and PAA are not included in ITD/Adhoc Night Margin Runs.

### 1.6.2 Margin and Settlement Run Process

- (a) Margin and Settlement Runs cover all registered ForexClear Contracts with the status "NOVATED".
- (b) Margin and Settlement Runs will be carried out for each ForexClear Contract and ForexClear Transaction (as the case maybe) until (and including) the later of:
  - (i) EOD Margin and Settlement Run on the Settlement Date; or
  - (ii) EOD Margin and Settlement Run after the Settlement Rate is published.
- (c) During every Margin and Settlement Run the Clearing House calculates the Collateral required in respect of the initial margin obligations and (i) in the case of an FXCCM who is party to ForexClear CTM Contracts, the Collateral required in respect of the variation margin obligations and PAI required to cover that FXCCM's relevant open ForexClear CTM Contracts; or (ii) in the case of an FXCCM who is party to ForexClear STM Contracts, the NPV Payments and the PAA required in respect of that FXCCM's relevant open ForexClear STM Contracts (each a "Liability" and together the "Liabilities"). For these purposes, liabilities in respect of the open ForexClear Contracts and ForexClear Transactions registered in an FXCCM's Proprietary Account, each of the FXCCM's Client Accounts (other than Indirect Gross Accounts) and each Indirect Gross Sub-Account within an Indirect Gross Account of such FXCCM will be calculated separately.

## (d) Each FXCCM's Liability:

- (i) in respect of the open ForexClear Contracts registered in an FXCCM's Proprietary Account, is offset against that FXCCM's non-cash collateral account (being a sub-account of the FXCCM's "H" collateral account) (for Collateral in respect of initial margin only) or funds in that FXCCM's "H" house cash account (being a sub-account of the FXCCM's "H" collateral account) (for variation margin/PAI/initial margin); and
- (ii) in respect of the open ForexClear Contracts registered in a particular FXCCM's Client Account, is offset against the relevant non-cash collateral account (being a sub-account of the FXCCM's Client Account) (for Collateral in respect of initial margin only) or funds in the relevant "C" client cash account (being a sub-account of the FXCCM's Client Account) (for variation margin/PAI/initial margin).
- (e) FXCCMs are informed via email of their Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)) and are directed to the ForexClear Service portal (being a secure website made available to FXCCMs) (the "ForexClear Service Portal") which provides reports (at the times specified in Section 1.7.1 (Margin and NPV Payment Liability Reports)) informing FXCCMs of their (i) total Liabilities under the ForexClear Service; (ii) current total Collateral posted with the Clearing House for the ForexClear Service (including any MCE, if any); and (iii) Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)).
- (f) If following a Margin and Settlement Run an FXCCM is required to provide additional Collateral, this is also indicated by email and via the ForexClear Service Portal. In the case of ITD/Ad-hoc Margin and Settlement Runs, where an FXCCM's Liabilities exceed its available Collateral and any MCE, then the Clearing House will issue a margin call for the amount of the shortfall plus 50% of the FXCCM's MER Buffer.

### 1.7 ForexClear Reporting

For purposes of reporting obligations to the CFTC, FXCCMs may only report details of ForexClear Contracts, including terminations and modifications to a ForexClear Contract, to an Approved LCH SDR. A list of Approved LCH SDRs is available on the Clearing House's website. In the event an FXCCM wishes to report details of ForexClear Contracts to a swap data repository that is not an Approved LCH SDR, the FXCCM must provide the Clearing House with reasonable prior notice of the date on which it wishes to report to such swap data repository.

FXCCMs must inform their respective Clearing Clients of the list of Approved LCH SDRs, and inform such Clearing Clients that the Clearing House is only able to report details of a ForexClear Contract to an Approved LCH SDR.

In accordance with CFTC Part 45 requirements (where the FXCCM has a reporting obligation), FXCCMs must provide the Clearing House (i) the USI of the original swap that is submitted to the Clearing House for registration and (ii) the LEI of the original swap SDR (i.e., "OriginalSwapRepository" or equivalent field) to enable the Clearing House to accurately report the termination of the original swap to the appropriate SDR.

The Clearing House produces a suite of treasury reports for members across each of the Clearing House services. Some of these reports are cross-service reports and others are specific to the ForexClear Service, thus an FXCCM will receive reports in respect of ForexClear and may also receive cross-service reports where it is a member of another service. Follow this link to the information available from the LCH.Clearnet website: <a href="mailto:Banking Reports">Banking Reports</a> http://www.lchclearnet.com/members-clients/training-education

In respect of the ForexClear Service, on each business day the Clearing House will provide two sets of reports to FXCCMs: (1) Banking Reports; and (2) reports direct from the ForexClear Service (together "ForexClear Reporting"). These Procedures reference the ForexClear Service specific reports. Each day's report will remain available for download by FXCCMs from the ForexClear Service Portal for five days.

The Clearing House (acting, where applicable, through the entity to which it has elected to delegate the relevant reporting obligation) shall report to a trade repository or similar body the details of a ForexClear Contract and any modification or termination of such contract without duplication and no later than the working day following the conclusion, modification or termination of such contract, in line with the requirements of Applicable Law.

- 1.7.1 Margin and NPV Payment Liability Reports: Reports detailing Liabilities are provided to FXCCMs following every scheduled Margin and Settlement Run in accordance with Section 1.6.2 (Margin and Settlement Run Process) and where additional Collateral has been called by the Clearing House. Additionally, a report, including sensitivities, is provided at ForexClear Contracts level at 22.00 local London time. If the EOD Margin and Settlement Run has not completed by 22:00 local London time on a particular business day, the report generated at EOD will reflect that certain Liabilities of FXCCMs are not discharged at the relevant time. A report will also be provided detailing an FXCCM's Collateral utilisation level. If an FXCCM's Liabilities exceed its total available Collateral, ForexClear will alert the FXCCM.
- 1.7.2 Market Data Reports: Reports detailing Market Data are provided to FXCCMs following every scheduled Margin and Settlement Run. They include reports of Market Data and Settlement Rate used in the valuation of ForexClear Contracts and reports of Market Data shifts for each historic scenario used in the initial margin requirement calculations.
- 1.7.3 *Trade Reports*: Reports are provided that enable FXCCMs to monitor their firms' trading events and positions in respect of ForexClear. Reports on open ForexClear Contracts and on cancelled ForexClear Transactions and ForexClear

- Contracts are generated at EOD and reports on transferred ForexClear Contracts are made on an ad hoc basis.
- 1.7.4 *Trade Fixing and Settlement Reports*: Reports are published on each business day detailing the ForexClear Contracts to which the Settlement Rate has been applied on that business day (the "FX Transaction Fixings" report), ForexClear Contracts that have been settled during that current business day (the "Settlements Today" report) and ForexClear Contracts that will settle the next business day (the "FX Transactions' Fixed with Settlement Tomorrow" report).
- 1.7.5 *Fees Reports*: Reports on trading volumes on a daily and monthly basis are provided to FXCCMs. Monthly reports are provided on the last business day of each month. They include the full trading volumes on which the monthly transaction fees will be charged to those FXCCMs choosing to have tariffs levied per transaction.
- 1.7.6 Banking Reports: Follow this link for a full list of banking reports.<sup>2</sup>
- 1.7.7 *Real-time Reporting*: A near real-time view of member liabilities, collateral pledged, collateral and credit utilisation will be available from the ForexClear Service Portal (referred to in paragraph (e) of Section 1.6.2 (*Margin and Settlement Run Process*)).
- 1.7.8 Settlement Limit Reports: As further described in 1.19 (Settlement Limits for ForexClear Option Contracts, ForexClear Deliverable Forward Contract and ForexClear Spot Contracts).

