

FCM PROCEDURES OF THE CLEARING HOUSE LCH LIMITED

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Except where the context otherwise requires, defined terms used herein have the meaning ascribed to them in the FCM Regulations or in other portions of the FCM Rulebook.

1. FCM CLEARING MEMBER STATUS

1.1 FCM Clearing Member Application Procedure

(a) **Application Procedure**: An application for FCM Clearing Member status of the Clearing House must be made on the appropriate form which can be obtained from the Clearing House's Membership Department. Additional information (including legal documents) must be supplied where necessary and submitted to the Clearing House with the completed form.

Applicants approved by the Clearing House for FCM Clearing Member status ("Approved Applicants") must, within three months of notification of their approval, fulfill all conditions attached to their approval. If an Approved Applicant does not fulfill all such conditions within these three months, the Clearing House may, at its sole discretion, consider the grant of approval to have lapsed and may notify the prospective FCM Clearing Member accordingly that they will be required to provide further information following which the application will be submitted for re-approval.

FCM Clearing Members have the right to apply for approval to clear one or more markets cleared by the Clearing House, subject to meeting the requirements of the Clearing House in respect of each such market. Please note that FCM Clearing Member status does not provide membership of the company LCH Limited or any right to a shareholding therein, nor does it provide the right to any shareholding in LCH Group Holdings Limited or any entitlement or right to participate in any way in LCH SA or the clearing services it offers. LCH SA has its own arrangements and admission criteria for Clearing Member status – see the LCH SA sections of the LCH website for further details.

(b) FCM Clearing Member status: The terms and conditions binding on each FCM Clearing Member are set out in the FCM Rulebook (which includes these FCM Procedures), the FCM Clearing Membership Agreement, the FCM Default Management Process Agreement and the FCM Default Fund Agreement, each as amended from time to time. Two copies of the FCM Clearing Membership Agreement and the FCM Default Fund Agreement will be provided to the applicant who must sign both copies of each (but not date them) and return them to the Clearing House's Membership Department along with the application documentation.

The applicant must pay the stipulated application fee to the Clearing House. This fee must accompany the application for FCM Clearing Member status and is non-refundable.

If and when FCM Clearing Member status is granted, new FCM Clearing Members will receive a duly executed (and dated) copy of the FCM Clearing Membership Agreement and the FCM Default Fund Agreement together with the notification of acceptance and details of any condition(s) attached to FCM

Clearing Member status. If granted, FCM Clearing Member status is subject to the making of Contributions to the default fund(s) of the Clearing House related to FCM Clearing Services cleared by the relevant FCM Clearing Member, as determined by the Clearing House under the Default Rules.

- (c) **Conditions of Application**: An applicant for FCM Clearing Member status must accept that the Clearing House:
 - (i) is entitled to make enquiries of any nature about the applicant and any person connected or associated with the applicant;
 - (ii) is entitled to ask the applicant to supply additional information and take whatever steps are necessary to verify information;
 - (iii) is entitled to provide and/or disclose information to an Exchange, governmental department, regulatory organization, other authority, or to the Clearing House's insurers in connection with any form of insurance, or to any person pursuant to the provisions of the CEA, any rules promulgated thereunder, or in accordance with any other statutory or regulatory requirement, and in accordance with the terms of the FCM Clearing Membership Agreement;
 - (iv) may disclose to any other party the name, address, registered number and details of any Exchange or clearing memberships held or applied for; and
 - (v) will endeavor to process, consider and decide upon an application in a timely fashion, but owes no duty or obligation to the applicant to do so.
- (d) 12 U.S.C. § 5390(a)(6): Where an FCM Clearing Member is a financial company as such term is defined in 12 U.S.C. § 5381(a)(11) it shall comply with the requirements of 12 U.S.C. § 5390(a)(6) with respect to the execution of the FCM Clearing Membership Agreement and each FCM Transaction that is cleared pursuant to the FCM Clearing Membership Agreement and the FCM Rulebook (and the grant of any related security interest to the Clearing House) and it shall be deemed to have confirmed that it complies with 12 U.S.C. § 5390(a)(6) each time that an FCM Transaction is submitted for clearing and it delivers Collateral to the Clearing House. For the avoidance of doubt, individual transactions need not be specifically approved by the FCM Clearing Member's board of directors or any committee thereof so long as they are entered into pursuant to an FCM Clearing Membership Agreement which was approved by the FCM Clearing Member's board or the loan committee thereof.
- (e) An FCM Clearing Member that is a financial company as such term is defined in 12 U.S.C. § 5381(a)(11) is further required: (i) from the date of entry into the FCM Clearing Membership Agreement (and the grant of any related security interest to the Clearing House), to maintain the FCM Clearing Membership Agreement continuously as an official record of that FCM Clearing Member; and (B) from the date of submission of an FCM Transaction for clearing (and the grant of any related security interest to the

Clearing House), maintain each agreement evidencing each such FCM Transaction continuously as an official record of that FCM Clearing Member.

1.2 Criteria for FCM Clearing Member Status

1.2.1 General

The Clearing House imposes certain criteria and requirements in relation to FCM Clearing Member status. The relevant criteria have, in all cases, been established by the Clearing House so as to be non-discriminatory and objective and so as to ensure fair and open access by FCM Clearing Members (whether existing or potential) to the Clearing House.

The relevant criteria are without prejudice to the provisions of the FCM Clearing Membership Agreement and the FCM Default Fund Agreement which must be executed by the applicant, and must equally be met by FCM Clearing Members.

The Clearing House may, in its sole discretion, refuse an application for membership where it considers it appropriate to do so in accordance with its internal risk management policies and procedures as amended from time to time. Where the Clearing House refuses an application it will provide a written justification for such refusal. FCM Clearing Members are referred to the Clearing House's website at http://www.lch.com for further information about the relevant internal risk management policies and procedures.

FCM Clearing Member status may be granted on a conditional basis before any Clearing House requirements have been fully met or before related Exchange or FCM Approved Trade Source System membership requirements are met, but cannot be operational until such requirements are satisfied.

The applicant, any controller of the applicant, and those of its staff who exercise an executive or managerial role, must have a high standard of integrity and a level of knowledge, as determined by and acceptable to the Clearing House, of the nature, risks and obligations of trading in the markets and contracts they wish to clear.

The applicant must satisfy the minimum net capital requirements, as set out in the FCM Regulations or such greater amounts as may be required by the Clearing House.

The applicant must open a protected payments system ("PPS") bank account at one or more of the PPS banks, in accordance with the requirements of an FCM Clearing Member under Section 3 of these FCM Procedures and must execute all necessary documentation in relation to this. Please see the PPS section of the Clearing House website for further information.

FCM Clearing Members are required to have contingency payment arrangements in place to ensure that they can continue to meet their obligations in the event of failure of their nominated PPS bank(s). During the application process, the Clearing House will require the applicant to provide

evidence of these arrangements and will test these prior to the applicant becoming an FCM Clearing Member. The FCM Clearing Member will be required to provide evidence of their contingency payment arrangements on an ongoing basis at the Clearing House's request.

The applicant must maintain a back office:

- (A) remote from both the trading floor and/or trading desks;
- (B) with adequate systems (including but not limited to computer and communications systems) and records;
- (C) with an adequate number of administrative staff fully conversant with procedures for the management of business transacted in the markets and contracts cleared by the Clearing House and in which the FCM Clearing Member participates; and
- (D) with such equipment (including technology and connectivity) as may be stipulated by the Clearing House or by any relevant Exchange(s).

Applicants for FCM Clearing Member status and FCM Clearing Members must at all times respond promptly to enquiries or requests for information made by the Clearing House. Such enquiries may require applicant FCM Clearing Members to demonstrate compliance with the applicable FCM clearing membership criteria and/or Applicable Law.

FCM Clearing Members are required to promptly notify or pre-notify the Clearing House of any changes which may result in non-compliance with the Clearing Member status criteria as stated in these FCM Procedures.

Termination of FCM Clearing Member Status: In the event that an FCM Clearing Member wishes to retire from FCM Clearing Member status, it may do so by giving written notice to the Clearing House not less than three months ahead of the proposed termination date. By the close of business on the proposed termination date, the Retiring Member shall ensure that all FCM Contracts registered in the Retiring Member's name have been closed-out or transferred so as to ensure that there are no open FCM Contracts to which the Retiring Member is a party at the proposed termination date. Once all such FCM Contracts have been closed-out or transferred, such Retiring Member shall be entitled to request that the Clearing House releases and returns to it any collateral held by the Clearing House for such Retiring Member. For further information on the retirement process, FCM Clearing Members should contact the Clearing House's Membership Department.

If an FCM Clearing Member has not been active on any exchange or market for a continuous period of three months, they will be asked to confirm that they intend to utilize their FCM Clearing Member status and, failing a satisfactory response, they will be asked to retire from FCM Clearing Member status.

FCM Clearing Members are required to notify promptly or pre-notify the Clearing House of any changes which may result in non-compliance with the FCM Clearing Member status criteria as stated in the FCM Regulations and these FCM Procedures.

1.3 Termination of FCM Clearing Member Status

- 1.3.1 In the event that an FCM Clearing Member wishes to retire from FCM Clearing Member status, it may do so by giving written notice to the Clearing House not less than three months ahead of the proposed termination date. By the close of business on the proposed termination date, the Retiring Member shall ensure that all FCM Contracts registered in the Retiring Member's name have been closed-out or transferred so as to ensure that there are no open FCM Contracts to which the Retiring Member is a party at the proposed termination date. Once all such FCM Contracts have been closed-out or transferred, such Retiring Member shall be entitled to request that the Clearing House releases and returns to it any cover held by the Clearing House for the purpose of collateralizing the Retiring Member's obligations. For further information on the retirement process, FCM Clearing Members should contact the Membership Department.
- 1.3.2 If an FCM Clearing Member has not been active on any exchange or market for a continuous period of three months, they will be asked to confirm that they intend to utilize their FCM Clearing Member status and failing a satisfactory response, they will be asked to retire from FCM Clearing Member status.

1.4 Net Capital

1.4.1 Net Capital Requirements

FCM Clearing Members are required to maintain a minimum level of net capital as set out in the FCM Regulations.

1.4.2 Additional Net Capital Requirements

Additional resources will be required when, in the Clearing House's assessment, an FCM Clearing Member's Net Capital is not commensurate with its level of business.

The Clearing House shall, on a daily basis, compare the market risk associated with each FCM Clearing Member's level of business with their level of net capital as reported to the Clearing House in order to ascertain whether, in the Clearing House's opinion, such FCM Clearing Member is sufficiently capitalized to support the level of risk associated with the FCM Contracts to which they are counterparty. In determining whether an FCM Clearing Member is sufficiently capitalized, the Clearing House may also consider:

(a) the ratio of FCM Contracts entered into on behalf of an FCM Client compared to those entered for its own Proprietary Account;

(b) the FCM Clearing Member's aggregate exposure to other clearing providers and other entities; and

(c) the total amount of Margin and Collateral deposited with, transferred to or otherwise delivered to the Clearing House by the FCM Clearing Member.

In the event that the Clearing House considers that the FCM Clearing Member is not sufficiently capitalized to support the level of risk associated with its open FCM Contracts, the Clearing House may perform one or more of the following:

- (a) require that the relevant FCM Clearing Member furnish the Clearing House with additional collateral; or
- (b) prevent or limit the extent to which an FCM Clearing Member may register additional FCM Contracts; or
- (c) require that the FCM Clearing member provide the Clearing House with additional information relating to its exposure to other clearing providers or other entities.

1.5 Calculation Of Net Capital

The net capital of FCM Clearing Members is calculated by the Clearing House in accordance with CFTC Regulation 1.17.

1.6 **Reporting**

FCM Clearing Members shall provide the information detailed below.

- (a) All FCM Clearing Members must, within six months from the date on which their annual accounts are made up, provide the Clearing House with an English-language copy of their income statement (or profit and loss statement) and balance sheet, together with a statement that their auditors have reviewed and approved them, in accordance with Applicable Law in the relevant jurisdiction, drawn up in accordance with the requirements of CFTC Regulation 1.16 or otherwise in accordance with the requirements of the Clearing House. In addition, the Clearing House may at its discretion require the provision of financial accounts for the ultimate or immediate parent of the FCM Clearing Member.
- (b) All FCM Clearing Members must provide the Clearing House in a prompt and timely manner with:
 - (A) copies of all financial returns/reports made to its regulators, and upon request from the Clearing House, any other notifications made to the CFTC as required under the CFTC Regulations (including CFTC Regulation 1.12);
 - (B) those financial reports detailed in CFTC Regulation 1.10;

(C) any information concerning any financial or business development that the FCM Clearing Member reasonably considers may materially affect the FCM Clearing Member's ability to comply with the applicable membership criteria or Applicable Law or regulations;

- (D) copies of all reports that are required to be filed with the CFTC pursuant to parts 17 and 20 of the CFTC Regulations;
- (E) information and documents regarding the FCM Clearing Member's risk management policies and practices as requested by the Clearing House. Such information shall include, without limitation, information and documents relating to the liquidity of that FCM Clearing Member's financial resources and settlement procedures;
- (F) any other financial information that the Clearing House determines is necessary to assess whether membership criteria are being met on an ongoing basis; and
- (G) notice if the FCM Clearing Member becomes the subject of a bankruptcy petition, receivership proceeding, or the equivalent, or any other event to which it is required to notify the Clearing House under the FCM Clearing Membership Agreement or the FCM Rulebook.

In addition, and upon request from the Clearing House or the CFTC, each FCM Clearing Member shall promptly provide the information detailed in (v) above directly to the CFTC.

1.6.2 **Reduction in Net Capital**

All FCM Clearing Members must immediately notify the Clearing House of any significant reduction (usually 10 per cent. or more), from the figures shown in their last financial returns, in:

- (a) shareholders' funds; and
- (b) net capital.

1.7 Additional Requirements

1.7.1 Notification of Changes of Ownership

FCM Clearing Members are required to notify or pre-notify the Clearing House of changes in controlling holdings (defined as the exercise or control of 20 per cent. or more of the voting power of the firm). However, in cases of changes in ownership, and particularly where those potentially acquiring a dominant stake in an FCM Clearing Member are not known to the Clearing House, FCM Clearing Members are required to pre-notify the Clearing House of their plans. The proposed change of ownership may be subject to an

approval process involving the Risk Committee and Board of the Clearing House.

1.7.2 Each FCM Clearing Member shall maintain current written risk management policies and procedures which address the risks that the relevant FCM Clearing Member may pose to the Clearing House, including any policies and procedures that the Clearing House may reasonably request to be incorporated therein. Upon the request of the Clearing House, an FCM Clearing Member shall promptly provide the Clearing House with a copy of its current policies and procedures for review by the Clearing House.

1.7.3 Pursuant to, and in accordance with, FCM Regulation 14 (*Margin and Collateral*), where an FCM Clearing Member provides clearing services to an FCM Client which the FCM Clearing Member considers to have a heightened risk profile, then that FCM Clearing Member shall collect from that FCM Client additional FCM Client Funds with a value that is 10 percent above the amount that the Clearing House would normally require for such FCM Client.

FCM Clearing Members are not required to furnish the Clearing House with the additional margin described in this section. However, for the avoidance of doubt, FCM Clearing Members are required to furnish the Clearing House with the Required Margin for every FCM Client.