#### 1.8 Treasury Operations & Collateral Management

1.8.1 Cover Distribution: The Clearing House nets each FXCCM's Liabilities (i.e. margins and multipliers) and then the total of cash Collateral and non-cash Collateral are applied to offset those net Liabilities. This process is known as collateral distribution ("Collateral Distribution"). FXCCMs can choose whether cash or non-cash Collateral should be applied first. At the end of this process, if an FXCCM has a shortfall, a PPS (as defined in Section 1.8.2 (Protected Payment System) below) call for additional Collateral is made. Conversely, any excess cash remaining after the final overnight Margin and Settlement Run can, if requested before 09:30 local London time, be repaid to the FXCCM.

http://www.lch.com/documents/731485/762647/Banking Reports Reference Guide Ltd.pdf /662aec8d-2c06-48cb-b946-

fe3b03e2dfa9http://www.lchclearnet.com/membership/training\_and\_education/

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<sup>2</sup> 

- (a) Cover Distribution Notification
  - (i) FXCCMs are informed via email of their: Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)) and are directed to the ForexClear Service Portal which provides reports (at the times specified in Section 1.7.1 (Margin and Settlement Liability Reports)) informing FXCCMs of their (i) total Liabilities under the ForexClear Service; (ii) current total Collateral posted with the Clearing House for ForexClear; and (iii) Liabilities as a percentage of their current total Collateral (such percentage being shown as a percentage of the aggregate Collateral in their cash and non-cash collateral account(s)).
  - (ii) The reports accessed via the ForexClear Service Portal will enable FXCCMs to log in and examine the underlying data.
- 1.8.2 Protected Payment System: The Clearing House operates the Protected Payments System ("PPS") for transferring funds to and from its FXCCMs to cover their obligations to transfer Margin, NPV Payments, PAA and PAI. This is similar to a direct debit arrangement where the PPS bank confirms that any Clearing House-specified call is met.

FXCCMs are obliged to hold an account with a London PPS bank in USD, as well as a USD account with a PPS bank in the USA.

Follow the link below for a list of PPS banks operating in the UK and US: <a href="http://www.lchclearnet.com/risk-collateral-management/collateral-management/protected-payments-system">http://www.lchclearnet.com/risk-collateral-management/collateral-management/protected-payments-system</a>

- 1.8.3 Acceptable Forms of Collateral Cover: Follow the link below for a detailed description of acceptable collateral and processes applicable from time to time: <a href="http://www.lchclearnet.com/risk-collateral-management/acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-acceptable-collateral-accept
- 1.8.4 *Interest and Accommodation*: Interest is paid to FXCCMs on cash Collateral held by the Clearing House. The London Deposit Rate ("**LDR**") is applied.

A utilisation fee, known as an accommodation charge, is charged on securities lodged at the Clearing House to cover liabilities. For an overview of interest and accommodation charges, please contact the Clearing House's Treasury Operations or follow the link below:

http://www.lchclearnet.com/members-clients/members/fees-ltd/custody-services

#### 1.9 **Payment of Stamp Tax**

Each FXCCM shall pay any Stamp Tax or duty levied or imposed upon it or in respect of its execution or performance of the Clearing Membership Agreement, the

Regulations and the Procedures (including any registration of a ForexClear Contract) by a jurisdiction in which it is incorporated, organised, managed and controlled, or considered to have its seat, or in which a branch or office through which it is acting is located ("**Stamp Tax Jurisdiction**") or by any other jurisdiction and shall indemnify the Clearing House against any Stamp Tax or duty levied or imposed upon the Clearing House or in respect of the Clearing House's execution or performance of the Clearing Membership Agreement, the Regulations and the Procedures (including any registration of a ForexClear Contract) by any such Stamp Tax Jurisdiction or by any other jurisdiction.

## 1.10 **Default Management**

- 1.10.1 *Portfolio Splitting*: As part of the ForexClear Default Management Process, the Clearing House may divide an Auction Portfolio into two or more individual Auction Portfolios. In circumstances where such portfolio splitting is adopted, the Clearing House will, in consultation with the ForexClear Default Management Group, seek to create:
  - (a) one or more individual Auction Portfolios which have comparatively greater levels of risk associated with them, thereby isolating such Auction Portfolios from those which are more risk neutral; and
  - (b) one or more individual Auction Portfolios which are more risk neutral.
- 1.10.2 Acceptance of Bids: In deciding whether to accept a bid, the Clearing House will generally accept the best bid in respect of any individual Auction. However, the Clearing House is entitled to reject a bid in the event that it considers, in its reasonable discretion that accepting the bid may:
  - (a) cause the Clearing House to Applicable Law by virtue of its being a Recognised Clearing House or a Derivatives Clearing Organization;
  - (b) cause the Clearing House or its membership any reputational harm;
  - (c) cause legal action or proceedings to be taken against the Clearing House; or
  - (d) endanger the Clearing House, any of its clearing members or the financial markets in which the Clearing House operates.

Where the Clearing House receives more than one bid from the same ForexClear Clearing Member and in respect of the same Auction the Clearing House is entitled to accept the last bid received by it in respect of that Auction. Where the Clearing House does not receive a bid that was made by a ForexClear Clearing Member for operational, technological or other similar reasons and as a result of which a bid does not reach the Clearing House, the Clearing House will be unable to accept a bid and shall not be liable for any failure to accept such bid.

1.10.3 *Affiliate Bidding*: ForexClear Clearing Members are entitled to bid for an Auction Portfolio on behalf of an affiliated ForexClear Clearing Member.

Where a ForexClear Clearing Member makes a bid and that ForexClear Clearing Member has an affiliated ForexClear Clearing Member that does not make a bid, the Clearing House shall not (unless instructed otherwise in accordance with the paragraph below) assume that the bidding ForexClear Clearing Member has made the relevant bid on behalf of a non-bidding, affiliated ForexClear Clearing Member.

A ForexClear Clearing Member may notify the Clearing House, in advance of an Auction, that it wishes to bid on behalf of an affiliated ForexClear Clearing Member. Where it wishes to do so, the ForexClear Clearing Member should contact the Clearing House's Client Services Team (membership@lchclearnet.com; +44 (0)207 426 7949).

1.10.4 *ForexClear Contributions*: ForexClear Contributions will be called via PPS on the fourth business day of each month or otherwise pursuant to a determination of a ForexClear Contribution under the Default Rules.