1.8 **Other Conditions**

The Clearing House may, at any time, impose additional conditions in relation to continued FCM Clearing Member status, and at any time vary or withdraw any such conditions, provided that any conditions which restrict, or may be considered to have the effect of restricting, access of an FCM Clearing Member to the Clearing House shall be imposed only in circumstances where, and to the extent that, their object is to control the exposure of the Clearing House to risk. FCM Clearing Members are referred to the Clearing House's website for further information about the relevant internal risk management policies and procedures of the Clearing House.

The relevant additional conditions imposed on an FCM Clearing Member may include, but are not limited to, a requirement to furnish additional cash or non-cash Collateral to the Clearing House, as determined by the Clearing House.

1.9 **Other Conditions**

1.9.1 Singaporean Clients

FCM Clearing Members are required to provide a copy of the 'Notice to Singapore Clearing Clients' to FCM Clients incorporated in or operating through a branch in Singapore. The 'Notice to Singapore Clearing Clients' is available here: http://www.lch.com/members-clients/members/fees-ltd/annual-account-structure-fees.

1.9.2 Restrictions on Japanese FCM Clients

(a) FCM Clearing Members shall not permit FCM Clients incorporated in or domiciled in Japan to participate in the Portfolio Margining Service.

(b) FCM Clearing Members shall not clear Yen-denominated FCM SwapClear Contracts on behalf of FCM Clients incorporated in or domiciled in Japan.

1.10 **Prescribed Terms**

Pursuant to FCM Regulation 7 the Clearing House may prescribe certain provisions that an FCM Clearing Member must include in its agreement with an FCM Client.

Where an FCM Clearing Member provides FCM Clearing Services to an FCM Client that is a registered investment company, as defined in the Investment Company Act of 1940, it shall include provisions in its agreement with that FCM Client to the following effect:

- (a) the FCM Clearing Member shall comply with Applicable Law relating to the segregation of FCM Client Funds, including Part 22 of the CFTC Regulations;
- (b) FCM Client Funds delivered by the FCM Client shall be held in accordance with the CEA and the CFTC Regulations, and the FCM Clearing Member shall obtain an acknowledgement, to the extent required by Parts 1.20 and 22 of the CFTC Regulations, that those FCM Client Funds are being held in accordance with the CEA and the CFTC Regulations;
- (c) the FCM Clearing Member will promptly furnish copies of or extracts from its records or such other information pertaining to the FCM Client's assets as the Securities Exchange Commission, through its employees or agents, may request;
- (d) any gains on FCM Contracts held on behalf of an FCM Client (other than de minimus amounts) may be maintained by the FCM Clearing Member only until the next Business Day following receipt; and
- (e) the FCM Client has the ability to withdraw its assets from the FCM Clearing Member as soon as reasonably practicable if the FCM Clearing Member's or the Clearing House's custody of FCM Client Funds no longer meets the requirements of Rule 17f-6 under the Investment Company Act of 1940.

2. PRODUCT-SPECIFIC PROCEDURES

Section 2 of these FCM Procedures contains certain requirements and procedures that are specific to individual Products cleared by the Clearing House. The clearing of FCM SwapClear Contracts is discussed in Section 2.1, the clearing of FCM ForexClear Contracts is discussed in Section 2.2 and the clearing of FCM Listed Interest Rates Contracts is discussed in Section 2.3.

The use of words such as "margin", "margin account", "margin call" and "margin run", which are used to reflect terminology commonly used by the Clearing House, shall not be deemed to affect the intent of the Clearing House, any FCM Clearing Member or any FCM Client as to the legal characterization of transfers of Settlement Payments, Variation Settlement, Price Alignment Amount, daily settlement amounts or other similar amounts.

2.1 **SWAPCLEAR**

2.1.1 The Clearing Process

The FCM SwapClear Service is an interface that processes and stores all FCM SwapClear Transactions received from an FCM Approved Trade Source System.

(a) FCM SwapClear Service Functions

The following functions are performed within the FCM SwapClear Service:

- (A) processing and settlement of coupon payments;
- (B) processing and settlement of consideration (fee) payments;
- (C) calculation of initial margin and Variation Settlement requirements;
- (D) calculation of SwapClear Tolerance Limits;
- (E) calculation of Price Alignment Amount;
- (F) adjustment of cash payments to conform with opening days and the SwapClear calendars;
- (G) allocation and designation of trades to a position-keeping account; and
- (H) reporting of registered trades.

FCM SwapClear Transactions presented via an FCM Approved Trade Source System (i.e. new trades presented for intra-day registration or existing trades presented for overnight registration – see Section 2.1.3(e)) will, subject to meeting all requirements prescribed by the Clearing House, be processed and stored within the FCM SwapClear

clearing system. Information regarding FCM SwapClear Contracts and margin reporting will be disseminated via the Clearing House's FCM Clearing Member Reporting (see Section 2.1.1(c)).

(b) Clearing House System Requirements

An FCM Clearing Member must, in order to present FCM SwapClear Transactions to the Clearing House, be a user of an FCM Approved Trade Source System.

(c) SwapClear FCM Clearing Member Reporting

There are three methods of notification to FCM Clearing Members of FCM SwapClear Contract registrations and other information:

- (A) Report 001;
- (B) via the FCM Approved Trade Source System; and
- (C) via ClearLink API.

An end-user report generation and analytical capability is provided by the Clearing House to FCM Clearing Members. All FCM SwapClear reports will be disseminated via the Clearing House's secure password access FCM Clearing Member-only website. These reports are the definitive record as to registration by the Clearing House.

The Clearing House is not liable for any corruption or alteration of messages or loss of data which may take place within any FCM Approved Trade Source System.

FCM Clearing Members will be able to produce reports either to print locally or to download in machine-readable data-file format. Queries about the FCM Clearing Member-only website should be directed to the Clearing House's Service Desk at +44 (0)20 7426 7200.

The terminology used in a report in respect of Margin, Variation Settlement, daily settlement amounts or Price Alignment Amount may reflect terminology commonly used in the industry. Such terminology shall not affect the interpretation or construction of any provisions or terms of the FCM Regulations or FCM Procedures.

(d) Clearing House Reporting

The Clearing House (acting, where applicable, through the entity to which it has elected to delegate the relevant reporting obligations) shall, to the extent required by (and in line with the requirements of) Applicable Law (including Parts 43 and 45 of the CFTC Regulations, and applicable requirements under English law), report to one or more data or trade repositories (including swap data repositories) or similar body the details of all FCM SwapClear Contracts, including any modifications or terminations without duplication and no later than the

working day following the conclusion, modification or termination of such contract, in each case as required by Applicable Law. In order to avoid any such duplication of reports, each FCM Clearing Member acknowledges and agrees that it will not report the details referred to in this paragraph to the bodies referred to in this paragraph, unless otherwise agreed with the Clearing House.

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

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

In accordance with CFTC Part 45 requirements (where the FCM has are porting obligation), FCMs 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.

(e) Inflation Swap Data

Pursuant to, and subject to the terms and conditions of, Regulation 60A of the UK General Regulations, certain SwapClear Clearing Members provide Market Data (as such term is defined in the UK General Regulations) to the Clearing House and the Clearing House is expressly authorized to use such Market Data to create Inflation Derived Data. Pursuant to, and subject to the terms and conditions of, Regulation 60A of the UK General Regulations, the Clearing House may disclose or furnish Inflation Derived Data to third parties on terms to be determined by the Clearing House in its sole discretion. In the event that the Clearing House provides Inflation Derived Data to an FCM Clearing Member, upon such provision, it grants such FCM Clearing Member, and such FCM Clearing Member agrees to be bound by the terms of, a limited, worldwide, non-exclusive, non-transferable, non-sublicensable, revocable license (the "License") permitting the FCM Clearing Member to use the Inflation Derived Data solely for the purposes of such FCM Clearing Members' internal settlement and risk management activities in relation to Inflation SwapClear Contracts referencing the relevant Index and may only share the Inflation Derived Data with:

(A) an FCM Client for whom the FCM Clearing Member conducts FCM SwapClear Clearing Services in respect of Inflation FCM SwapClear Contracts referencing the relevant Index and/or their third party service providers, provided that the FCM Clearing Member shall procure that such FCM Client and/or its service providers (as applicable) shall only use the Inflation Derived Data for the purposes of the FCM Client's internal risk management and settlement activities in respect of Inflation FCM SwapClear Contracts which the FCM Clearing Member clears or intends to clear on the FCM Client's behalf in respect of the relevant Index and may not further disclose the Inflation Derived Data for any other purpose;

- (B) third parties providing the FCM Clearing Member with risk management or settlement services, provided that the FCM Clearing Member shall procure that such third parties shall only use the Inflation Derived Data for the purposes of the FCM Clearing Member's internal risk management and settlement activities in relation to FCM Inflation SwapClear Contracts that reference the relevant Index and that the third party may not further disclose the Inflation Derived Data to any other person or use the Inflation Derived Data for any other purpose; and
- (C) competent regulatory authorities when required to do so by Applicable Law or regulation;

2.1.2 Operating Times And Calendars

(a) Opening Days

The Clearing House will publish a circular detailing the days on which the FCM SwapClear clearing system will be open.

(b) Opening Hours

Unless notified otherwise, the FCM SwapClear clearing system will be operational during the following hours:

06:00 London time to 19:00 hours New York time (a "Business Day")¹.

The Clearing House will notify FCM Clearing Members in the event that the FCM SwapClear clearing system is scheduled for closure for operational or other reasons (including compression runs).

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¹ The FCM SwapClear clearing system may, in the Clearing House's absolute discretion, be operational beginning 04:00 London Time.

(c) FCM SwapClear Clearing System Calendars

The FCM SwapClear clearing system uses the SwapsMonitor Financial Calendar for its processing. This will require all FCM Clearing Members to be licensees of the SwapsMonitor Financial Calendar. The calendars, as applicable to the FCM SwapClear clearing system, will be available online for inspection and for file download from FCM Clearing Member Reporting (see Section 2.1.1(c)).

With respect to FCM SwapClear Contracts where the Currency is Israeli Shekel (ILS), the Clearing House will not recognize Sunday as a Business Day.

2.1.3 Registration

(a) Submission for Registration

Prior to and as a precondition to the registration of an eligible FCM SwapClear Transaction, the relevant FCM Clearing Member must provide notice to and receive approval from the Clearing House (or have previously provided such notice and received such approval), in such form as determined by the Clearing House in its sole discretion, with respect to each type of FCM SwapClear Transaction to be presented for registration (be it with respect to tenor, currency or other eligibility criteria). Notwithstanding anything herein to the contrary, if (i) notification pursuant to this paragraph is not received by the Clearing House, (ii) the relevant FCM Clearing Member does not receive approval from the Clearing House pursuant to this paragraph, or (iii) approval granted pursuant to this paragraph has been rescinded by the Clearing House, the Clearing House may, in its sole discretion, reject the registration of any relevant FCM SwapClear Transaction.

The Clearing House receives details of a new eligible FCM SwapClear Transaction using agreed format messages via an FCM Approved Trade Source System. The FCM Approved Trade Source System will send these trades to the Clearing House once they have been bilaterally agreed by two Executing Parties, or otherwise executed by or on behalf of two Executing Parties on an FCM Trading Venue, and will confirm which FCM Clearing Member(s) has been elected to register the FCM SwapClear Transaction.

(b) *Conditions to Registration*

In respect of an FCM SwapClear Transaction that is not an FCM Trading Venue Transaction, following receipt of information from the FCM Approved Trade Source System, the Clearing House will notify the relevant FCM Clearing Member, via member reports, the ClearLink API or otherwise, that a third party Executing Party has elected it to register the FCM SwapClear Transaction with the Clearing House (the "FCM Notification"). Where an FCM Clearing Member has been elected to clear both FCM SwapClear Contracts resulting

from the registration of an FCM SwapClear Transaction in the capacities described in this paragraph, such FCM Clearing Member will receive two separate FCM Notifications from the Clearing House in relation to such FCM SwapClear Transaction. All FCM Notifications shall be provided within the required timeframe under all Applicable Law. In all other cases, no FCM Notifications will be provided to any FCM Clearing Member.

Following receipt of an FCM Notification, an FCM Clearing Member may choose to grant or refuse consent to register the FCM SwapClear Transaction.

It is a condition for registration of such FCM SwapClear Transaction that an FCM Clearing Member provides a separate consent (each, an "FCM Acceptance") in respect of each FCM Notification received by it in relation to the registration of such FCM SwapClear Transaction. The Clearing House has an automated system which it operates on each business day for the purposes of rejecting FCM SwapClear Transactions which have been presented for clearing but in respect of which any necessary FCM Acceptance has not been notified to the Clearing House prior to the LCH Cut-off Time. The "LCH Cut-off **Time**" in respect of an FCM SwapClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FCM Clearing Member has not notified the Clearing House of an FCM Acceptance prior to the LCH Cut-Off Time, it will be deemed to have rejected the relevant FCM SwapClear Transaction. Any FCM Acceptance provided prior to the LCH Cut-Off Time shall be irrevocable and any FCM Acceptance provided following the LCH Cut-Off Time shall be invalid.

In circumstances where the registration of an FCM SwapClear Transaction is conditional upon one or more FCM Acceptances(s) being notified by the applicable FCM Clearing Member(s), the relevant FCM SwapClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FCM Clearing Member at the time when it notifies the Clearing House of its FCM Acceptance. In all other circumstances, an FCM SwapClear Transaction shall be "submitted" to the Clearing House by the applicable FCM Clearing Member upon being presented to the Clearing House for clearing by or on behalf of such FCM Clearing Member.

In accordance with Section 2.1.3(e) of these FCM Procedures, it is a precondition for registration of an FCM SwapClear Contract resulting from an FCM SwapClear Trading Venue Transaction other than a Sub-Block Trading Venue Transaction that the applicable FCM Clearing Member has complied with all requirements to furnish sufficient Margin (taking into account available SwapClear Tolerance) in respect of such FCM SwapClear Contract, any amounts due in respect of such FCM SwapClear Contract and any other amounts required by the Clearing House to register the FCM SwapClear Contract (collectively

"Required Registration Amounts") to the Clearing House as of the time of its "submission" or "deemed submission" of the FCM SwapClear Transaction to which the FCM SwapClear Contract relates.

In exceptional circumstances, where an FCM Clearing Member experiences technical issues such that it is unable to accept or reject an FCM Notification, it may contact the Clearing House via email to request that an FCM SwapClear Transaction to which an FCM Notification relates be accepted or rejected on its behalf. In such circumstances, and unless the Clearing House notifies the FCM Clearing Member otherwise, the Clearing House will manually accept or reject the FCM SwapClear Transaction on behalf of the requesting FCM Clearing Member and will confirm registration or rejection of the FCM SwapClear Transaction via email. In the event that an FCM Clearing Member requests the manual acceptance or rejection of an FCM SwapClear Transaction it shall ensure that such acceptance is requested by appropriately authorized personnel. The Clearing House shall have no liability in the event that an FCM Clearing Member suffers a loss through the unauthorised manual acceptance or rejection of an FCM SwapClear Transaction.