Excess ForexClear Contribution amounts due to ForexClear Clearing Members following a ForexClear Determination Date will (subject to the Default Rules) be repaid to ForexClear Clearing Members' PPS accounts on the fourth business day immediately following such ForexClear Determination Date.

If a Resignation Effective Date has occurred in respect of a Resigning Member and the ForexClear Service pursuant to Rule F3(e) of the ForexClear Default Fund Supplement, then the Clearing House will repay the ForexClear Contribution that it holds for such Clearing Member (to the extent it has not been applied under the Default Rules) to the Clearing Member's relevant PPS account on such Resignation Effective Date.

Interest on ForexClear Contributions will be paid to ForexClear Clearing Members' PPS accounts on the fifth business day of each month, in respect of the relevant "interest accrual period" occurring immediately prior to each such business day. Interest is calculated in respect of each "interest accrual period", which commences on (and includes) the fourth business day of each month (each, a "ForexClear Reset Day") and ends on (and includes) the calendar day immediately before the next ForexClear Reset Day. Notwithstanding the preceding paragraphs, if the rate of interest payable on ForexClear Contributions is negative, interest shall be payable by ForexClear Clearing Members to the Clearing House.

- 1.10.5 Quantifying ForexClear Contributions: For the purposes of calculating the ForexClear Margin Weight under Rule F2(d) of the ForexClear Default Fund Supplement, the uncovered stress loss of an FXCCM shall be determined by reference to the ForexClear Contracts entered into (1) on behalf of the relevant FXCCM and (2) with respect to the Clearing Clients and FCM Clients of such FXCCM.
- 1.10.6 Outsourcing: Pursuant to Section 1 (Clearing Member and Dealer Status) of the Procedures, an FXCCM may appoint a third party to fulfil one or both of the Clearing House's Membership requirements to: (i) participate in a ForexClear "fire drill" run by the Clearing House; and (ii) participate in the ForexClear

Default Management Process operated by the Clearing House. Where an FXCCM chooses to outsource one or both of these functions it must appoint and maintain at least three LCH Approved Outsourcing Agents.

The following entities are eligible for appointment as an LCH Approved Outsourcing Agent:

A ForexClear Clearing Member
any other entity that the Clearing House deems appropriate in its sole discretion.

Where an FXCCM wishes to appoint a third party to carry out any obligation on its behalf, it should contact the Clearing House's Membership Department with the:

- (a) details of the third party entity that the FXCCM wishes to appoint as an LCH Approved Outsourcing Agent. Such information should include details of the applicant's regulatory status;
- (b) evidence of the existence of a legally binding agreement between the FXCCM Clearing Member and the third party; and
- (c) such other information that the Clearing House reasonably considers necessary for the purposes of determining whether an entity should be approved as an LCH Approved Outsourcing Agent.

Following the receipt of all of the information above, the Clearing House shall determine in its sole discretion, whether to approve the third party as an LCH Approved Outsourcing Agent. In making its determination, the Clearing House shall consider the third party's ability to demonstrate that it has the necessary operational infrastructure and appropriate asset class expertise.

Where an FXCCM successfully appoints an LCH Approved Outsourcing Agent, that FXCCM may be subject to increased margin requirements to cater for the additional time required to invoke an outsourcing process in the event of a default

FXCCMs should note that LCH Approved Outsourcing Agents may be subject to a more rigorous driving test and fire-drill than FXCCM (i.e. required to demonstrate an ability to price and bid a greater number of trades at tighter pricing tolerances and within more onerous timeframes). In addition, the Clearing House may require an FXCCM, that has appointed an LCH Approved Outsourcing Agent, to participate in an ad-hoc fire-drill or driving test with such notice as the Clearing House deems appropriate in its sole discretion.

The Clearing House reserves the right to revoke an entity's status as an LCH Approved Outsourcing Agent, in its sole discretion and without notice. In the event of such a revocation, the relevant FXCCM shall be required to assume those responsibilities that were previously outsourced. Such revocation may occur where the Clearing House considers that there is an insufficient number

of third party entities that are providing outsourced default management services (usually a minimum of five providers at any one time).

Other than in exceptional circumstances and in the Clearing House's sole discretion, an LCH Approved Outsourcing Agent may not act on behalf of more than three clearing members.

The appointment of an LCH Approved Outsourcing Agent does not absolve an FXCCM of its obligations under the ForexClear DMP (including its obligation to participate in an Auction) and an LCH Approved Outsourcing Agent's participation in the ForexClear DMP on behalf of an FXCCM, in the event of a default, shall not extend beyond the provision of operational and other ancillary support to that FXCCM.

1.10.7 ForexClear DMG: The necessary involvement of FXCCMs and the ForexClear DMG in the ForexClear DMP entails the assessment and dissemination of information that could give rise to conflicts of interest. To ensure that such potential conflicts are demonstrably contained, Schedule 1 (Confidentiality, non-disclosure and participation in the ForexClear Default Management Group) establishes binding obligations of confidentiality, anonymity and the extent of dissemination of information on FXCCMs (and their executives or directors who participate from time to time in the ForexClear DMG) and on the Clearing House.

Each FXCCM who makes available a representative to serve on the ForexClear DMG agrees, and shall procure that, to the extent applicable, its representatives agree to be bound by and to ensure that it and any of its executives or directors serving on the ForexClear DMG complies with Schedule 1 (*Confidentiality, non-disclosure and participation in the ForexClear Default Management Group*) covering confidentiality, non-disclosure and other terms.

#### 1.11 Provision of Tax Forms

The Clearing House and each FXCCM shall provide to each FXCCM or the Clearing House, as relevant, (i) any forms or documents specified in the ForexClear Contract between the Clearing House and the FXCCM and (ii) any other form, document, statement or certification reasonably requested in writing by the FXCCM or the Clearing House in order to allow the FXCCM or the Clearing House to make a payment under the Rules of the Clearing House or any ForexClear Contract without deduction or withholding for or on account of any tax or with such deduction or withholding at a reduced rate unless the Clearing House or the FXCCM can no longer deliver such form, document, statement or certification solely as a result of a change in law (including double tax treaty) or interpretation thereof after the date of the ForexClear Contract between the Clearing House and the FXCCM. In the case of the Clearing House, the forms required pursuant to item (ii) above include an Internal Revenue Service Form W-8BEN. Additionally, the Clearing House will take such further actions as necessary to ensure that payments made to it can be made without deduction or withholding for or on account of any Tax.

## 1.12 ForexClear Client Clearing

- 1.12.1 ForexClear Clearing Client Clearing Ancillary Documentation
  - (a) Security Deed: Unless specified otherwise by the Clearing House, a ForexClear Clearing Member must enter into a Security Deed in respect of its Clearing Clients in relation to amounts due to it from the Clearing House pursuant to the Client Clearing Annex. Further information in relation to such Security Deed is prescribed by the Clearing House from time to time and published on the Clearing House's website.
  - (b) Prescribed Language and End-User Notice: Pursuant to the Clearing House's General Regulations, each ForexClear Clearing Member is required to ensure that it includes certain language in its agreement with its ForexClear Clearing Client (the "Clearing House Prescribed Language"). The Clearing House Prescribed Language is shown at Schedule 1 of Section 1 of the Procedures.