Where, in the context of a Default, the Clearing House executes a hedging FCM SwapClear Transaction, which is:

- (A) not an FCM Trading Venue Transaction, with a Hedging Rates Service Clearing Member for the purpose of Risk Neutralisation, and such FCM SwapClear Transaction is presented for clearing to the Clearing House, the Defaulting Rates Service Clearing Member shall be deemed to have received an FCM Notification, in respect of such FCM SwapClear Transaction, and to have notified an FCM Acceptance, in respect of such FCM SwapClear Transaction, to the Clearing House before the relevant LCH Cut-off Time; and
- (B) an FCM Trading Venue Transaction, with a Hedging Rates Service Clearing Member for the purpose of Risk Neutralisation, and such FCM SwapClear Transaction is presented for clearing to the Clearing House, the FCM Trading Venue on which such FCM SwapClear Transaction was executed shall be deemed to be an FCM Eligible Trading Venue, in respect of the Defaulting Rates Service Clearing Member, at the time of execution of such FCM SwapClear Transaction and such FCM SwapClear Transaction shall be deemed to be an FCM Eligible Trading Venue Transaction, in respect of the Defaulting Rates Service Clearing Member.

Non-Standard Fixing Offsets for SwapClear Transactions

FCM Clearing Members may submit for registration FCM SwapClear Transactions that are OIS transactions with non-standard fixing offsets of [-1 to -10] Business Days, where the fixing for any Business Day 'i'

in an interest period is equal to the fixing in respect of the Business Day falling [-1 to -10] Business Days prior to such day 'i'. For the avoidance of doubt, FCM SwapClear Contracts registered as OIS transactions with non-standard fixing offsets will retain the underlying set of compounding coupon sub-periods and their respective weights.

(c) Trade Registration Facilitation: SwapClear Tolerance and Standing Order Amount

In order to facilitate the registration of new FCM SwapClear Transactions by FCM Clearing Members, the Clearing House may offer SwapClear Tolerance on a daily basis, as further described below.

The Clearing House will set SwapClear Tolerance Limits (as defined below) based on a number of factors, including an FCM Clearing Member's credit rating, risk profile and an analysis of the incremental risk registered by an FCM Clearing Member during an historic lookback period. However, the Clearing House sets SwapClear Tolerance Limits in its sole discretion, and may modify its methodologies at any time or may vary it across different FCM Clearing Members.

SwapClear Tolerance:

If an FCM Clearing Member has not furnished sufficient Margin to enable the registration of an FCM SwapClear Contract, then the Clearing House may provide such FCM Clearing Member with temporary "tolerance" in the form of Initial Margin forbearance ("SwapClear Tolerance") to enable such registration. An FCM Clearing Member may utilize SwapClear Tolerance in between margin runs on a one-to-one basis to the value of the Initial Margin that would have been required to cover that FCM Clearing Member's Initial Margin requirements for newly registered FCM SwapClear Contracts registered in between margin runs. For the avoidance of doubt, SwapClear Tolerance is provided in the form of temporary Initial Margin forbearance and an FCM Clearing Member's utilization of SwapClear Tolerance does not give rise to any payment or transfer of Collateral by the Clearing House or result in any use of Default Fund resources (except following a default).

The Clearing House will determine, in its sole discretion, the maximum value of the SwapClear Tolerance (which may be zero) (the "SwapClear Tolerance Limit") which it will make available to an FCM Clearing Member at any particular time. SwapClear Tolerance is made available by the Clearing House to an FCM Clearing Member at the Clearing House's sole discretion. The Clearing House may adjust the value of an FCM Clearing Member's SwapClear Tolerance Limit, and/or require an FCM Clearing Member to provide Initial Margin in respect of any utilized SwapClear Tolerance, at any time and without prior notice to the relevant FCM Clearing Member. The Clearing House will provide each FCM Clearing Member with information regarding its SwapClear Tolerance Limit and will, as promptly as

reasonably practicable, notify it following any adjustment to the amount of its SwapClear Tolerance Limit. Subject to the above, an FCM Clearing Member will typically be required to furnish Initial Margin in respect of any SwapClear Tolerance utilized by it in the margin run immediately following the time of the relevant registration of an FCM SwapClear Contract where SwapClear Tolerance was utilized.

Any failure of an FCM Clearing Member to satisfy an Initial Margin call relating to utilized SwapClear Tolerance may give rise to a Default in respect of such FCM Clearing Member, just as any failure by an FCM Clearing Member to satisfy any other type of Initial Margin call may give rise to a Default.

Standing Order Amount:

To facilitate the registration of SwapClear Transactions, an FCM Clearing Member may elect to maintain a minimum level of Available FCM Buffer with the Clearing House at the start of a Business Day (such amount, the "Standing Order Amount"). The Clearing House ay approve such election in its sole discretion. Upon the effectiveness of such election, if, at the end of a Business Day, the amount of a given FCM Clearing Member's Available FCM Buffer is less than the Standing Order Amount, the Clearing House will call the FCM Clearing Member for an amount of cash Collateral equal to the difference. Any amount so called and received by the Clearing House pursuant to this section shall constitute FCM Buffer of the given FCM Clearing Member.

The form and manner of an election by an FCM Clearing Member pursuant to this section shall be determined by the Clearing House in its sole discretion (a "Standing Order Request"). In the event an FCM Clearing Member wishes to rescind or modify its Standing Order Request, it must contact the Clearing House's Client Services Department (ratesclientservices@lch.com). The Clearing House may reduce the Standing Order Amount or terminate a Standing Order Request in its sole discretion

Through submitting a Standing Order Request, an FCM Clearing Member warrants that the individual making the request on behalf of the FCM Clearing Member is appropriately authorized to do so.

- (d) SwapClear FCM Approved Trade Source Systems and FCM Trading Venues
 - (i) FCM Approved Trade Source Systems

Application for FCM 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 FCM Approved Trade Source Systems currently approved by the Clearing House is available on the

Clearing House's website. Where the Clearing House approves additional FCM Approved Trade Source Systems, it will notify FCM Clearing Members via member circular.

FCM SwapClear Transactions presented through an FCM Approved Trade Source System must be in an acceptable message format, as prescribed by the Clearing House.

Notwithstanding the designation by the Clearing House of any system as an FCM 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 FCM Approved Trade Source System or the timeliness or otherwise of the delivery of any FCM SwapClear Transaction details by that FCM Approved Trade Source System to the Clearing House. Such matters form part of the relationship between the FCM Clearing Members and that FCM Approved Trade Source System.

The Clearing House will process any FCM SwapClear Transaction reported to it by an FCM Approved Trade Source System on an "as is" basis and, subject to the FCM Rulebook, will register any such FCM SwapClear Transaction on the basis of the data provided to it by the FCM Approved Trade Source System and approved by the relevant FCM Clearing Member. The Clearing House has no obligation to verify that the details received properly reflect the trade entered into by the relevant Executing Parties.

The Clearing House accepts no liability for any error within or corruption of any data sent by an FCM Approved Trade Source System to the Clearing House or to an FCM Clearing Member 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 FCM SwapClear Contract on the basis of incorrect or corrupted data sent to it by an FCM Approved Trade Source System and accepted by an FCM Clearing Member, the FCM Clearing Member concerned shall be bound by the terms of such FCM SwapClear Contract. The Clearing House shall use its reasonable efforts to assist the relevant FCM Clearing Members in re-registering the trade on the correct basis but the Clearing House shall not be liable to the FCM Clearing Member or anyone else with regard to the registration (or lack of registration or re-registration) of any such FCM SwapClear Contract.

FCM Clearing Members shall ensure that FCM Acceptances are provided by appropriately authorized personnel. Apart from the foregoing acceptance, the Clearing House is not able to, and will not, verify the authorization of the source of any details of any transaction reported to it for registration by any FCM Approved Trade Source System. The Clearing House shall have no liability in the event that any FCM Clearing Member suffers any loss through the unauthorized FCM Acceptance.

(ii) FCM Trading Venues

While the Clearing House receives details of an FCM SwapClear Transaction via an FCM Approved Trade Source System pursuant to Section 2.1.3(a) of these FCM Procedures, such FCM Approved Trade Source System may in providing such details to the Clearing House rely upon similar details delivered to it by an FCM Trading Venue (where such FCM SwapClear Transaction is executed on such FCM Trading Venue). Additionally, the Clearing House may rely on details relating to an FCM SwapClear Transaction obtained from an FCM Trading Venue for verification purposes or in order to generate reports or to exercise its rights or discretion under Regulation 45. In this regard, the Clearing House may direct the FCM Trading Venues to use prescribed format messages or classifications.

Notwithstanding the approval by the Clearing House of any FCM Trading Venues, 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 FCM Trading Venue or the timeliness or otherwise of the delivery of any FCM SwapClear Transaction details by that FCM Trading Venue. Such matters form part of the relationship between the FCM Clearing Members and that FCM Trading Venue.

The Clearing House will process any FCM SwapClear Transaction reported to it by an FCM Trading Venue on an "as is" basis, and subject to the FCM Rulebook, may register any FCM SwapClear Contract arising from such FCM SwapClear Transaction on the basis of the data provided to it by the FCM Approved Trade Source System and the relevant FCM Trading Venue. The Clearing House has no obligation to verify that the details received properly reflect the trade entered into by the relevant Executing Parties or that the FCM Trading Venue is correctly applying the format messages or classifications that the Clearing House has prescribed.

The Clearing House accepts no liability for any error within or corruption of any data sent by an FCM Trading Venue to the Clearing House 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 FCM SwapClear Contract on the basis of incorrect or corrupted data recorded by it or sent to it by an FCM Trading Venue, the FCM Clearing Member concerned shall be bound by the terms of such FCM SwapClear Contract. The Clearing House shall use its reasonable endeavors to assist the relevant FCM Clearing Members in reregistering the trade on the correct basis but the Clearing House shall not be liable to the FCM Clearing Member or anyone else with regard to the registration (or lack of registration or re-registration) of any such FCM SwapClear Contract.

Open Access

- 21 - <u>March June</u> 2021

The Clearing House provides access to FCM Approved Trade Source Systems and FCM Trading Venues on an open and non-discriminatory basis.

(e) Registration of New Trades and Backloaded Trades

(A) New Trades:

The following section does not apply to Backloaded Trades, which are dealt with in Section 2.1.3(e)(B) below.

As a precondition of registering an FCM SwapClear Contract resulting from an FCM SwapClear Transaction other than a Sub-Block Trading Venue Transaction, the Clearing House will require the FCM Clearing Member in whose name such FCM SwapClear Contract is to be registered to furnish to the Clearing House sufficient Margin and other Required Registration Amounts in respect of such FCM Contract as of the time of its "submission" or "deemed submission" of such FCM SwapClear Transaction. In determining whether sufficient Margin for registration is available, the Clearing House will take into account any Available FCM Buffer and SwapClear Tolerance. Available FCM Buffer will always be applied prior to taking into account any available SwapClear Tolerance. In respect of an FCM SwapClear Contract resulting from an FCM SwapClear Transaction that is a Sub-Block Trading Venue Transaction, the FCM Clearing Member in whose name such FCM SwapClear Contract is registered shall furnish the Clearing House with sufficient Margin and other Required Registration Amounts in respect of such FCM SwapClear Contract at such time after the registration of such FCM SwapClear Contract as the Clearing House shall require.

Notwithstanding the foregoing: (A) if the Clearing House registers an FCM SwapClear Contract resulting from an FCM SwapClear Transaction that is not a Sub-Block Trading Venue Transaction where one or both of the relevant FCM Clearing Members has not furnished sufficient Margin or other Required Registration Amounts prior to registration, the FCM Clearing Members shall be bound by the terms of the FCM SwapClear Contract relating thereto arising under FCM Regulation 45 and any other applicable provision of the FCM Rulebook; and (B) if the Clearing House rejects an FCM SwapClear Transaction that is a Sub-Block Trading Venue Transaction for insufficient Margin or failure to furnish other Required Registration Amounts, the Clearing House shall not be liable to any FCM Clearing Member or anyone else with regard to the registration (or lack of registration or re-registration) of any such FCM SwapClear Transaction.

Upon an FCM SwapClear Transaction being presented to the Clearing House for registration, the Clearing House will determine whether to accept or reject the FCM SwapClear Transaction within the required timeframe under all Applicable Law.

Where the Clearing House determines to accept the FCM SwapClear Transaction, registration shall occur immediately and the FCM SwapClear Transaction shall be automatically replaced with (as applicable) (i) two separate FCM SwapClear Contracts, one between the relevant FCM Clearing Member and the Clearing House and the other between the same or another FCM Clearing Member and the Clearing House, or (ii) one FCM SwapClear Contract between the relevant FCM Clearing Member and the Clearing House and one SwapClear Contract between the relevant SwapClear Clearing Member and the Clearing House.

The SwapClear clearing system will respond, after processing, with a message confirming the registration. The registration notification message will be sent using the SwapClear Clearing Member reporting system and/or the FCM Clearing Member reporting system (including by way of the originating FCM Approved Trade Source System). The definitive report of a registered FCM SwapClear Contract will be shown within the FCM Clearing Member reporting system on the FCM Clearing Member reporting account.

(B) Backloaded Trades:

An FCM SwapClear Transaction that has a Trade Date of greater than ten calendar days prior to the date of presentation of such FCM SwapClear Transaction to the Clearing House for registration is considered a backloaded trade by the Clearing House (a "Backloaded Trade"). Due to the nature of Backloaded Trades, FCM Clearing Members should note that a relatively large amount of Required Registration Amounts (including Margin) are required in order to register such trades. The Clearing House provides the facility for FCM Clearing Members to load such eligible existing FCM SwapClear Transactions, through an FCM Approved Trade Source System. Where the Clearing House approves additional FCM Approved Trade Source Systems for these purposes, it will notify FCM Clearing Members via member circular. Backloading requires bilateral agreement between the relevant Executing Parties and acceptance by the FCM Clearing Member(s) and the SwapClear Clearing Member, if any, of the full particulars required by the Clearing House for each such FCM SwapClear Transaction.

At least once every Business Day, the Clearing House will carry out a process for the registration of Backloaded Trades (each, a "Backload Registration Cycle") which have been presented for clearing or with respect to which the Clearing House has received the one or more FCM Acceptances, if any. Following each Backload Registration Cycle, the Clearing House will calculate the increase in Required Margin as well as any other Required Registration Amounts required to be furnished to required to register the Backloaded Trade(s) and will notify each relevant FCM Clearing Member (the "Backload Call"). The Backload Call will be for the entire amount of Collateral calculated by the increase in required Margin and any other Required

Registration Amounts required in connection with the Backloaded Trades, and the Backload Call cannot be satisfied by and will not take into account SwapClear Tolerance (i.e. SwapClear Tolerance is not available for this purpose) or any available FCM Buffer (other than that which has been expressly allocated for that purpose, as described in the paragraph below). In connection with a Backload Call, following the time that an FCM Clearing Member is required to furnish the Clearing House with the Margin and other Required Registration Amounts associated with such Backload Call (the "Backload Call Deadline"), the Clearing House will issue such FCM Clearing Member with a subsequent margin call to furnish Margin and any other Required Registration Amounts in respect of any SwapClear Tolerance utilisation as of the time of the Backload Call Deadline (if any).

Where an individual FCM Clearing Member determines that the Backloaded Trade(s) that it is presented for registration will lead to an aggregate change in the net present value of its portfolio of FCM SwapClear Contracts in excess of a threshold amount (the "Individual Backload Value Threshold") as published by the Clearing House from time to time, it shall notify the Clearing House before the end of the Business Day preceding the Backload Registration Cycle. In the event that the Clearing House does not receive such notification and the change in net present value of the FCM Clearing Member's portfolio of FCM SwapClear Contracts is in excess of the Individual Backload Value Threshold the Clearing House may, in its sole discretion, exclude that FCM Clearing Member from the Backload Registration Cycle or postpone or cancel the entire Backload Registration Cycle.

Where an FCM Clearing Member notifies the Clearing House of a change in net present value in excess of the Individual Backload Value Threshold, the Clearing House shall inform the FCM Clearing Member whether it will be required to pre-fund the Backload Call and, if so, how it should be delivered such that it will be made available for a Backload Registration Cycle.

In the event that the aggregate Backload Call required from all FCM Clearing Members participating in a Backload Registration Cycle is in excess of a pre-determined threshold amount (the "**Aggregate Backload Threshold**") as published by the Clearing House from time to time, the Clearing House may postpone or cancel the relevant Backload Registration Cycle.

Where the Clearing House postpones or cancels a Backload Registration Cycle it shall notify those FCM Clearing Members that were intending to participate in the Backload Registration Cycle.

Backloaded Trades received by the Clearing House in advance of a Backload Registration Cycle will be 'parked' until the next Backload Registration Cycle (whether that Backload Registration Cycle is on the same Business Day or the following Business Day).

In order for the registration of the Backloaded Trades included in a Backload Registration Cycle to complete, Collateral and any other Required Registration Amounts from each FCM Clearing Member (and each SwapClear Clearing Member, if applicable) which is party to a Backloaded Trade within that Backload Registration Cycle must be furnished as required to the Clearing House in advance.

A Backloaded Trade which has been presented for clearing (or with respect to which the Clearing House has received the one or more FCM Acceptances, if any) shall be deemed to have been submitted by the FCM Clearing Member(s) or the FCM Clearing Member and the SwapClear Clearing Member (as the case may be) for registration by the Clearing House at such time that the Clearing House determines that sufficient Collateral and other Required Registration Amounts have been furnished to register that Backloaded Trade.

For any FCM SwapClear Transaction which is a Backloaded Trade, where one leg is to be registered as a Non-FCM SwapClear Contract, the UK General Regulations and UK General Procedures will apply with respect to such registration of the Non-FCM SwapClear Contract.

The Clearing House shall publish the following via member circular:

- (A) times of Backload Registration Cycles;
- (B) the Individual Backload Value Threshold; and
- (C) the Aggregate Backload Threshold.
- (f) Notification

In respect of an FCM SwapClear Transaction which is:

- (A) an FCM Trading Venue Transaction, the Clearing House will notify the FCM Clearing Members, the FCM Trading Venue and (if the FCM Approved Trade Source System is different to the FCM Trading Venue) the originating FCM Approved Trade Source System of registration or rejection of the FCM SwapClear Transaction (as applicable); and
- (B) not an FCM Trading Venue Transaction, the Clearing House will notify the FCM Clearing Members (via the originating FCM Approved Trade Source System or the ClearLink API) of registration or rejection of the FCM SwapClear Transaction (as applicable),

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

(g) Rejected Trades

Trades presented for registration that do not meet the FCM SwapClear Product Eligibility Criteria or any other requirements for registration

under the FCM Rulebook, including a trade (i) presented by or on behalf of an FCM Clearing Member in respect of a third party Executing Party where such trade was executed on an FCM Trading Venue that was not at the time of execution of such trade an FCM Eligible Trading Venue in respect of such FCM Clearing Member, (ii) presented by or on behalf of an FCM Clearing Member 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 an FCM Trading Venue, (iii) which contains invalid or incomplete message data, or (iv) that is not a Sub-Block Trading Venue Transaction and with respect to which the Clearing House has not been furnished with sufficient Collateral (taking into account SwapClear Tolerance, if any) and other Required Registration Amounts will, in each case, be rejected.

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

(h) Package Transactions

In certain circumstances an FCM Clearing Member may, via an FCM Approved Trade Source System, present to the Clearing House, in a single submission, a group of two or more FCM SwapClear Transactions for simultaneous registration (such group of FCM SwapClear Transactions, 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 FCM SwapClear Transaction within the Package Transaction will be rejected.

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

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

In respect of a Package Transaction presented in an FCM Clearing Member's name, such FCM Clearing Member's requirement to furnish Margin and other Required Registration Amounts will be assessed based on the net Margin call for all of the constituent FCM SwapClear Transactions of such Package Transaction. Where one or more of the constituent FCM SwapClear Transactions in a Package Transaction is not a Sub-Block Trading Venue Transaction, the relevant FCM Clearing Member is required to provide the Clearing House with sufficient Collateral prior to registration of the entire Package Transaction as a condition thereto (taking into account, with respect to Collateral and/or SwapClear Tolerance, if any).

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

(i) Standard Coupon Inflation Swap FCM Contracts

FCM SwapClear Transactions that are standard coupon inflation swap contracts and presented to the Clearing House for registration must be presented with the International Securities Identification Number for the Related Bond (as defined in the ISDA 2008 Inflation Definitions) (the "Bond ISIN"). The Bond ISIN associated with an FCM SwapClear Transaction shall only be used for registration of the resulting FCM SwapClear Contract, and shall not be used for any other purposes, including in relation to any provisions under the ISDA 2008 Inflation Definitions.

For the avoidance of doubt, the Clearing House shall reject any FCM SwapClear Transaction presented for registration that contains an inflation floor (embedded or otherwise).

2.1.4 Allocation Notices

In respect of an Allocation Notice, the Clearing House will notify the relevant Pre-Allocation FCM Clearing Member and Post-Allocation FCM Clearing Member via member reports, the ClearLink API or otherwise, that an Allocation Notice has been submitted to allocate some or all of notional value of an Unallocated FCM SwapClear

Contract from the FCM SwapClear Suspension Sub-Account of that Pre-Allocation FCM Clearing Member to the Client Segregated Sub-Account or Proprietary Account of the Post Allocation FCM Clearing Member.

Following receipt of this notification, a Pre-Allocation FCM Clearing Member or Post-Allocation FCM Clearing Member may choose to accept or refuse to register the Allocation Notice as if such Allocation Notice were a new FCM SwapClear Transaction, as described above.

2.1.5 **Position Accounts**

(a) FCM Accounts

For identification purposes, each FCM Clearing Member is assigned a unique three-character mnemonic with respect to its accounts relating to FCM SwapClear Contracts. An FCM Clearing Member's position and financial information are further identified by position-keeping accounts corresponding to a single character code: C for client business and H for house business.

(b) Position-Keeping Accounts

FCM Clearing Member Accounts

The account types are: H for house business (Proprietary Account); and C for segregated client business (an FCM Omnibus SwapClear Client Account with LCH). An FCM Clearing Member's FCM SwapClear Contract positions are also recorded within the FCM SwapClear clearing system in SwapClear accounts.

All registered FCM SwapClear Contracts will be identifiable to FCM Clearing Members and FCM Clients, as applicable, via SwapClear FCM Clearing Member Reporting (see Section 2.1.1(c)). All registered FCM SwapClear Contracts will be maintained only in SwapClear accounts (identified as such by a unique three letter mnemonic). Each FCM SwapClear Contract will also be assigned a unique trade identifier by the Clearing House. The SwapClear FCM Clearing Member Reporting functionality also allows each FCM Clearing Member and FCM Client to identify all FCM SwapClear Contracts registered in its name.

At the request of an FCM Clearing Member or FCM Client, as applicable, the Clearing House may permit the FCM Clearing Member or FCM Client, as applicable and/or its respective agent or designee (that has previously been approved by the Clearing House for such purpose) to assign or amend a trade identifier to an FCM SwapClear Contract in its accounts, provided that no such assignment or amendment shall in any way affect the Clearing House trade identifiers in respect of each such FCM SwapClear Contract. By making such request, such FCM Clearing Member, either on its own behalf or on

behalf of an FCM Client acknowledges that the Clearing House shall have no liability for any direct or indirect consequence of the use or assignment of such additional trade identifiers.

Any request for the Clearing House to approve an agent or designee for the purposes of this Section 2.1.5 must be made in writing and using the Clearing House's standard documentation. Through making a request, an FCM Clearing Member, either on its own behalf or on behalf of an FCM Client, is deemed to represent and warrant that the individual making the request is appropriately authorized to do so.

Notwithstanding anything in this Section 2.1.5 of the FCM Procedures, the Clearing House trade identifiers and records in relation to FCM SwapClear Contracts shall be the definitive version for all purposes involving the Clearing House or any service or product offered by it, and shall prevail over any versions otherwise maintained by or on behalf of any FCM Clearing Member.

2.1.6 Other Accounts

The Clearing House will open operational accounts, in respect of an FCM Clearing Member, which are used to record cash and securities balances and its SwapClear Contributions. The Clearing House may open and close such operational accounts, in its sole discretion, upon notice to the relevant FCM Clearing Member. FCM SwapClear Operations will provide details of such accounts to an FCM Clearing Member upon request.

2.1.7 FCM SwapClear Contract Valuation

(a) Net Present Value

The Clearing House will calculate the Net Present Value (NPV) of each eligible FCM SwapClear Contract using the Clearing House's zero coupon yield curves.

It is a condition of registration that sufficient Margin and other Required Registration Amounts, as determined by the Clearing House, are furnished to the Clearing House to cover the Clearing House's Margin requirement for each FCM SwapClear Transaction (taking into account, for these purposes, SwapClear Tolerance, if any) and other amounts required by the Clearing House to register the FCM SwapClear Contract, except that such Required Registration Amounts shall not be required to be furnished prior to registration as a condition thereto if such FCM SwapClear Transaction is a Sub-Block Trading Venue Transaction.

All FCM SwapClear Contracts credited to an FCM Clearing Member will, on submission to the Clearing House, be marked-to-market, in accordance with FCM Regulation 47 (*Daily Settlement of FCM SwapClear Contract and FCM ForexClear Contracts*). Except as expressly provided herein, the amount of Variation Settlement

determined to be owing pursuant to FCM Regulation 47 must, subject to Intra-day Registration (see Section 2.1.3(e)) and the netting provisions of FCM Regulation 47), be paid by the FCM Clearing Member or the Clearing House, as applicable, in cash in the currency of the FCM SwapClear Contract. Where an FCM SwapClear Transaction is registered intra-day, and the change in net present value is covered with non-cash Collateral, the Clearing House will, the following Business Day, require payment of the full cash amount of Variation Settlement, subject to the netting provisions of FCM Regulation 47.

(b) Zero Coupon Yield Curve Construction

The Clearing House will determine, at its sole discretion, appropriate instruments, points and market prices for the construction of zero coupon curves and portfolio valuation. Details of the construction method and Instruments used are available on request from the Clearing House Risk Management Department at +44 (0)20 7426 7549, but may be subject to change without prior notification.

(c) Official Quotations

Zero Coupon Yield curves will use prices and rates taken at:

All times quoted, are London time.

AUD	
BBSW & OIS	12:00
BRL	8:20, 13:15 and 19:05
CAD	20:00
CHF LIBOR & OIS	16:15
CLP	8:20, 13:15 and 19:05
CNY	8:20, 13:15 and 19:05
COP	8:20, 13:15 and 19:05
CZK	16:15
DKK	16:15
EURO	
EURIBOR	16:15
GBP	

LIBOR	16:15
HKD	12:00
HUF	16:15
INR	8:20, 13:15 and 19:05
JPY	
LIBOR & OIS	12:00
KRW	8:20, 13:15 and 19:05
MXN	20:00
NOK	16:15
NKD	12:00
PLN	16:15
SEK	16:15
SGD	12:00
THB	8:20, 13:15 and 19:05
TWD	8:20, 13:15 and 19:05
USD	
LIBOR, SOFR & OIS	20:00
ZAR	16:15
EURO	
OIS	18:15
GBP	
OIS	17:15

Zero coupon yield curves used for daily marking to market will be published on the Clearing House's Member Reporting website after the end of each Business Day.

(d) Variation Settlement

On the date of registration, the Net Present Value of an FCM SwapClear Contract will be calculated in accordance with Section 2.1.7(a).

On all subsequent days, the change in the Net Present Value from one Business Day to the next will be calculated by the Clearing House.

Separate Variation Settlement calculations are performed in respect of an FCM Clearing Member's house "H" account and in respect of an FCM Clearing Member's client "C" account. No offset between the "C" and the "H" accounts is permitted. The Clearing House shall make or receive a separate Variation Settlement payment in respect of each house "H" account and each client "C" account (subject to the netting provisions of FCM Regulation 47 and the Default Rules) of each FCM Clearing Member.

(e) Price Alignment Amount (PAA)

In order to compensate for the payment of changes in NPV on a daily basis for FCM SwapClear Transactions cleared through the Clearing House, the Clearing House will for each FCM Clearing Member either charge or pay Price Alignment Amount in accordance with Section 3.5.2. PAA is debited, credited and netted in accordance with FCM Regulation 47 and the Clearing House's normal practices.

(f) Non-deliverable Interest Rate Swaps

The Clearing House will calculate variation margin, NPV Payments and PAA in relation to FCM SwapClear Contracts that are non-deliverable interest rate swaps in USD, and all amounts due or payable under such FCM SwapClear Contracts must be paid in USD.

2.1.8 Coupon Payments

(a) Calendars and Coupons

Payment dates for coupon payments will be set based on the SwapsMonitor Financial Calendar (see Section 2.1.2(c)). Changes to the calendar that affect FCM SwapClear Contracts will be published and made available to FCM Clearing Members by the Clearing House in an FCM Clearing Member Report. The central control and publication of these calendars will assist the reconciliation of coupon payments between FCM Clearing Members and the Clearing House. Coupon payments will be adjusted, in the event of a holiday amendment, in accordance with the FCM SwapClear Contract Terms.

(b) Calculation of Fixed Amount

The Clearing House will calculate the Fixed Amount payable by a party on a Payment Date as either:

(A) if an amount is specified for the FCM SwapClear Contract as the Fixed Amount payable by that party for that Payment Date or for the related Calculation Period, such amount; or

(B) if an amount is not specified for the FCM SwapClear Contract as the Fixed Amount payable by that party for that Payment Date or for the related Calculation Period, an amount calculated on a formula basis for that Payment date or for the related Calculation Period as follows:

Fixed Amount = Calculation Amount x Fixed Rate x Fixed Rate Day Count Fraction

(c) Calculation of Floating Amount

The Clearing House will calculate the Floating Amount payable by a party on a Payment Date as an amount calculated on a formula basis for that Payment Date or for the related Calculation Period as follows:

Floating Amount = Calculation Amount x Floating Rate x Fixed Rate Day Count Fraction (+/- Spread)

(d) OIS Coupon Calculation

Compounding Rate Calculations

The rate used for the OIS rate is calculated according to the methodology and formulation stated in the ISDA 2006 Definitions in respect of the following floating rate options:

- (A) USD-Federal Funds-H.15-OIS-COMPOUND
- (B) CHF-SARON-OIS-COMPOUND
- (C) GBP-SONIA-COMPOUND
- (D) EUR-EONIA-OIS-COMPOUND
- (E) CAD-CORRA-OIS-COMPOUND
- (F) JPY-TONA-OIS-COMPOUND
- (G) USD-Federal Funds-H.15-LIBOR-BBA
- (H) USD-SOFR-COMPOUND
- (I) AUD-AONIA-OIS-COMPOUND
- (J) EUR-EuroSTR-COMPOUND
- (K) NZD-NZIONA-OIS-COMPOUND
- (L) SGD-SORA-COMPOUND

(e) Calculation of Compounded Amount

Depending on whether the FCM SwapClear Contract is submitted under ISDA 2000 or ISDA 2006 Definitions, the Clearing House will calculate the compounded floating amount payable by an FCM Clearing Member on a Payment Date as an amount calculated in accordance with Articles 6.1 to 6.3 inclusive of the relevant definitions.