ForexClear Clearing Clients' attention is drawn to the End-User Notice which is published on the Clearing House's website:

http://www.lch.com/about-us/governance/end-user-notices

- 1.12.2 Transactions in Respect of ForexClear Clearing Client Default to FXCCM
  - (a) This Section describes certain transactions that, under certain conditions, can be carried out by an FXCCM in respect of one of its ForexClear Clearing Clients that has defaulted in its obligations to the FXCCM.
  - A request or instruction from an FXCCM to the Clearing House to carry (b) out a transaction described in Sections 1.12.3 (Transfers between Client Accounts and Proprietary Accounts) or 1.12.4 (ForexClear Contracts Entered into, or Cancelled, on behalf of Defaulted Clients) below shall in every case be deemed a representation by the FXCCM to the Clearing House that (i) the affected ForexClear Clearing Client is in default of its obligations to the FXCCM, (ii) the FXCCM has provided and will provide (as applicable) any required notices to the ForexClear Clearing Client of its default and the FXCCM's transactions effected under Sections 1.12.3 (Transfers between Client Accounts and Proprietary Accounts) and/or 1.12.4 (ForexClear Contracts Entered into, or Cancelled, on behalf of Defaulted Clients) below, and (iii) the FXCCM is permitted by its agreements with the ForexClear Clearing Client and Applicable Law, and has authority to effect the transactions specified in the FXCCM's requests and/or instructions to the Clearing House in respect of such ForexClear Clearing Client. FXCCMs are not permitted to effect or attempt to effect a transaction described in Sections 1.12.3 (Transfers between Client Accounts and Proprietary Accounts) or 1.12.4 (ForexClear Contracts Entered into, or Cancelled, on behalf of Defaulted Clients) below where the preceding representations are not satisfied.

- (c) In any other circumstance not covered by Section 1.12.3 (*Transfers between Client Accounts and Proprietary Accounts*), Section 1.12.4 (*ForexClear Contracts Entered into, or Cancelled, on Behalf of Defaulted Clients*) or Section 1.14 (*Indirect Clearing*), an FXCCM may only instruct the Clearing House to transfer a ForexClear Contract from its Client Account to its Proprietary Account in circumstances where the Clearing House has received from the FXCCM:
  - (i) evidence of the relevant ForexClear Clearing Client's consent to such transfer in a form suitable to the Clearing House; and
  - (ii) an indemnity in a form suitable to the Clearing House.

The Clearing House will usually arrange a transfer of any ForexClear Contracts to be transferred pursuant to this paragraph (c) within 24 hours of receipt (to the extent applicable) of the documents listed in subparagraphs (i) and (ii) above, unless such transfer is contested by the relevant ForexClear Clearing Client.

## 1.12.3 Transfers between Client Accounts and Proprietary Accounts

- (a) If at any time an early termination date (howsoever described) occurs in respect of one or more of the transactions between an FXCCM and a ForexClear Clearing Client in respect of which such FXCCM is a party to Related ForexClear Contracts and, at the time of such early termination date, the relevant FXCCM is not a Defaulter, the FXCCM may, in connection with a defaulted ForexClear Clearing Client, transfer a ForexClear Contract from the applicable Client Account to its Proprietary Account, provided that the following conditions are met (in addition to any other generally applicable provisions of the Rulebook):
  - (i) the representations described above in paragraph (b) of Section 1.12.2 (*Transactions in Respect of ForexClear Clearing Client Default to FXCCM*) are not or would not be breached;
  - (ii) satisfactory evidence of the ForexClear Clearing Client's default in its obligations to the FXCCM is presented to the Clearing House, which evidence may be, to the extent permitted by the Clearing House in its sole discretion, nothing other than the FXCCM's instruction to effect the transfer (provided that the Clearing House shall be entitled to request additional evidence in its discretion);
  - (iii) a copy of a notice served by the FXCCM on the ForexClear Clearing Client alerting that ForexClear Clearing Client of the FXCCM's intention to transfer the relevant ForexClear Contract to the Clearing House;
  - (iv) at all times the FXCCM maintains sufficient Collateral in its Proprietary Account and the applicable Client Account; and

(v) on demand from the Clearing House, an indemnity from the FXCCM in a form suitable to the Clearing House is provided to the Clearing House.

For the purposes of this Section 1.12.3 a "Related ForexClear Contract" means, in respect of a transaction between an FXCCM and a ForexClear Clearing Client which has been terminated on an early termination date, the open position represented by the ForexClear Contract entered into with the Clearing House by such FXCCM on behalf of the relevant ForexClear Clearing Client on equal and opposite terms to such transaction.

- (b) The Clearing House will typically (but shall not be required to) transfer the relevant ForexClear Contract within 24 hours of receipt of the above.
- 1.12.4 ForexClear Contracts Entered into, or Cancelled, on Behalf of Defaulted Clients
  - (a) An FXCCM may register, in the name of a defaulted ForexClear Clearing Client but without the direction of such ForexClear Clearing Client, ForexClear Contracts (including hedging and/or compression transactions) to such Client Account, or cancel ForexClear Contracts without the direction of such ForexClear Clearing Client under the following conditions (in addition to any other generally applicable provisions of the Rulebook):
    - (i) the representations described above in paragraph 1.12.2(b) (*Transactions in respect of ForexClear Clearing Client Default to FXCCM*) are not or would not be breached;
    - (ii) satisfactory evidence of the ForexClear Clearing Client's default in its obligations to the FXCCM is presented to the Clearing House, which evidence may be, to the extent permitted by the Clearing House in its sole discretion, nothing other than the FXCCM's instruction to effect the transfer (provided that the Clearing House shall be entitled to request additional evidence in its discretion);
    - (iii) at all times the FXCCM maintains sufficient Collateral in the applicable Client Account;
    - (iv) a copy of a notice served by the FXCCM on the ForexClear Clearing Client alerting that ForexClear Clearing Client of the FXCCM's intention to register the relevant ForexClear Contract(s) is provided to the Clearing House; and
    - (v) on demand from the Clearing House, an indemnity from the FXCCM in a form suitable to the Clearing House is provided to the Clearing House.

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(b) Such a ForexClear Contract submitted for registration in the name of a defaulted ForexClear Clearing Client must reference the applicable ForexClear Clearing Client and Client Account as would ordinarily occur; however, the transaction may be submitted using either the ForexClear Clearing Client's ForexClear Approved Trade Source System identification number or an alternative ForexClear Approved Trade Source System identification number other than that of the ForexClear Clearing Client (e.g., the FXCCM's ForexClear Approved Trade Source System identification numbers), as applicable.

## 1.12.5 Backup Clearing Members:

A ForexClear Clearing Client may appoint a Backup Clearing Member for the purposes of the porting of the ForexClear Contracts entered into by a ForexClear Clearing Member on its behalf, in accordance with the Client Clearing Annex.