(f) Calculation of FRA Discounting (Article 8.4 of the 2006 ISDA Definitions)

Where FRA Discounting is specified for CAD, CHF, CZK, DKK, EUR, HUF, JPY, NOK, PLN, SEK, USD, ZAR the FRA Amount will be calculated in accordance with formulae found in the relevant definitions.

(g) Business Day and Business Day Convention

In determining whether a day is a Business Day the Clearing House will only apply the Financial Centers specified in the matched FCM SwapClear Transaction message. The Clearing House will in the event of non-business days apply the Business Day Conventions as specified in the matched FCM SwapClear Transaction message.

(h) Payment of Coupons

After adjusting coupons, in accordance with the appropriate Business Day and Business Day Conventions, the Clearing House will, subject to the netting provisions of FCM Regulation 47, credit or debit FCM Clearing Members' Accounts with the appropriate Fixed or Floating Amount with a value date matching the Coupon Payment Date. In the event of SwapClear being closed on a Coupon Payment Date it will pay the Fixed and Floating Amounts on the next Business Day following the Coupon Payment Date.

(i) Calculation Periods

In respect of any Calculation Period that is a not a whole calendar month (a stub period), the applicable rate for the Reset Date in respect of that Calculation Period shall be determined by the Clearing House with reference to the rate(s) specified in the matched format message.

(j) Day Count Fractions: ISDA 2000

Day count fractions will be applied to deal legs independently as they are communicated via the matched format message.

Where the FCM SwapClear Transaction is submitted under the ISDA 2000 Definitions, the Clearing House will calculate Day Count Fractions in accordance with the principles specified in the FCM

SwapClear Transaction submitted to the Clearing House and as set forth in the ISDA 2000 Definitions.

(k) Day Count Fractions: ISDA 2006

Day count fractions will be applied to deal legs independently as they are communicated via the matched format message.

Where the FCM SwapClear Transaction is submitted under the ISDA 2006 Definitions, the Clearing House will calculate Day Count Fractions in accordance with the principles specified in the FCM SwapClear Transaction submitted to the Clearing House and as set forth in the ISDA 2006 Definitions.

(l) Floating Rate

Subject to Section 2.1.8(q) and Section 2.1.8(r), the Floating Rate Options shall have the meanings given to them in the ISDA 2000 Definitions or the ISDA 2006 Definitions, as applicable, provided that where the rate for a Reset Date (i) is unavailable (including where such rate ceases, or will cease, to be provided by its administrators), (ii) is not sufficiently robust, (iii) is not fit for purpose or (iv) has materially changed, in each case as determined by the Clearing House in its sole discretion, the Clearing House will determine an alternative rate at its sole discretion. Each such rate will be provided in regular reports by the Clearing House to members.

(m) Applying Floating Rate Options

The Clearing House will determine the rate applicable on a Reset Date in respect of a SwapClear Contract as set out in paragraph (l) above. Such Rate will be applied to the appropriate floating legs and the coupon payments calculated.

The coupon payments will be adjusted to fall on actual Business Days according to the Calendar(s) and Business Day Convention specified.

(n) Negative Interest Rate Method

FCM Clearing Member should note the provisions of Section 3.2 of Part A of Schedule 1 to the FCM Product Specific Contract Terms And Eligibility Criteria Manual regarding the applicability of the Negative Interest Rate Method, to an FCM SwapClear Contract. FCM Clearing Members may, in the circumstances, wish to ensure that any trade submitted for registration follows that Negative interest Rate Method.

(o) Calculation of Inflation Indices

The Index level used for calculating the Floating Rate is determined according to the 2008 ISDA Definitions in respect of the following indices (or successor indices from time to time):

(A) non-revised Index of Consumer Prices excluding Tobacco in the European Monetary Union;

- (B) non-revised Index of Consumer Prices excluding Tobacco in France;
- (C) non-revised Retail Price Index All Items in the United Kingdom; and
- (D) non-revised index of Consumer Prices for All Urban Consumers (CPI-U) before seasonal adjustment in the United States.

In the event an Index is no available to calculate the Index Final, the Clearing House will, in its sole discretion, determine a value for the Index Final.

(p) Non-deliverable Interest Rate Swaps

The Clearing House will calculate all coupon payments for FCM SwapClear Contracts that are non-deliverable interest rate swaps, including the Fixed Amount or Floating Amount payable under any such FCM SwapClear Contract, in USD, and all amounts due or payable under such FCM SwapClear Contracts must be paid in USD.

- (q) Pre-Cessation
 - (A) Subject to paragraph (f) below, upon the occurrence of a Pre-Cessation Effective Date in relation to:
 - (I) Sterling LIBOR, for each Reset Date occurring on or after the Pre-Cessation Effective Date, GBP-LIBOR-BBA will, in respect of all FCM SwapClear Contracts referencing GBP-LIBOR-BBA, be deemed to be Fallback Rate (SONIA) for the 'Original IBOR Rate Record Day' that corresponds to the Original GBP Fixing Date, as most recently provided or published as at 11:30 a.m., London time on the related Fallback Observation Day, and the rate for such FCM SwapClear Contracts shall be determined by the Clearing House accordingly;
 - (II) Swiss Franc LIBOR, for each Reset Date occurring two or more London Banking Days after the Pre-Cessation Effective Date, CHF-LIBOR-BBA will, in respect of all FCM SwapClear Contracts referencing CHF-LIBOR-BBA, be deemed to be Fallback Rate (SARON) for the 'Original IBOR Rate Record Day' that corresponds to the Original CHF Fixing Date, as most recently provided or published as at 8:30 p.m., Zurich time on the related Fallback Observation Day, and the rate for

- such FCM SwapClear Contracts shall be determined by the Clearing House accordingly;
- (III) U.S. Dollar LIBOR, for each Reset Date occurring two or more London Banking Days after the Pre-Cessation Effective Date, USD-LIBOR-BBA will, in respect of all FCM SwapClear Contracts referencing USD-LIBOR-BBA be deemed to be Fallback Rate (SOFR) for the 'Original IBOR Rate Record Day' that corresponds to the Original USD Fixing Date, as most recently provided or published as at 10:30 a.m., New York City time on the related Fallback Observation Day, and the rate for such FCM SwapClear Contracts shall be determined by the Clearing House accordingly;
- (IV) Euro LIBOR, for each Reset Date occurring two or more TARGET Settlement Days after the Pre-Cessation Effective Date, EUR-LIBOR-BBA will, in respect of all FCM SwapClear Contracts referencing EUR-LIBOR-BBA, be deemed to be Fallback Rate (EuroSTR) for the 'Original IBOR Rate Record Day' that corresponds to the Original EUR Fixing Date, as most recently provided or published as at 11:30 a.m., Frankfurt time on the related Fallback Observation Day, and the rate for such FCM SwapClear Contracts shall be determined accordingly; and
- (V) Yen LIBOR, for each Reset Date occurring two or more London Banking Days after the Pre-Cessation Effective Date, JPY-LIBOR-BBA will, in respect of all FCM SwapClear Contracts referencing JPY-LIBOR-BBA, be deemed to be Fallback Rate (TONA) for the 'Original IBOR Rate Record Day' that corresponds to the Original JPY LIBOR Fixing Date, as most recently provided or published as at 12:30 p.m., Tokyo time on the related Fallback Observation Day, and the rate for such FCM SwapClear Contracts shall be determined by the Clearing House accordingly.

For the purposes of each FCM SwapClear Contract referencing THB-THBFIX-Reuters, if THBFIX for a period of the Designated Maturity in the relevant FCM SwapClear Contract does not appear on the Reuters Screen THBFIX Page and, as of the day that is two Bangkok Banking Days preceding the Reset Date, U.S. Dollar LIBOR for a period of the Designated Maturity is Non-Representative and there is either no U.S. Dollar LIBOR which is not Non-Representative for a period which is longer than the Designated Maturity or no U.S. Dollar LIBOR which is not Non-Representative for a period which is shorter than the Designated Maturity, then the Pre-Cessation Effective Date shall be the first date on which there is no such

longer or shorter rate (or, if later, the first date on which U.S. Dollar LIBOR for a period of the Designated Maturity is Non-Representative) and for each Reset Date occurring two or more Bangkok Banking Days after the Pre-Cessation Effective Date THB-THBFIX-Reuters will be determined as if references to THB-THBFIX-Reuters were references to Fallback Rate (THBFIX) for the 'Original THBFIX Rate Record Day' that corresponds to the Original THBFIX Fixing Date, as most recently provided or published as at 10:00 a.m., Bangkok time on the related Fallback Observation Day.

For the purposes of each FCM SwapClear Contract referencing SGD-SOR-VWAP, if SOR for a period of the Designated Maturity does not appear on the Reuters Screen ABSFIX01 Page and, as of the day that is two Singapore and London Banking Days preceding the Reset Date, U.S. Dollar LIBOR for a period of the Designated Maturity is Non-Representative and there is either no U.S. Dollar LIBOR which is not Non-Representative for a period which is longer than the Designated Maturity or no U.S. Dollar LIBOR which is not Non-Representative for a period which is shorter than the Designated Maturity then the related Pre-Cessation Effective Date shall be the first date on which there is no such longer or shorter rate (or, if later, the first date on which U.S. Dollar LIBOR for a period of the Designated Maturity is Non-Representative) and for each Reset Date occurring two or more Singapore and London Banking Days after the Pre-Cessation Effective Date SGD-SOR-VWAP will be determined as if references to SGD-SOR-VWAP were references to Fallback Rate (SOR) for the 'Original SOR Rate Record Day' that corresponds to the Original SOR Fixing Date, as most recently provided or published as at 11:30 a.m., New York City time on the related Fallback Observation Day.

For the purposes of the definition of Fallback Observation Day in relation to a Relevant Floating Rate Option, references to "Business Days" will be to those Business Days applicable for the purposes of the payment obligation which is calculated by reference to such Floating Rate Option. References to an "Original IBOR Rate Record Day" are to that term as used on the Fallback Rate Screen relating to the Replacement Floating Rate Option.

(B) From time to time the Clearing House may, by giving written notice to FCM Clearing Members, include provisions to address the "pre-cessation" of any other Floating Rate Options specified in FCM SwapClear Contracts, and upon the exercise of such right, the Clearing House shall prescribe the terms on which pre-cessation shall take effect with respect to the relevant FCM SwapClear Contracts.

(C) In connection with each Pre-Cessation Effective Date in relation to a Relevant Benchmark, LCH may make any, changes, alterations, modifications, or amendments to the terms of any FCM SwapClear Contract referencing the Replacement Floating Rate Option in relation to such Relevant Benchmark that it determines, in its sole and absolute discretion, are necessary to give effect to the Replacement Floating Rate Option or reflect the use, adoption or implementation of the Replacement Floating Rate Option (including, but not limited to, amendments to the determination of the Reset Dates) and it shall promptly notify each FCM Clearing Member in writing of any such changes, alternations, modifications or amendments.

- (D) If a Relevant Benchmark is subject to a Pre-Cessation Trigger Event and, in relation to such Relevant Benchmark, there is a subsequent announcement of non-representativeness or permanent cessation by the Relevant Regulator in relation to such Relevant Benchmark, the spread adjustment in relation to that Relevant Benchmark and Designated Maturity will continue to be determined as of the Pre-Cessation Trigger Event Date, and such spread adjustment shall apply in the event that the Clearing House exercises its powers under any other relevant provisions of the FCM Rulebook in relation to permanent cessation.
- (E) If, in respect of a FCM SwapClear Contract, the definition, methodology, formula or other means of calculating the Floating Rate Option referenced in that FCM SwapClear Contract (or, if applicable, any index, benchmark or other price source that is referred to in the Floating Rate Option) is modified, the FCM Clearing Members acknowledge that, unless otherwise specified or notified, references to that Floating Rate Option (or the index, benchmark or other price source that is referred to in the Floating Rate Option) shall be to the Floating Rate Option (or the index, benchmark or other price source that is referred to in the Floating Rate Option) as modified pursuant to the terms of this Section 2.1.8(q).
- (F) If a Pre-Cessation Trigger Event occurs in relation to some, but not all, of the tenors of a Relevant Floating Rate Option (each, a Non-Representative Tenor) and (i) that Non-Representative Tenor is the Designated Maturity in relation to the Relevant Floating Rate Option under a FCM SwapClear Contract, or (ii) that Non-Representative Tenor is used to determine the Floating Rate in relation to a Calculation Period under a FCM SwapClear Contract to which Linear Interpolation applies, then the Clearing House shall determine the Floating Rate in relation to such Calculation Period under that FCM SwapClear Contract in its sole and absolute discretion, taking into account the nearest available shorter and longer tenors of that Relevant

Floating Rate Option which have not been subject to a Pre-Cessation Trigger Event (if any) and, if no such tenors are available, the Clearing House shall determine the Floating Rate pursuant to paragraph (a) above.

- (G) These provisions shall apply to all existing and future FCM SwapClear Contracts that incorporate the 2000 ISDA Definitions or the 2006 ISDA Definitions.
- (H) For the avoidance of doubt the foregoing provisions in relation to the determination of certain rates in connection with FCM SwapClear Contracts shall be without prejudice to any other provision of the FCM Rulebook or a FCM SwapClear Contract from time to time, including without limitation, any provisions in relation to the permanent cessation and/or temporary unavailability of any Floating Rate Option or benchmark, or any supplements published by the International Swaps and Derivatives Association from time to time and incorporated into the FCM SwapClear Contracts in accordance with the FCM Rulebook.

Capitalized terms used in this Section 2.1.8(q) and not otherwise defined will have the meaning given to them in the 2006 ISDA Definitions or the 2000 ISDA Definitions (as applicable and each as defined in FCM SwapClear Contract Terms).

Euro LIBOR means the Euro wholesale funding rate known as the Euro London Interbank Offered Rate provided by ICE Benchmark Administration Limited, as the administrator of the benchmark (or a successor administrator).

Fallback Observation Day means, in respect of a Reset Date and the Calculation Period (or any Compounding Period included in that Calculation Period) to which that Reset Date relates, the day that is two Business Days preceding the related Payment Date.

Fallback Rate (EuroSTR) means the term adjusted EuroSTR plus, the spread relating to Euro LIBOR for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted EuroSTR and the spread, on the Fallback Rate (EuroSTR) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (EuroSTR) Screen means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for Euro LIBOR for a period of the Designated Maturity accessed via the Bloomberg Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

Fallback Rate (SARON) means the term adjusted SARON plus the spread relating to Swiss Franc LIBOR, in each case, for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SARON and the spread, on the Fallback Rate (SARON) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (SARON) Screen means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for Swiss Franc LIBOR for a period of the Designated Maturity accessed via the Bloomberg Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

Fallback Rate (SOFR) means the term adjusted SOFR plus the spread relating to U.S. Dollar LIBOR, in each case, for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SOFR and the spread, on the Fallback Rate (SOFR) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (SOFR) Screen means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for U.S. Dollar LIBOR for a period of the Designated Maturity accessed via the Bloomberg Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time);

Fallback Rate (SONIA) means the term adjusted SONIA rate plus the spread relating to Sterling LIBOR, in each case, for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SONIA and the spread, on the Fallback Rate (SONIA) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (SONIA) Screen means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for Sterling LIBOR for a period of the Designated Maturity accessed via the Bloomberg Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

Fallback Rate (SOR) means the rate based on actual transactions in the U.S. Dollar/Singapore Dollar foreign exchange swap market and a U.S. Dollar interest rate calculated by reference to Fallback Rate

(SOFR) including any fallback rate that may apply pursuant to that definition for a period of the Designated Maturity provided by ABS Benchmarks Administration Co Pte. Ltd. (or a successor provider), as the provider of Fallback Rate (SOR), on the Fallback Rate (SOR) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (SOR) Screen means the Refinitiv Screen corresponding to the Refinitiv ticker for the fallback for SOR for a period of the Designated Maturity accessed via the Refinitiv Screen <FBKSORFIX> (or, if applicable, accessed via the relevant Refinitiv Screen for 'price history') or any other published source designated by ABS Benchmarks Administration Co Pte. Ltd. (or a successor provider).

Fallback Rate Screen means, (i) in relation to Fallback Rate (SONIA), the Fallback Rate (SONIA) Screen; (ii) in relation to Fallback Rate (SARON), the Fallback Rate (SARON) Screen; (iii) in relation to Fallback Rate (SOFR), the Fallback Rate (SOFR) Screen; (iv) in relation to Fallback Rate (EuroSTR), the Fallback Rate (EuroSTR) Screen; and (v) in relation to Fallback Rate (TONA), the Fallback Rate (TONA) Screen.

Fallback Rate (THBFIX) means the rate based on actual transactions in the U.S. Dollar/Thai Baht foreign exchange swap market and a U.S. Dollar interest rate calculated by reference to "Fallback Rate (SOFR)" (as set out in the definition of "USD-LIBOR-BBA") including any fallback rate that may apply pursuant to that definition for a period of the Designated Maturity provided by the Bank of Thailand (or a successor provider), as the provider of Fallback Rate (THBFIX), on the Fallback Rate (THBFIX) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (THBFIX) Screen means the Refinitiv Screen corresponding to the Refinitiv ticker for the fallback for THBFIX for a period of the Designated Maturity accessed via the Refinitiv Screen <FBKTHBFIX> (or, if applicable, accessed via the relevant Refinitiv Screen for 'price history') or any other published source designated by the Bank of Thailand (or a successor provider).

Fallback Rate (TONA) means the term adjusted TONA plus the spread relating to Yen LIBOR, in each case, for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted TONA and the spread, on the Fallback Rate (TONA) Screen (or by other means) or provided to, and published by, authorized distributors.

Fallback Rate (TONA) Screen means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for Yen LIBOR for a period of the Designated Maturity accessed via the Bloomberg

Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

Non-Representative means, in respect of a Relevant Benchmark, the Relevant Regulator for the administrator of the Relevant Benchmark:

- (i) has determined and announced that the Relevant Benchmark is no longer representative of the underlying market and economic reality it is intended to measure and representativeness will not be restored; and
- (ii) is aware that certain contractual triggers for fallbacks activated by pre-cessation announcements by such supervisor (howsoever described) in contracts have been or are engaged,

provided that such Relevant Benchmark will be 'Non-Representative' by reference to the date indicated in the most recent statement or publication contemplated in the definition of "Pre-Cessation Trigger Event".

Original CHF Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two London Banking Days preceding that Reset Date.

Original EUR Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two TARGET Settlement Days preceding that Reset Date;

Original GBP Fixing Date means, in respect of a Reset Date and unless otherwise agreed, that Reset Date.

Original IBOR Rate Record Day has the meaning given to it on the applicable Fallback Rate Screen.

Original JPY LIBOR Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two London Banking Days preceding that Reset Date.

Original SOR Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two Singapore and London Banking Days preceding that Reset Date;

Original THBFIX Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two Bangkok Banking Days preceding that Reset Date.

Original USD Fixing Date means, in respect of a Reset Date and unless otherwise agreed, the day that is two London Banking Days preceding that Reset Date.

Pre-Cessation Effective Date means, in respect of, a Relevant Benchmark, the first date on which the Relevant Benchmark is Non-Representative by reference to the most recent statement or publication contemplated in the definition of "Pre-Cessation Trigger Event".

Pre-Cessation Trigger Event means, in relation to a Relevant Benchmark, a public statement or publication of information by the Relevant Regulator announcing that (A) the regulatory supervisor has determined that such Relevant Benchmark is no longer, or as of a specified future date will no longer be, representative of the underlying market and economic reality that such Relevant Benchmark is intended to measure and that representativeness will not be restored and (B) it is being made in the awareness that the statement or publication will engage certain contractual triggers for fallbacks activated by precessation announcements by such supervisor (howsoever described) in contracts.

Pre-Cessation Trigger Event Date means, in relation to a Relevant Benchmark, the date of the first statement or publication which constitutes a Pre-Cessation Trigger Event in relation to that Relevant Benchmark.

Relevant Benchmark means, each interest rate benchmark identified in the first column of the table set-out in Section 2.1.8(r).

Relevant Floating Rate Option means each floating rate option identified in the third column of the table set-out in Section 2.1.8(r), where each such rate is as defined in the FCM SwapClear Product Eligibility Criteria.

Replacement Floating Rate Option means, with respect to a Relevant Floating Rate Option, the corresponding rate identified in the relevant row of the fourth column of the table set-out in Section 2.1.8(r).

Relevant Regulator means, with respect to a Relevant Benchmark, the regulatory authority responsible for the administrator of such Relevant Benchmark as identified in the second column of the table set-out in Section 2.1.8(r) or any successor thereto.

SOR means the synthetic rate for deposits in Singapore Dollars known as the Singapore Dollar Swap Offer Rate provided by ABS Benchmarks Administration Co Pte. Ltd., as the administrator of the benchmark, (or a successor administrator).

Sterling LIBOR means the Sterling wholesale funding rate known as the Sterling London Interbank Offered Rate provided by ICE Benchmark Administration Limited, as the administrator of the benchmark (or a successor administrator).

Swiss Franc LIBOR is the Swiss Franc wholesale funding rate known as the Swiss Franc London Interbank Offered Rate provided by ICE

Benchmark Administration Limited, as the administrator of the benchmark, (or a successor administrator).

THBFIX means the synthetic rate for deposits in Thai Baht derived from the swap offered points known as the Thai Baht Interest Rate Fixing provided by the Bank of Thailand, as the administrator of the benchmark, (or a successor administrator).

U.S. Dollar LIBOR means the U.S. Dollar wholesale funding rate known as the U.S. Dollar London Interbank Offered Rate provided by ICE Benchmark Administration Limited, as the administrator of the benchmark (or a successor administrator).

Yen LIBOR is the Yen wholesale funding rate known as the Yen London Interbank Offered Rate provided by ICE Benchmark Administration Limited, as the administrator of the benchmark (or a successor administrator).

(r) Pre-Cessation Benchmarks

Relevant Benchmark	Relevant Regulator	Relevant Floating Rate Option	Replacement Floating Rate Option
U.S. Dollar LIBOR	The U.K. Financial Conduct Authority	USD-LIBOR-BBA	Fallback Rate (SOFR)
Euro LIBOR	The U.K. Financial Conduct Authority	EUR-LIBOR-BBA	Fallback Rate (EuroSTR)
Sterling LIBOR	The U.K. Financial Conduct Authority	GBP-LIBOR-BBA	Fallback Rate (SONIA)
Yen LIBOR	The U.K. Financial Conduct Authority	JPY-LIBOR-BBA	Fallback Rate (TONA)
Swiss Franc LIBOR	The U.K. Financial Conduct Authority	CHF-LIBOR-BBA	Fallback Rate (SARON)

2.1.9 *Initial Margin*

The Clearing House will require FCM Clearing Members to furnish it with Initial Margin. This amount will be determined by the prevailing market conditions and the expected time to close out the portfolio. The Portfolio Approach to Interest Rate Scenarios (PAIRS) will be used to calculate Initial Margin requirements for FCM SwapClear Contracts.

Separate Initial Margin calculations are performed for an FCM Clearing Member's house "H" and client "C" accounts and, within a "C" account, separately in respect of each FCM Client Sub-Account therein. No offset between the "C" and "H" accounts is permitted.

The Clearing House reserves the right to require additional amounts of Margin from a specific FCM Clearing Member or from all FCM Clearing Members in accordance with FCM Regulation 14 (*Margin and Collateral*).

(a) Liquidity Multiplier

Risk Management applies a liquidity multiplier based on Worst Case Loss (WCL) exceeding certain thresholds on the FCM Clearing Member's whole portfolio and individual currencies. The threshold amounts and multipliers are reviewed on an on-going basis. FCM Client accounts are treated as independent accounts for purposes of liquidity and will be called only in the event that the individual account exceeds the relevant threshold.

(b) Intra-day Margin Calls

In accordance with the Clearing House's FCM Regulations, the Clearing House is entitled to make additional margin calls for payment the same day (intra-day margin calls) where it is considered necessary. Intra-day margin calls can be called at any time throughout the Business Day. Intra-day margin calls will usually be made via the Protected Payments System (PPS) (see Section 2.1.10).

In certain circumstances the Clearing House may wish to make a call for additional funds after the closure of UK PPS facilities at 16:00 hours, London time. In this event the Clearing House will require payment of additional funds through PPS facilities in the USA (see Section 3.2.1). Members must ensure, in these circumstances, that they are in a position to fund such calls through their nominated US PPS account within one hour of the call.

(c) Calculation of Initial Margin

(A) Portfolio Approach to Interest Rate Scenarios (PAIRS)

The PAIRS calculation is a VAR based approach based on filtered historical simulations. All positions in each currency are re-valued under a series of cross portfolio yield curve scenarios to estimate the highest forecast loss and therefore the Initial Margin requirement. Further details of this method are available upon request and are detailed in the PAIRS TIP document. The PAIRS document and further information relating to Initial Margin calculations can be obtained from the Rates team at +44 (020) 7426 6325 or +44 (020) 7426 7428.

(d) Tenor Basis Risk Margin Add-on

A margin add-on will be applied in respect of tenor basis risk.

(e) Default Fund Additional Margin

The Clearing House may from time to time require an FCM Clearing Member to transfer Collateral to the Clearing House to meet the default fund additional margin requirement as determined and notified by the Clearing House to such FCM Clearing Member ("**DFAM**"). The methodology by which the Clearing House determines DFAM is available on the secure area of the Clearing House website. The Clearing House will record any Collateral an FCM Clearing Member has provided to meet its DFAM obligation to the FCM Clearing Member's Proprietary Account.

(f) Collateral for Stress Loss Exposure

In response to a request from an FCM Clearing Member, the Clearing House may require additional Collateral to cover such FCM Clearing Member's stress loss exposure with respect to an FCM Client Sub-Account (the "Stress Loss Margin"). The Stress Loss Margin may be subject to an additional percentage add-on as the Clearing House may require in its sole discretion. The Stress Loss Margin and any add-ons, as applicable, will be called as part of the end of day margin run and by means of morning PPS calls. The request must indicate the percentage of the stress loss exposure that will be covered by Stress Loss Margin. Any request pursuant to this paragraph is subject to the Clearing House's consent in its sole discretion (and the Clearing house may apply a lower percentage than that requested by the SwapClear Clearing Member).

An FCM Clearing Member may cease paying Stress Loss Margin by giving not less than three (3) business days' written notice to the Clearing House.

Before making any request to pay or notifying the Clearing House of ceasing to pay Stress Loss Margin, an FCM Clearing Member must obtain the consent of the FCM Client to which the Stress Loss Margin applies. In making any request pursuant to this paragraph, the FCM Clearing Member is deemed to represent that it has obtained such consent.

Where FCM SwapClear Contracts entered into by an FCM Clearing Member in respect of an FCM Client which has requested to pay Stress Loss Margin are transferred to a Receiving Clearing Member, such Receiving Clearing Member may be required to pay additional initial margin to the Clearing House in the event that it does not pay Stress Loss Margin with respect to the transferring FCM Client.

2.1.10 Intra-Day Margin Call: Collateral Management

(a) General – Intra-day Margining

Following an intra-day margin call and unless notified otherwise by an FCM Clearing Member at the time of an intra-day margin call the Clearing House will deduct cash, in the appropriate currency, directly

from the relevant FCM Clearing Member's PPS account to cover the Margin needed to meet that intra-day margin call.

Cash payments in respect of intra-day Margin requirements are accepted only in USD by the Clearing House.

It is the responsibility of the FCM to ensure that they have sufficient cash funds in place with their PPS bank(s) in order to avoid any intraday liquidity issues.

2.1.11 Compression

- (a) An FCM Clearing Member may compress or decompress Eligible FCM SwapClear Compression Contracts in accordance with FCM Regulation 46(n) and this Section 2.1.11. FCM Clearing Members may request the compression or decompression of Eligible FCM SwapClear Compression Contracts as follows:
 - (A) an FCM Clearing Member can request that all Eligible FCM SwapClear Compression Contracts entered into (i) on behalf of a designated FCM Client or (ii) in such FCM Clearing Member's Proprietary Account 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 FCM Clearing Member after the applicable scheduled compression run) until the FCM Clearing Member notifies the Clearing House to discontinue the compression of Eligible FCM SwapClear Compression Contracts.;
 - (B) an FCM Clearing Member may notify the Clearing House through the ClearLink API or SwapClear Portal specifying the Eligible FCM SwapClear Compression Contracts it wishes to be compressed;
 - (C) an FCM Clearing Member may notify the Clearing House through any FCM Approved Trade Source System previously approved for this purpose by the Clearing House, but only where the compression is by way of netting in respect of Eligible FCM SwapClear Compression Contracts in respect of which the position of the FCM Clearing Member (on its own behalf or on behalf of the relevant FCM Client) is (x) in the opposite direction on each leg of such pair (i.e., obligations to make payment netted against rights to receive payment), such that the FCM SwapClear Contract that replaces such pair of Eligible FCM SwapClear Compression Contracts to be compressed shall have a notional amount equal to the net notional amount of the original pair of Eligible FCM SwapClear Compression Contracts or (y) in the same direction on each leg of such pair (i.e., obligations to make payment aggregated and rights to receive payment aggregated), such that the FCM SwapClear Contract that replaces the compressed

Eligible FCM SwapClear Compression Contracts shall have a notional amount equal to the total notional amount of the original pair of Eligible FCM SwapClear Compression Contracts. The FCM 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; or

(D) an FCM Clearing Member may request that certain Eligible FCM SwapClear Compression Contracts be decompressed in the manner and form as determined by the Clearing House from time to time (such requests may be subject to the Clearing House's capacity constraints).

Any request for the Clearing House to approve an FCM Approved Trade Source System for the purposes of this Section 2.1.11(a) must be made in writing and using the Clearing House's standard documentation. Through making a request, an FCM Clearing Member is deemed to represent and warrant that the individual making the request is appropriately authorized to do so.

- (b) In order to compress an Eligible FCM SwapClear Compression Contracts, an FCM Clearing Member must have in its applicable FCM Client Sub-Account or Proprietary Account two or more FCM SwapClear Contracts with the same compression identifier (being an identifier applied by the Clearing House that indicates that such FCM SwapClear Contracts are eligible for compression) and shall then follow the process for compression as set out above. By making a request to compress or decompress Eligible FCM SwapClear Compression Contracts, the relevant FCM Clearing Member shall be deemed to represent and warrant that its request is in compliance with Applicable Law.
- In respect of each compression run (which, for the purposes of this (c) Section 2.1.11, shall include the time at which the Clearing House effects the decompression of Eligible FCM SwapClear Compression Contracts, as applicable), the Clearing House will notify Clearing Members of the cut-off time by which the FCM Clearing Members must notify the Clearing House of the requested Eligible FCM SwapClear Compression Contracts to be compressed in order for such Eligible FCM SwapClear Compression Contracts to be included in the relevant compression run. The Clearing House shall process the compression of all Eligible FCM SwapClear Compression Contracts notified to it prior such cut-off time. A notification received after the relevant cut-off time shall be treated as if such notification was submitted on the following day. The Clearing House shall notify the applicable FCM Clearing Member after the relevant compression run of the result of such compression procedure. An FCM Clearing Member may, with the prior approval of the Clearing House and pursuant to the Procedures, elect to receive such notification via any

FCM Approved Trade Source System previously approved by the Clearing House for such purpose.