Where, following the Default of a ForexClear Clearing Member, the Clearing House is notified of the existence of such a Backup Clearing Member in respect of a ForexClear Clearing Client, the Clearing House is entitled, in accordance with the Client Clearing Annex, to immediately and without notice to any person, send details of the Relevant Contracts and Account Balances to that appointed Backup Clearing Member. The Clearing House shall not require consent from any person in advance of sending these details.

Note: The appointment by a ForexClear Clearing Client of a Backup Clearing Member and the notification of a Backup Clearing Member to the Clearing House does not mean that ForexClear Contracts will always be transferred to that Backup Clearing Member. Porting of ForexClear Contracts, following a ForexClear Clearing Member's Default is always subject to the Clearing House's receipt of consent from the relevant Backup Clearing Member.

## 1.13 **Provision of Tax Forms**

The Clearing House and each FXCCM shall provide to each FXCCM or the Clearing House, as relevant, (i) any forms or documents specified in the ForexClear Contract between the Clearing House and the FXCCM and (ii) any other form, document, statement or certification reasonably requested in writing by the FXCCM or the Clearing House in order to allow the FXCCM or the Clearing House to make a payment under the Rules of the Clearing House or any ForexClear Contract without deduction or withholding for or on account of any tax or with such deduction or withholding at a reduced rate unless the Clearing House or the FXCCM can no longer deliver such form, document, statement or certification solely as a result of a change in law (including double tax treaty) or interpretation thereof after the date of the ForexClear Contract between the Clearing House and the FXCCM. In the case of the Clearing House, the forms required pursuant to item (ii) above include an Internal Revenue Service Form W-8BEN. Additionally, the Clearing House will take such further actions as necessary to ensure that payments made to it can be made without deduction or withholding for or on account of any Tax.

## 1.14 **Indirect Clearing**

- in respect of all of the transactions between a ForexClear Clearing Member and a ForexClear Clearing Client acting on behalf of Indirect Clearing Clients comprising an Indirect Gross Account in respect of which such ForexClear Clearing Member (i) is a party to Related ForexClear Contracts and (ii) at the time of such early termination date, is not a Defaulter, that ForexClear Clearing Member may instruct the Clearing House to take one of the following steps in respect of each Indirect Clearing Client comprising the Indirect Gross Account:
  - (a) in circumstances where the ForexClear Clearing Member notifies the Clearing House of a Backup Client in respect of the relevant Indirect Clearing Client, transfer all of the open Related ForexClear Contracts registered to the Indirect Gross Sub-Account referable to the Indirect Clearing Client to the relevant Indirect Gross Sub-Account referable to the Indirect Clearing Client of the new or existing Indirect Gross Account which the ForexClear Clearing Member(a) has opened in respect of such Backup Client (a "Client to Client Porting");
  - (b) transfer all of the open Related ForexClear Contracts registered to the relevant Indirect Gross Sub-Account referable to the Indirect Clearing Client to:
  - (c) a new Individual Segregated Account opened within the Clearing House by the ForexClear Clearing Member directly on behalf of such Indirect Clearing **Client** who shall, after such transfer, become a ForexClear Clearing **Client** in respect of such Client Account; or
    - (i) a new or existing Omnibus Segregated Account opened within the Clearing House by the ForexClear Clearing Member where such Indirect Clearing Client shall, after such transfer, become a ForexClear Clearing Client in respect of such Omnibus Segregated Account,
  - (d) (each, a "Direct Account Opening"); or
  - (e) transfer all of the open Related ForexClear Contracts registered to the relevant Indirect Gross Sub-Account referable to the Indirect Clearing Client to its Proprietary Account (an "Initial Transfer").

The Clearing House will determine, in respect of each Indirect Clearing Client comprising the Indirect Gross Account, whether a Client to Client Porting, a Direct Account Opening or an Initial Transfer (as applicable) is possible within the period of time considered by the Clearing House (in its sole discretion) to be appropriate in the relevant circumstances. In the event of a determination by the Clearing House that the relevant step is impossible within such time period (an "Impossibility Determination"), the Clearing House will notify the ForexClear Clearing Member and will not undertake a Client to Client Porting, a Direct Account Opening or an Initial Transfer in respect of the relevant Indirect Clearing Client.

- 1.14.2 Each of the steps referred to in paragraphs 1.14.1 (a), (c)(i) and (e) above will be subject to the following:
  - (a) the Clearing House receiving a copy of the notice from the ForexClear Clearing Member to the relevant ForexClear Clearing Client or from the relevant ForexClear Clearing Client to the ForexClear Clearing Member, copied to each Indirect Clearing Client comprising the Indirect Gross Account, designating the relevant early termination date or, if such early termination date has occurred automatically, evidence of the relevant event of default or termination event;
  - (b) the Clearing House receiving a copy of the notice from the ForexClear Clearing Member to the relevant ForexClear Clearing Client and the relevant Indirect Clearing Client confirming that the ForexClear Clearing Member will, in accordance with the instructions of the Indirect Clearing Client, request the Clearing House to arrange a Client to Client Porting, a Direct Account Opening or an Initial Transfer (as applicable) in respect of the Related ForexClear Contracts referable to such Indirect Clearing Client;
  - (c) the ForexClear Clearing Member having satisfied the Total Required Margin Amount in respect of the relevant account to which the Related ForexClear Contracts are being transferred;
  - (d) the Clearing House receiving an indemnity from the ForexClear Clearing Member in a form suitable to the Clearing House; and
  - (e) in respect of a Client to Client Porting, the Clearing House receiving written confirmation from the ForexClear Clearing Member that the Backup Client has agreed to act as the Backup Client in relation to such Client to Client Porting.

The Clearing House will usually arrange a transfer of the Related ForexClear Contracts referable to an Indirect Clearing Client within 24 hours of receipt of the documents listed in (a)(c)(i)(d) Section 1.14.21.14.2 (a) to (e).

For the purposes of this Section 1.14, a "Related ForexClear Contract" has the same meaning as ascribed to such term in Section 1.12.3 save that, in this Section 1.14 the ForexClear Clearing Client is acting on behalf of one or more Indirect Clearing Clients in respect of whom the ForexClear Clearing Member clears Contracts with the Clearing House in an Indirect Gross Account.

#### 1.15 Compression

1.15.1 A ForexClear Clearing Member may compress existing ForexClear Contracts (other than ForexClear Contracts that are ForexClear Option Contracts, ForexClear Swap Contracts, ForexClear Spot Contracts and ForexClear Deliverable Forward Contracts) in accordance with Regulation 95. There are two options available to a ForexClear Clearing Member that wishes to compress such ForexClear Contracts:

- (a) a ForexClear Clearing Member can request that all such ForexClear Contracts entered into (i) on behalf of a designated ForexClear Clearing Client and in respect of a particular Client Account (or, where relevant, in respect of an Indirect Gross Sub-Account), or (ii) on such ForexClear Clearing Member's own behalf, be considered for compression by the Clearing House. Such a request shall be reconsidered by the Clearing House automatically each day (and the results notified to the ForexClear Clearing Member after the applicable scheduled compression run) until the ForexClear Clearing Member notifies the Clearing House to discontinue such compression of such ForexClear Contracts. ForexClear Clearing Members should contact the Clearing House's Membership Department to request such a compression of such ForexClear Contracts; or
- (b) a ForexClear Clearing Member may notify the Clearing House directly through the ClearLink API specifying which such ForexClear Contracts and/or Resulting ForexClear Contracts should be compressed. The ForexClear Clearing Member will be notified after the applicable scheduled compression run whether compression has occurred and the Clearing House will not automatically reconsider such compression request on subsequent days regardless of whether compression has occurred.
- 1.15.2 In order to compress such a ForexClear Contract, a ForexClear Clearing Member must follow the process for compression as set out above and must, at the time of compression, have in its applicable Client Account or Proprietary Account ForexClear Contracts with the same compression identifier (being an identifier applied by the Clearing House which indicates that such ForexClear Contracts are eligible for compression).
- 1.15.3 In respect of each compression, the Clearing House will notify ForexClear Clearing Members of the cut-off time by which the Clearing House must be notified of the relevant ForexClear Contracts and/or Resulting ForexClear Contracts to be compressed in order for such ForexClear Contracts and/or Resulting ForexClear Contracts to be included in the relevant compression run. The Clearing House shall process the compression of all ForexClear Contracts and Resulting ForexClear Contracts notified to it prior to such cut-off time and shall notify the applicable ForexClear Clearing Member after the applicable compression run of the result of such compression procedure. A notification received after the relevant cut-off time shall be treated as if such notification was submitted on the following day.
- 1.15.4 Following the compression process described above and as further set out in Regulation 95, the applicable ForexClear Clearing Member shall promptly notify the Clearing House if it believes that any errors have occurred in the compression process or if its books and records do not reconcile with those of the Clearing House in respect of the compressed ForexClear Contracts as notified to the ForexClear Clearing Member by the Clearing House.

## 1.16 Exercise and Expiry Agent

- 1.16.1 ForexClear Clearing Members may facilitate or communicate the exercise of (or intent to exercise) ForexClear Option Contracts to the Clearing House via an exercise and expiry agent. The Clearing House may determine, in its sole discretion, the form and manner of any instruction pursuant to this Section 1.16.
- In the event that an exercise and expiry agent is not able to facilitate or communicate the exercise of (or intent to exercise) a ForexClear Option Contract for any reason whatsoever, and the Clearing House becomes aware of such failure to facilitate or communicate, the Clearing House will notify the relevant ForexClear Clearing Members of such failure and may provide details of one or more alternative exercise methods.
- 1.16.3 Exercise and expiry agents may be designated by the Clearing House from time to time and such agents shall be published on the Clearing House's website.
- 1.16.4 Neither the Clearing House nor any other member of the LCH Group shall have any liability whatsoever to any ForexClear Clearing Member or any other person, including any Clearing Client, in contract, tort (including negligence), trust, as a fiduciary or under any other cause of action in respect of any liabilities, damages, losses, costs or expenses of whatsoever nature suffered or incurred by a ForexClear Clearing Member or any other person, including any Clearing Client, as a result of (a) any failure by the Clearing House to provide notice pursuant to Section 1.16.2 or (b) any failure of an exercise and expiry agent to communicate the exercise of (or intent to exercise) a ForexClear Option Contract to the Clearing House.

## 1.17 Automatic Exercise of ForexClear Option Contracts

- In relation to a ForexClear Option Contract, if, at the Expiration Time on the Expiration Date of that ForexClear Option Contract, the ForexClear Option Contract has not been exercised by the relevant ForexClear Clearing Member or the Clearing House, as the case may be, then it will be deemed exercised as of that time if the In-the-Money Amount of that ForexClear Option Contract at the Expiration Time equals (in the case of a Call) or exceeds (in the case of a Call or Put) the product of:
  - (a) the number of basis points as published on the Clearing House's website from time to time as being applicable to the ForexClear Currency Pair referenced in that ForexClear Option Contract; and
  - (b) the Call Currency Amount or the Put Currency Amount, as appropriate,
  - in each case as calculated at or immediately prior to the Expiration Time on the Expiration Date of the given ForexClear Option Contract.
- 1.17.2 For the purposes of Section 1.17.1, the Clearing House may change the number of basis point applicable to any ForexClear Currency Pair by giving three Business Days' prior notice to the ForexClear Option Clearing Members (or

- such shorter notice period as determined by the Clearing House following consultation with ForexClear Option Clearing Members).
- 1.17.3 If the Clearing House receives an instruction from a ForexClear Clearing Member, including via any third party intent agent or middleware provider, before the applicable Expiration Time on the Expiration Date such instruction will in all circumstances be acted upon notwithstanding any administrative, systems or processing delays that may affect the Clearing House immediately taking the action required upon receipt of such instruction. If the Clearing House receives an instruction from a ForexClear Option Clearing Member at or after the applicable Expiration Time on the Expiration Date then Section 1.17.1 shall in all circumstances apply and the Clearing House shall have no regard to such instruction.
- 1.17.4 The "**In-the Money Amount**" in relation to a ForexClear Option Contract shall, in respect of the Exercise Date, be equal to:
  - (a) in the case of a Call, the excess of the FX Spot Reference over the Strike Price, multiplied by the Call Currency Amount, where both the Strike Price and the Settlement Rate are quoted in terms of the amount of Put Currency to be paid per one unit of Call Currency; and
  - (b) in the case of a Put, the excess of the Strike Price over the FX Spot Reference, multiplied by the Put Currency Amount, where both the Strike Price and the Settlement Rate are quoted in terms of the amount of Call Currency to be paid per one unit of Put Currency.
- 1.17.5 Capitalised terms used in this Section 1.17 and not otherwise defined shall have the meanings specified for such terms in (i) the ForexClear Option Contract Terms applicable to that ForexClear Option Contract, and, if note defined therein, (ii) the 1998 FX and Currency Options Definitions (including Annex A thereto) as published by the International Swaps and Derivatives Association, Inc., the Emerging Markets Trade Association and The Foreign Exchange Committee.

## 1.18 **CLS Payment Procedures**

1.18.1 In connection with ForexClear Spot Contracts, ForexClear Deliverable Forward Contracts, ForexClear Option Contracts and ForexClear Swap Contracts, where applicable, FXCCMs are required to meet the following requirements with respect to CLS:

Time	Action or Requirement
00:00 CET	Clearing House to provide FXCCMs
	expected CLS funding requirements.
01:30 – 02:00 CET	Clearing House to provide FXCCMs
	final CLS funding requirements.
	FXCCMs required to make such
	payments by 08:00 CET.

06:00 – 08:00 CET	FXCCMs required to make payments
	to cover all short positions in all
	currencies.
08:00 CET	CLS to issue payments to FXCCMs
	per settlement instructions for each
	relevant FXCCM.
08:00 – 10:00 CET	Clearing House to initiate and
	complete liquidity provisions.