Any request for the Clearing House to approve an FCM Approved Trade Source System for the purposes of this Section 2.1.11(c) must be made in writing and using the Clearing House's standard documentation. Through making a request, an FCM Clearing Member is deemed to represent and warrant that the individual making the request is appropriately authorized to do so.

- (d) An FCM Clearing Member that elects to provide notices or reports to the Clearing House through any FCM Approved Trade Source System specifying which Eligible FCM SwapClear Compression Contracts should be compressed, have been compressed or any other information in relation to compressions acknowledges and agrees that (i) 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 FCM Approved Trade Source System or the timeliness or otherwise of the delivery of any compression-related details by that FCM Approved Trade Source System to the Clearing House of the FCM Clearing Member, (ii) the Clearing House will process and use any compression-related information provided to it via an FCM Approved Trade Source System on an "as is" basis (with no obligation to verify any details), (iii) the Clearing House accepts no liability for any error within or corruption of any data sent by an FCM Approved Trade Source System to the Clearing House or to the FCM Clearing Member or any delay in or failure of the transmission of such data to the Clearing House or the FCM Clearing Member. In the event that the Clearing House terminates, registers or otherwise effects an action in connection with a compression relating to any FCM SwapClear Contract on the basis of incorrect or corrupted data sent to it by an FCM Approved Trade Source System, the FCM Clearing Member concerned shall be bound by the results of such actions. Such matters form part of the relationship between the FCM Clearing Member and the relevant FCM Approved Trade Source System. Notwithstanding anything in this Section 2.1.11 of the FCM Procedures, the Clearing House records in relation to any compression and the status of any FCM SwapClear Contract prior to, during or following a compression run shall be the definitive record in connection therewith and shall prevail over any such records maintained by any FCM Approved Trade Source System.
- (e) Following the compression or decompression process described above and as further set out in FCM Regulation 46(m) (Registration of FCM SwapClear Contracts; Novation and Post-Novation Compression; SwapClear Accounts), the applicable FCM Clearing Member shall promptly notify the Clearing House if it believes that any errors have occurred in the compression process or decompression process or if its books and records do not reconcile with those of the Clearing House in

respect of the compressed or decompressed FCM SwapClear Contracts as notified to the FCM Clearing Member by the Clearing House.

For purposes of this Section 2.1.11, (i) an FCM Client may, on behalf of an FCM Clearing Member, submit a compression request (whether under paragraph (a) or (b) above) or an election to provide notices or reports via an FCM Approved Trade Source System, the ClearLink API or SwapClear Portal and (ii) for the avoidance of doubt, references to an FCM Approved Trade Source System may include the SwapClear Portal, in each case as applicable.

2.1.12 Portfolio Transfers (BAU)

FCM Clearing Members may, acting for their own account or for the account of an FCM Client, effect Permitted Transfers in accordance with the provisions of FCM Regulation 46(p).

2.1.13 Actions in Respect of an FCM Client Default

This Section describes certain transfers and registrations that, under certain conditions, can be requested by an FCM Clearing Member upon an FCM Client Default with respect to a Defaulting FCM Client.

The Clearing House shall have no liability in connection with any loss or cost suffered or incurred by any FCM Clearing Member or FCM Client in connection with any actions taken by the Clearing House pursuant to this Section 2.1.13.

Notwithstanding anything to the contrary contained in this Section 2.1.13, the actions described in this section are subject to Applicable Law, including the provisions of the CEA and the CFTC Regulations.

(a) Transfers between Proprietary Accounts and FCM Client Accounts

Pursuant to FCM Regulation 13(d), the UK General Regulations and the UK General Procedures, an FCM Clearing Member may, following the occurrence of an FCM Client Default, request that the Clearing House transfer one or more FCM SwapClear Contracts (including those submitted for registration pursuant to Section 2.1.13(c)) or SwapClear Contracts (as the case may be): (i) from the Defaulting FCM Client's FCM Client Sub-Account to its Proprietary Account or the Proprietary Account of a SwapClear Clearing Member or an FCM Clearing Member; or (ii) from its Proprietary Account or the Proprietary Account of a SwapClear Clearing Member or FCM Clearing Member to the Defaulting FCM Client's FCM Client Sub-Account, provided that the following conditions precedent are met (in addition to any other generally applicable provisions of the FCM Rulebook): neither the FCM Clearing Member nor any SwapClear Clearing Member or FCM Clearing Member to or from which the SwapClear Contracts are being transferred pursuant to this Section 2.1.13 is a Defaulter (nor would they become a Defaulter upon the completion of the transfer).

For the avoidance of doubt, in the case of an FCM Client Default, the Clearing House will not require that the Defaulting FCM Client provide its consent to the requested transfer in order for the Clearing House effect a transfer requested by the FCM Clearing Member pursuant to Regulation 13(d)(i).

The Clearing House will typically (but shall not be required to) transfer the relevant FCM SwapClear Contract(s) or SwapClear Contract(s) within 24 hours of receipt of (a) the transfer request and (b) such other documents as the Clearing House requested in accordance with the foregoing.

(b) Proprietary Account Position Transfers

An FCM Clearing Member may, following a transfer of open contracts to its Proprietary Account in accordance with paragraph (a) above, and to the extent permitted by Applicable Law (including all applicable laws and provisions of the CEA and the CFTC Regulations), request that the Clearing House transfer an FCM SwapClear Contract from its Proprietary Account to the Proprietary Account of a SwapClear Clearing Member or other FCM Clearing Member pursuant to FCM Regulation 13(d), provided that the following condition precedent is met (in addition to any other generally applicable provisions of the FCM Rulebook): the transferor FCM Clearing Member is permitted (where applicable) by its agreement(s) with the Defaulting FCM Client, and has authority to effect, the transactions specified in the transferor FCM Clearing Member's request(s) to the Clearing House in respect of such transfer.

The Clearing House will typically (but shall not be required to) transfer the relevant FCM SwapClear Contract(s) within 24 hours of receipt of the (a) transfer request and (b) such other documents as the Clearing House requested in accordance with the foregoing.

(c) Registration of FCM SwapClear Contracts in Defaulting FCM Client's FCM Client Sub-Account

Following the occurrence of an FCM Client Default in respect of a Defaulting FCM Client, an FCM Clearing Member may submit FCM SwapClear Contracts to the Clearing House for registration in such Defaulting FCM Client's FCM Client Sub-Account, provided that the following condition precedent is met (in addition to any other generally applicable provisions of the FCM Rulebook): the submission of such FCM SwapClear Contracts is effected via such Approved Trade Source System or other method as the Clearing House shall instruct for such purpose, and on such terms and including such details as the Clearing House shall require.

A request from an FCM Clearing Member to the Clearing House to carry out any of the actions described in paragraphs (a) to (c) above, shall in every case

be deemed a representation by the FCM Clearing Member to the Clearing House that:

- (a) an FCM Client Default has occurred;
- (b) the FCM Clearing Member has provided and will provide (as applicable) any required notices to the Defaulting FCM Client in respect of (A) such FCM Client Default and (B) any of the actions described in paragraphs (a) to (c) above;
- (c) the FCM Clearing Member is permitted by its agreement(s) with the Defaulting FCM Client and has authority to effect the transfers and/or registrations specified in the FCM Clearing Member's requests to the Clearing House in respect of the Defaulting FCM Client;
- (d) such transfers and/or registrations and all related instructions to the Clearing House are in compliance with Applicable Law; and
- (e) the individual making such request or submission (or issuing any related instructions to the Clearing House) is authorized to do so on behalf of the FCM Clearing Member.

In connection with a request from an FCM Clearing Member to the Clearing House to carry out any of the actions described in paragraphs (a) to (c) above:

- (f) the FCM Clearing Member shall provide to the Clearing House (i) satisfactory evidence of the occurrence of the FCM Client Default and (ii) all other documentation required by the Clearing House, which shall include an indemnity from the FCM Clearing Member in favour of the Clearing House, the form and manner of which shall be determined by the Clearing House in its sole discretion. For purposes of this paragraph, "satisfactory evidence" may be, to the extent permitted by the Clearing House in its sole discretion, the FCM Clearing Member's instruction to effect the relevant transfer under paragraph (a) or (b) above or accept the submission under paragraph (c) above. For the avoidance of doubt, the Clearing House shall be entitled to request additional evidence and/or documentation for legal, regulatory or risk management reasons; and
- (g) the relevant FCM Clearing Member shall transfer (or make available) Required Margin into its Proprietary and/or the applicable FCM Client Sub-Account, taking into account that an FCM Clearing Member may not request the transfer of an Associated Collateral Balance in connection with a transfer of an FCM SwapClear Contract from an FCM Client Sub-Account to a Proprietary Account.

2.1.14 Notifications via FCM Approved Trade Source Systems

With prior approval of the Clearing House, FCM Clearing Members and FCM Clients may elect to submit and receive certain post-trade messages via any FCM Approved Trade Source System previously approved by the Clearing

House for the results of compression procedures, Permitted Transfers and non-economic amendments of FCM SwapClear Contracts.

An FCM Clearing Member, either on its own behalf or on behalf of an FCM Client, as applicable, acknowledges and agrees, with respect to an election to receive messages and/or notifications under this Section 2.1.13 from the Clearing House via an FCM Approved Trade Source System, that (i) 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 FCM Approved Trade Source System or the timeliness or otherwise of the delivery of any notices, reports or details by that FCM Approved Trade Source System to the Clearing House of the FCM Clearing Member or FCM Client, as applicable, (ii) the Clearing House will process and use any information provided to it under this Section 2.1.13 via an FCM Approved Trade Source System on an "as is" basis (with no obligation to verify any details), (iii) the Clearing House accepts no liability for (A) any error within or corruption of any data sent by an FCM Approved Trade Source System to the Clearing House, the FCM Clearing Member or any FCM Client or (B) any delay in or failure of the transmission of such data to the Clearing House, the FCM Clearing Member or any FCM Client.

Any request for the Clearing House to approve the submission and receipt of post-trade messages via any FCM Approved Trade Source System must be made in writing and using the Clearing House's standard documentation. Through making a request, an FCM Clearing Member, either on its own behalf or on behalf of an or FCM Client, is deemed to represent and warrant that the individual making the request is appropriately authorized to do so.

2.1.15 [Reserved.]

2.1.16 Amendment of Trade References

An FCM Clearing Member may wish to change its own trade reference numbers/codes by which they identify trades registered in the FCM SwapClear Service. Subject to any such FCM Clearing Member meeting all the Clearing House's requirements, including those set forth in paragraph (a) below and under these FCM Procedures, the Clearing House will, as part of its service to FCM Clearing Members, amend its records in order to reflect any such change. Such change has no effect whatsoever on the terms of any registered FCM SwapClear Contract or any other obligations of the FCM Clearing Member party to such contract.

(a) Trade Reference Amendment Request Form

FCM Clearing Members may submit a request to the Clearing House to amend a trade reference (either on behalf of the given FCM Clearing Member or an FCM Client) (a "**Trade Amendment Request**"). Trade Amendment Requests must be submitted in the form and manner prescribed by the Clearing House from time to time, and may be approved by the Clearing House in its sole discretion. Upon approval by the Clearing House, Trade Amendment Requests will typically be

processed within two Business Days. In the event the Clearing House is unable, or determines it will be unable, to process an approved Trade Amendment Request within two business days, it shall attempt to notify the given FCM Clearing Member as soon as reasonably practicable.

(b) Processing

The Clearing House shall reject a Trade Amendment Request in the event that:

- (A) it is not made in accordance with these FCM Procedures;
- (B) any trade reference submitted in the Trade Amendment Request does not (a) match the FCM Clearing Member's trade reference in the Clearing House's books and records or (b) refer to a trade registered in the FCM SwapClear clearing system;
- (C) any trade reference submitted in the Trade Amendment Request is not recorded by the Clearing House against the BIC code of the FCM Clearing Member requesting the amendment; or
- (D) it determines it advisable, in its sole discretion, for risk, legal, technical, cost or similar considerations.

Upon processing a Trade Amendment Request, the Clearing House will notify the given FCM Clearing Member and will produce a report setting out details of the time and date that it has amended its records in accordance with the request, details of the old and new FCM Clearing Member trade references and the status of the amendment in respect of each trade set out in the Trade Reference Amendment Request. All records of the Clearing House and data held in the FCM SwapClear clearing system will then be updated overnight following the close of the given Business Day.

2.1.17 Default Management

(a) *Portfolio Splitting:*

As part of the Rates Service DMP, 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 Rates Service DMG (which, as defined in the Default Rules, refers to the advisory Default Management Group established by the Clearing House pursuant to the terms of the Rates Service DMP Annex to the Default Rules), seek to create:

(A) one or more individual Sub-portfolios which have comparatively greater levels of risk associated with them, thereby isolating such Sub portfolios from those which are more risk neutral; and

(B) one or more individual Sub portfolios which are more risk neutral.

(b) 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 breach 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;
- (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 FCM 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 an FCM Clearing Member or SwapClear 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.

(c) Affiliate Bidding

SwapClear Clearing Members are entitled to bid for an Auction Portfolio on behalf of an affiliated SwapClear Clearing Member or affiliated FCM Clearing Member. Where a SwapClear Clearing Member makes a bid and that SwapClear Clearing Member has an affiliated SwapClear Clearing Member or FCM 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 SwapClear Clearing Member has made the relevant bid on behalf of a non-bidding, affiliated SwapClear Clearing Member or affiliated FCM Clearing Member.

A SwapClear Clearing Member may notify the Clearing House, in advance of an Auction, that it wishes to bid on behalf of an affiliated SwapClear Clearing Member or affiliated FCM Clearing Member. Where it wishes to do so, the SwapClear Clearing Member should

contact the Clearing House's Membership Department at +44 (0)207 426 7891/7627/7063 or via e-mail at membership@lch.com.

Upon the request of an FCM Clearing Member that has successfully bid in an Auction (or in respect of which an LCH Approved Outsourcing Agent or an affiliated SwapClear Clearing Member has made a successful bid on its behalf), the Clearing House shall transfer the rights and obligations arising out of the applicable Auction Portfolio to an affiliated SwapClear Clearing Member of such FCM Clearing Member, subject to such affiliate consenting to such transfer and meeting all the requirements imposed by the Clearing House from time to time in relation to accepting such rights and obligations (including executing any documents reasonably requested by the Clearing House), and subject to the Clearing House's determination in its reasonable discretion that the transfer would not be likely to result in a material and adverse impact on the Clearing House, the SwapClear Service or another SwapClear Clearing Member. Until such time as such transfer has been effected, the FCM Clearing Member shall remain liable to perform its obligations (including in respect of the Auction Portfolio to be transferred) under the FCM Rulebook.

(d) Outsourcing

Pursuant to FCM Regulation 4(c)(vii) and 4(c)(viii) (FCM Clearing Member Status and Application of LCH Regulations), an FCM Clearing Member may appoint a third party to fulfill one or both of the Clearing House's Membership requirements to: (i) participate in a SwapClear "fire drill" run by the Clearing House; and (ii) participate in the Rates Service DMP operated by the Clearing House. Where an FCM Clearing Member 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) A SwapClear Clearing Member
- (B) An FCM Clearing Member
- (C) An FCM Client
- (D) Any other entity that the Clearing House deems appropriate in its sole discretion.