- In connection with ForexClear Spot Contracts, ForexClear Deliverable Forward Contracts, ForexClear Option Contracts and ForexClear Swap Contracts, where applicable, the following Relevant FX Liabilities are payable to CLS by FXCCMs in accordance with the Procedures and/or instructions from the Clearing House:
  - (a) Initial Exchange Amounts, Final Exchange Amounts and amounts owed under the Economic Terms of ForexClear Spot Contracts and ForexClear Deliverable Forward Contracts; and
  - (b) Premiums under ForexClear Option Contracts,
- 1.18.2 in each case net of any return of aggregate variation margin or NPV Payments denominated in the same currency and due on the same day.
- 1.18.3 Each ForexClear Option Clearing Member warrants that the Relevant FX Liabilities that are paid to CLS pursuant to Section 1.18.2 are transferred free from any proprietary, equitable or other similar interest of any person.
- 1.18.4 Each ForexClear Option Clearing Member shall at all times maintain complete and accurate written records of all Payment Transfer Orders given by it (or on its behalf) to its Member Settlement Bank(s) in respect of all amounts under all of the ForexClear Contracts (other than ForexClear NDF Contracts) registered in its name from time to time. Upon demand by the Clearing House, a ForexClear Option Clearing Member shall immediately provide all such records to the Clearing House.
- 1.19 Settlement Limits for ForexClear Option Contracts, ForexClear Deliverable Forward Contracts, ForexClear Spot Contracts and ForexClear Swap Contracts
  - 1.19.1 Subject to the Regulations, the Clearing House shall, in its sole and absolute discretion, determine from time to time the Settlement Position Limit and Settlement Exposure Limit in respect of each ForexClear Clearing Member and each ForexClear Currency. The Clearing House shall notify each ForexClear Clearing Member of the Settlement Position Limit and Settlement Exposure Limit applicable to it via the ForexClear Service Portal.
  - 1.19.2 If, on a given day, at 10:00AM Eastern Standard Time, the Settlement Position Limit of a ForexClear Clearing Member and a given ForexClear Currency Pair is exceeded by the Settlement Position Amount on that day with respect to that ForexClear Clearing Member and that ForexClear Currency Pair, the Clearing

House may take the actions specified in Regulation 100 or such other actions as it deems necessary, including requesting that ForexClear Clearing Member to transfer extra Collateral in respect of Initial Margin.

# 1.20 Mandatory ForexClear Swap Limit

1.20.1 Subject to the Regulations, the Clearing House shall, in its sole and absolute discretion, determine from time to time the Mandatory ForexClear Swap Limit in respect of each ForexClear Clearing Member and each ForexClear Currency. The Clearing House shall notify each ForexClear Clearing Member of the Mandatory ForexClear Swap Limits applicable to it via the ForexClear Service Portal.

#### 1.21 ForexClear STM Contracts – Conversions

1.21.1 If a ForexClear Clearing Member wishes to make a conversion pursuant to Regulation 106A, it must complete and deliver to the Clearing House such documentation (if any) as the Clearing House determines, in its sole discretion, from time to time.

# SCHEDULE 1 CONFIDENTIALITY, NON-DISCLOSURE AND PARTICIPATION IN THE FOREXCLEAR DEFAULT MANAGEMENT GROUP

#### 1. **Definitions**

- 1.1 "Confidential Material" means data (including but not limited to portfolio data) and documents, which are not in the public domain and which are disclosed to the FXCCM, its associated companies and advisers, or to which the FXCCM, its associated companies and advisers obtains or otherwise has access as a result of participation in the ForexClear Default Management Process, (which, for the avoidance of doubt, does not include any information, data or documents provided to the Clearing House by the FXCCM).
- 1.2 "**FXDMG Member**" means an individual appointed by a Nominating FXCCM.
- 1.3 "Nominating FXCCM" means a ForexClear Member who, through their obligations under the ForexClear DMP Annex, makes available a representative to serve on the FXDMG.
- 1.4 "Permitted Purpose" means proper fulfilment by the FXCCM of its duties under the ForexClear DMP Annex and includes, after the completion of the Auction, the use by the FXCCM its associated companies and advisers (to be determined by it at its discretion) of any data or documents related to portfolios successfully won through the Auction, for the purposes of its own ongoing portfolio management and to enable it to comply with ongoing legal or regulatory requirements.
- 1.5 References denoting the masculine (including "his" and "he") shall be construed as the feminine if the FXDMG Member is female.
- 1.6 All other terms have the meaning ascribed to them in the Default Rules (including the ForexClear DMP Annex).

## Confidentiality and Non-Disclosure: General Obligations of the FXCCM

## 2. Confidentiality

- 2.1 The FXCCM agrees that, in consideration of being given Confidential Material, it will keep all such Confidential Material in the strictest confidence, adhere to the provisions of this Agreement in respect thereof and, subject to paragraph 2.3 below, will not disclose it to any person without the prior written permission of the Managing Director, Risk of the Clearing House or a Director of Risk Management of the Clearing House, providing always that the FXCCM shall be relieved of such an obligation of confidentiality in respect of any Confidential Material if:
  - (a) it comes into the public domain other than through a breach by the FXCCM of this Agreement; or
  - (b) b) the FXCCM is expressly obliged to do so by order of a court of competent jurisdiction upon the application of a third party, or as a result of any request to disclose such part or parts of the Confidential Material in connection with any

inquiry or other request by a regulatory authority or self-regulatory authority asserting jurisdiction over the FXCCM.

- 2.2 The FXCCM further agrees that it will not use any Confidential Material for any purpose other than the Permitted Purpose. In this regard the FXCCM expressly acknowledges and agrees that the Confidential Material may contain commercially sensitive information which if used inappropriately or otherwise than in accordance with this Schedule 1 might result in the gaining of an unfair commercial advantage by the FXCCM over other members of the Clearing House ForexClear Service.
- 2.3 Subject to paragraph 2.4 below the FXCCM may disclose any Confidential Material to any of its employees, representatives, associated companies and advisers on a "**strictly need to know**" basis, in the event that any such person needs that Confidential Material for the Permitted Purpose (and to that extent only).
- 2.4 The FXCCM agrees to establish and adhere to adequate procedures (including, without limitation, the establishment of appropriate Chinese walls) to ensure that any employee or representative to whom any Confidential Material is disclosed shall not use any part or all of that Confidential Material for any proprietary purpose outside the scope of the Permitted Purpose.
- 2.5 This paragraph and the duties hereunder shall survive the termination of this Schedule 1 and, in relation to any Confidential Material, shall expire on the second anniversary of the date the Confidential Material was first provided to the FXCCM.

# 3. **Secrecy**

- 3.1 Except in accordance with the terms of this Schedule 1, the FXCCM agrees that it shall treat as strictly confidential and shall not disclose or allow to be divulged to any person:
  - (a) Confidential Material;
  - (b) the fact that it has received any Confidential Material;
  - (c) the existence of any discussions or negotiations between the parties in this matter.
  - (d) details of the Permitted Purpose and any of the proposals, terms, conditions, facts or other matters relating to any of the forgoing. Subject only to the FXCCM being relieved of such an obligation because of the circumstances covered in paragraphs 2.1(a) and 2.1(b).
- 3.2 The Clearing House undertakes to ensure that the FXCCM is fully appraised of information on the ForexClear Default Management Process that it makes public and which is accordingly of relevance to the FXCCM's obligations.

# 4. **Property**

The parties acknowledge that the property in the Confidential Material (or any part of it) shall not pass to the FXCCM or any FXCCM, and the property in the media on which it is conveyed to the receiving party shall not pass to the FXCCM or any FXCCM unless expressly so agreed by the Clearing House in writing.

#### 5. Return of Confidential Material

Upon request by the Clearing House, and in any event upon fulfilment of the Permitted Purpose, the FXCCM shall promptly return to the Clearing House by a secure method of transportation all or any part of the Confidential Material and all copies thereof in its possession or control or that of its employees or representatives, including all other papers, programs and records incorporating any of that Confidential Material, or shall destroy such information and shall certify to the Clearing House in writing that it has done so provided that the FXCCM is permitted to retain copies of any Confidential Material which it requires as part of its portfolio management or otherwise for legal or regulatory reasons.

# 6. No Representations or Warranties; No Conflict of Interest

- 6.1 Subject to references made in Paragraph7 (*Liability*), the Confidential Material is disclosed by the Clearing House without any representation or warranty whatsoever as to its accuracy or completeness or otherwise.
- 6.2 The Clearing House acknowledges and agrees that, subject to compliance with the terms of this Schedule 1 by the FXCCM and any of its employees or representatives to whom Confidential Material is provided in accordance with this Schedule 1, the FXCCM's participation in the ForexClear Default Management Process shall not prevent the FXCCM from carrying out any transaction, or otherwise providing investment services in respect of, investments that the FXCCM may subsequently learn are the subject of Confidential Material and, furthermore, the Clearing House agrees that it shall not be able to assert that the FXCCM has a conflict of interest in doing so nor shall the Clearing House have a claim or action in respect of the foregoing against the FXCCM or any of its directors, employees or other representatives.

## 7. **Liability**

- 7.1 Subject to Regulation 52 (*Exclusion of Liability*), the parties agree and acknowledge that neither the Clearing House nor any of its employees or representatives shall have any liability whatsoever to the FXCCM or any of employees or representatives, for any loss or damage of whatsoever kind howsoever arising directly or indirectly out of or in connection with the disclosed Confidential Material or its use.
- 7.2 The Clearing House accepts liability for any personal injury or death caused by the negligence of the Clearing House and any fraud or wilful default on the part of the Clearing House, for any actions that it may take on the basis of advice given to it by the FXDMG, and for the accuracy of the information (confidential material as defined in this Schedule 1) that it distributes to the FXCCM in connection with the ForexClear Default Management Process.
- 7.3 Under no circumstances shall the Clearing House have any liability to the FXCCM for (a) any consequential loss or other indirect loss of whatsoever kind or (b) loss of anticipated profit (whether direct or indirect).

#### 8. **Remedies**

Without affecting any other rights or remedies that the Clearing House may have, the FXCCM acknowledges that the Clearing House may be irreparably harmed by any breach of the terms of this Schedule 1 and that damages alone may not necessarily be an adequate remedy. Accordingly, the Clearing House will be entitled to the remedies of injunction, specific performance and other equitable relief, or any combination of these remedies, for any threatened or actual breach of its terms, and not proof of special damages will be necessary to enforce this Agreement.

# Confidentiality and Non-Disclosure and General Terms of Participation in ForexClear Default Management Group

#### 9. **Conflict of Interest**

The FXCCM shall procure that, in the event that a FXDMG Member takes the view that a possible conflict of interest may arise with regard to any matter forming part of the business of the FXDMG, he shall promptly report his view to the Chairman of the FXDMG, who shall act accordingly, taking the advice of other FXDMG Members as appropriate.

# 10. **Confidentiality**

- 10.1 Subject to paragraph 10.3 below, the FXCCM shall procure that the FXDMG Member shall keep all Confidential Material strictly confidential to himself and will not disclose it to any person who is not a FXDMG Member (including, for the avoidance of doubt, the FXCCM who recommended his appointment to the FXDMG (the Nominating FXCCM) or his employer (if different) or any other employee, adviser, officer or fellow worker of that FXCCM or his employer) without the prior written permission of the Managing Director, Risk of the Clearing House or his properly authorised delegate, providing always that the FXDMG Member shall be relieved of such an obligation of confidentiality in respect of any Confidential Material if it comes into the public domain in the circumstances covered in paragraphs 2.1(a) and 2.1(b) above.
- 10.2 Subject to paragraph 10.3 below, the FXCCM shall procure that the FXDMG Member shall not use any Confidential Material for any purpose other than the proper fulfilment of his duties as a FXDMG Member.
- 10.3 The parties acknowledge that, in the event that a Default Notice is issued by the Clearing House in respect of any ForexClear Clearing Member, the FXDMG Member may be required by the Nominating FXCCM and/or his employer (if different) to provide certain services to the Clearing House in the management of the default. In such event, and only in such event, the parties acknowledge that the FXDMG Member shall be entitled to disclose any part or parts of the Confidential Material as may be agreed by the Clearing House, in such manner and form and in accordance with such procedures as may prescribed by the Clearing House and/or the FXDMG with regard to the management of that default.
- 10.4 Upon request by the Clearing House, and in any event upon termination of the membership of the FXDMG Member of the FXDMG, the FXCCM shall procure that the FXDMG Member shall promptly return to the Clearing House by a secure method

of transportation all or any part of the Confidential Material and all copies thereof in his possession or control, including all abstracts, notes, drawings and other papers, programs and records incorporating any of that Confidential Material, or shall destroy such information and shall certify to the Clearing House in writing that it has done so, provided that the FXDMG Member is permitted to retain a copy thereof to comply with applicable legal or regulatory requirements.

# 11. Warranty and Representation

The FXCCM represents and warrants that it will procure that:

- (a) the Nominating FXCCM and the FXDMG Member's employer (if different) are aware of the obligations of confidentiality arising out of this Procedure; and
- (b) nothing in this Schedule 1 will cause the FXDMG Member to breach any duty or obligation (whether arising pursuant to contract or otherwise) which he owes to the Nominating FXCCM or to his employer, if different, or any other contract counterparty of the FXDMG Member.

# 12. Confidentiality and Non-Disclosure: General Obligations of the Clearing House

The Clearing House will treat all Confidential Material in the terms envisaged in Schedule 1 (*Confidentiality, non-disclosure and participation in the ForexClear Default Management Group*), confining use to the ForexClear Default Management Process, restricting its availability on a "**strictly need to know basis**", and exercising every duty of care required of it as a Recognised Clearing House and as a Derivatives Clearing Organization.