Where an FCM Clearing Member 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 FCM Clearing Member 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 FCM 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 FCM Clearing Member successfully appoints an LCH Approved outsourcing Agent, that FCM Clearing Member 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

FCM Clearing Members should note that LCH Approved Outsourcing Agents may be subject to a more rigorous driving test and fire-drill than FCM Clearing Members (*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 FCM Clearing Member, 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 FCM Clearing Member 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 FCM Clearing Member of its obligations under the Rates Service DMP (including its obligation to participate in an Auction) and an LCH Approved Outsourcing Agent's participation in the Rates

Service DMP on behalf of an FCM Clearing Member, in the event of a default, shall not extend beyond the provision of operational and other ancillary support to that FCM Clearing Member.

(e) Rates Service *DMG*

The necessary involvement of FCM Clearing Members and the Rates Service DMG in the Rates Service 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 2.Schedule 2. establishes binding obligations of confidentiality, anonymity and the extent of dissemination of information on FCM Clearing Members (and their executives or directors who participate from time to time in the Rates Service DMG) and on the Clearing House.

Each FCM Clearing Member who makes available a representative to serve on the Rates Service 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 Rates Service DMG complies with <u>SCHEDULE 2.SCHEDULE 2.</u> covering confidentiality, non-disclosure and other terms.

(f) Procedures for Liquidation of FCM Rates Contracts of FCM Clients

Upon the default of an FCM Rates Clearing Member, the Clearing House has the power and authority, pursuant to the FCM Rulebook, the CEA and the CFTC Regulations, to liquidate the FCM Rates Contracts of FCM Clients which, pursuant to the FCM Rulebook, would be conducted in accordance with the Rates Service DMP Annex. This section sets forth certain supplementary procedures (in addition to the Default Rules and other applicable provisions of the FCM Rulebook) that will apply under such circumstances.

In certain circumstances the Clearing House may deem, in its sole discretion, that the FCM Rates Contracts of one or more FCM Clients should be liquidated. Such determination may result from factors including: (i) the Clearing House determining that the FCM Client poses too great a risk to the Clearing House and should therefore be liquidated, (ii) the Clearing House becoming aware of the FCM Client becoming insolvent or otherwise failing in its obligations to the defaulting FCM Clearing Member, (iii) the relevant FCM Client requesting that it be liquidated, or (iv) a request or instruction from a Regulatory Body, whether orally or in writing. In the event of such liquidation the Clearing House shall establish a notional account reflecting such FCM Client's FCM Rates Contracts for purposes of allocating losses arising from the liquidation of such contracts (such account, a "Hedged Account"). The Clearing House may establish one or more separate Hedged Account(s) for FCM Rates Contracts that are non-transferable and will be subject to liquidation and, if applicable, may reference in each such Hedged Account the FCM

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Rates Contracts that are to be liquidated, regardless of the FCM Clients for which such FCM Rates Contracts are held. The provisions of this section shall apply equally to any such Hedged Account. Additionally, no FCM Contracts other than FCM Rates Contracts will be referenced in a Hedged Account established for liquidating FCM Rates Contracts.

An FCM Client whose FCM Rates Contracts are referenced in a Hedged Account is referred as a "Non-Porting Client". The Clearing House shall hold the relevant Collateral in respect of: (a) the FCM SwapClear Contracts of Non-Porting Clients (segregated as belonging to each such applicable Non-Porting Client in accordance with the CFTC Regulations and Part 22 thereof) in the relevant FCM Omnibus SwapClear Client Account with LCH: and (b) the FCM Listed Interest Rates Contract of Non-Porting Clients in the relevant FCM Omnibus Listed Interest Rates Client Account with LCH, in each case until the liquidation of the entire relevant Hedged Account and all FCM Rates Contracts and other positions therein, as described below. At the time that the FCM Rates Contracts of a Non-Porting Client are first referenced in a Hedged Account, any outstanding and accrued but unpaid Variation Settlement, daily settlement amounts or PAA in respect of such FCM Rates Contracts shall be discharged as of the time such FCM Rates Contracts are referenced in such Hedged Account, by (i) in the event that Variation Settlement, daily settlement amounts or PAA are accrued but unpaid in favor of the Clearing House, debiting (x) the FCM Client Sub-Account of such FCM Client (in respect of FCM SwapClear Contracts) or (y) the FCM Omnibus Listed Interest Rates Client Account with LCH (in respect of FCM Listed Interest Rates Contracts), or (ii) in the event that Variation Settlement, daily settlement amounts or PAA are accrued but unpaid in favor of the FCM Client, crediting (x) the FCM Client Sub-Account of such FCM Client (in respect of FCM SwapClear Contracts) or (y) the FCM Omnibus Listed Interest Rates Client Account with LCH (in respect of FCM Listed Interest Rates Contracts).

(A) Administration of a Hedged Account. The Clearing House may enter into hedge transactions and liquidate and/or auction the FCM Rates Contracts and hedges for the account of the Hedged Account, and may take related actions with respect to a Hedged Account (and the positions referenced therein), in its sole discretion as permitted by the FCM Rulebook, the CEA and the CFTC Regulations, or as directed by an applicable Regulatory Body.

(B) Allocation of Gains and Losses in a Hedged Account to Non-Porting Clients. The Clearing House will allocate losses and gains (including further Variation Settlement, daily settlement amounts or PAA, hedging costs including the gains and losses associated with hedging transactions, and liquidation/auction costs and losses) to Non-Porting Clients in a Hedged Account in accordance with the following provisions:

- At the time an FCM Client becomes a Non-Porting (A) Client, such Non-Porting Client is assigned a separate risk factor in respect of its FCM SwapClear Contracts (if any) and its set of FCM Listed Interest Rates Contacts (if any) (each, an "Account Class Risk Factor"). The value of each Account Class Risk Factor is calculated as the proportion of such Non-Porting Client's hypothetical (where applicable) Required Margin in respect of each set of contracts in a given currency bears to the aggregate hypothetical Required Margin of all contracts that are referenced in the Hedged Account in that currency at the time such FCM Client became a Non-Porting Client (i.e., at the time such contracts are first referenced in such Hedged Account).
- On the first day that FCM Clients become Non-Porting (B) Clients, gains and losses in a Hedged Account on such day shall be allocated on a pro rata basis among such Non-Porting Clients based on their individual Account Class Risk Factors. The allocation of gains and losses on subsequent days shall be made in the same manner until the occurrence of a day (if applicable) in which additional Non-Porting Clients are referenced in such Hedged Account. Additional Non-Porting Clients whose positions are referenced in such Hedged Account on a subsequent day, until the positions of further additional Non-Porting Clients are referenced in such Hedged Account on a further subsequent day, are referred to as "New Non-Porting Clients".
- (C) On a day when one or more New Non-Porting Clients are referenced in a Hedged Account, the Clearing House shall calculate a combined risk factor (the "Existing Non-Porting Clients Combined Account Class Risk Factor") in respect of the FCM SwapClear Contracts and FCM Listed Interest Rates Contracts, respectively, of the Non-Porting Clients that were previously referenced in such Hedged Account and are not New Non-Porting Clients (such existing Non-Porting Clients, "Existing Non-Porting Clients"). The Existing Non-Porting Clients Combined Account Class

Risk Factors shall be based on the amount of Required Margin associated with the relevant Hedged Account with respect to (x) all FCM SwapClear Contract positions (including all FCM SwapClear Contracts, hedges or other positions) and (y) all FCM Listed Interest Rates Contract positions (including all FCM Listed Interest Rates Contracts, hedges or other positions), respectively, referenced in the Hedged Account at the beginning of the day on which New Non-Porting Clients are referenced in that Hedged Account (i.e., at a time prior to when New Non-Porting Clients' FCM SwapClear Contracts and FCM Listed Interest Rates Contracts are first referenced in that Hedged Account). For the avoidance of doubt, the Existing Non-Porting Clients Combined Account Class Risk Factor is calculated without respect to the Required Margin applicable to the FCM SwapClear Contracts and FCM Listed Interest Rates Contacts of the New Non-Porting Clients.

(D) On any day on which the position of New Non-Porting Clients are referenced in a Hedged Account, gains and losses in that Hedged Account that are incurred on that day will be allocated among the Existing Non-Porting Clients (as a group) and the New Non-Porting Clients (individually) on a pro rata basis based on the Existing Non-Porting Clients Combined Account Class Risk Factors (with respect to the Existing Non-Porting Clients as a group) and the individual Account Class Risk Factors of each New Non-Porting Client (with respect to each such New Non-Porting Client individually). The gains and losses allocated in such manner to the Existing Non-Porting Clients as a group shall be further allocated to each individual Existing Non-Porting Client on a pro rata basis based on the Account Class Risk Factor of each such Existing Non-Porting Client. The allocation of gains and losses on subsequent days shall occur in the same manner as set forth in this paragraph (D) until the occurrence of a day (if applicable) in which the positions of additional Non-Porting Clients are referenced included in such Hedged Account and thus become the New Non-Porting Clients. In such a case, (A) the Existing Non-Porting Clients shall continue to be treated as Existing Non-Porting (B) the Non-Porting Clients previously constituting the New Non-Porting Clients shall then constitute Existing Non-Porting Clients (in accordance with the definition of New Non-Porting Clients in paragraph (B) above), (C) the additional Non-Porting Clients referenced in such Hedged Account constitute

the New Non-Porting Clients (in accordance with the definition of New Non-Porting Clients in paragraph (B) above), and (D) the Clearing House shall recalculate the Existing Non-Porting Clients Combined Account Class Risk Factor and the allocation of gains and losses shall be in accordance with paragraph (C) above and this paragraph (D).

- (E) Upon the liquidation of the contracts referenced in a Hedged Account and all FCM Rates Contracts and other positions therein, by auction or otherwise, any gains or losses associated with such auction/liquidation shall be allocated among all Non-Porting Clients on a pro rata basis based on the "unit value" of each FCM Rates Contract of each Non-Porting Client referenced in such Hedged Account, as adjusted by a "auction value adjustment". For purposes of this clause (E), (1) "unit value" means, in respect of FCM SwapClear Contracts, the value applied to each FCM SwapClear Contract, based on the net present value and outstanding notional value associated with each such FCM SwapClear Contract and, in respect of FCM Listed Interest Rates Contacts, the net present value and outstanding notional value associated with such FCM Listed Interest Rates Contracts (being the Contract Price times the number of Contracts), and (2) "auction value adjustment" means a ratio applied to an FCM Rates Contract based on the aggregate auction/liquidation costs incurred auctioning/liquidating the contracts referenced in such Hedged Account and the aggregate notional value of all FCM Rates Contracts referenced in such Hedged Account, each of clauses (1) and (2) as determined by the Clearing House. The allocations described in this clause (E) are without reference to any Account Class Risk Factor or Existing Non-Porting Clients Accounts Class Combined Risk Factor.
- (C) Settlement of Non-Porting Clients Following Liquidation of a Hedged Account. Following the liquidation of the contracts referenced in a Hedged Account, the Clearing House shall allocate the appropriate gains and losses (as determined in accordance with the above provisions) to each Non-Porting Client's relevant FCM Client Sub-Account (in respect of FCM SwapClear Contracts) or to the FCM Omnibus Listed Interest Rates Client Account with LCH (in respect of FCM Listed Interest Rates Contracts).

The Clearing House shall allocate gains and losses to FCM SwapClear Contracts registered in the FCM SwapClear Suspension Sub-Account

in the same manner as it allocates to an individual FCM Client and as described above.

(g) FCM Rates Service Default Management Disclosure Notice

Each FCM Rates Service Clearing Member must ensure that each FCM Client to which it offers FCM SwapClear Clearing Services is provided with, or is directed to a copy of, the FCM Rates Service Default Management Disclosure Notice, and further must provide confirmation, in the form and manner reasonably required by the Clearing House, that it has discharged this obligation in respect of each such FCM Client.

(h) Contact Information

Each FCM Rates Clearing Member is required to provide the Clearing House with contact details for those persons that the Clearing House should contact in the event of a Clearing Member Default. FCM Rates Clearing Members are required to ensure that contact details remain up to date and to notify the Clearing House of any changes in such details.

2.1.18 Payment of Stamp Tax

Each FCM Clearing Member shall pay any stamp tax or duty levied or imposed upon it or in respect of its execution or performance of the FCM Clearing Membership Agreement, the FCM Default Fund Agreement, the FCM Regulations and the FCM Procedures (including any registration of an FCM SwapClear Contract) by a jurisdiction in which it is incorporated, organized, managed and controlled, or considered to have its seat, or in which a branch or office through which it is acting is located 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 FCM Clearing Membership Agreement, the FCM Regulations and the FCM Procedures (including any registration of an FCM SwapClear Contract) by any such jurisdiction.

2.1.19 Section 696, Corporation Tax Act 2009

The FCM Clearing Member agrees that should a situation arise where HM Revenue and Customs ("HMRC") raises an enquiry, or makes an information request, to the Clearing House regarding an FCM Transaction or FCM Contract that the FCM Clearing Member is submitting (or has submitted) to the Clearing House, and that enquiry or information request is in respect of the application of s696 - s697 Corporation Tax Act 2009, the FCM Clearing Member will use its reasonable efforts to provide such information and support as the Clearing House may reasonably require in order to respond to and effectively deal with the queries raised by HMRC.

2.1.20 *Tax Forms*

The Clearing House and each FCM Clearing Member shall provide to the other party (i) any form or document specified in the given FCM Contract and (ii) any form, document, statement or certification (including, in the case of the Clearing House, an Internal Revenue Service Form W-8BEN) reasonably requested in writing to permit the Clearing House or FCM Clearing Member, as applicable, to make any payment under the Clearing House's rules or any FCM Contract without withholding for any tax, levy or charge. The foregoing requirement shall not apply in the event the Clearing House or FCM Clearing Member is not permitted to deliver such form, document, statement or certification under Applicable Law (including any double-tax treaty).

2.1.21 Withholding Taxes

In the event an FCM Clearing Member is required under Applicable Law to withhold an amount in respect of any tax, levy or charge from any payment made to the Clearing House, (i) such amount payable shall be increased such that the Clearing House receives an amount equal to that it would have received had such withholding not been required under Applicable Law and (ii) the FCM Clearing Member shall provide the Clearing House the relevant tax certificates (or similar form) confirming the payment of such withholding.

The Clearing House shall provide reasonable cooperation to the given FCM Clearing Member to ensure that payments made to the Clearing House may be made without deduction or withholding in respect of any tax, levy or charge

2.1.22 Sales Tax; Value Added Tax

All fees and other payments payable under the Clearing House's rules are exclusive of sales tax, purchase or turnover tax, levies, duties and their equivalent in each jurisdiction, which, if applicable, shall be payable by FCM Clearing Members at the applicable rate in force at the given time.

2.1.23 [Reserved.]

2.1.24 FCM Portfolio Margining Service

(a) Introduction

The Clearing House offers FCM Clients of FCM Clearing Members an optional service ("FCM Portfolio Margining Service") that provides portfolio-margining functionality in respect of pairs of accounts that are held in the FCM SwapClear Clearing Service and FCM Listed Interest Rates Clearing Services by transferring FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts between accounts in each Service (such transferred FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts, "FCM Portfolio Margined Contracts").

A list of FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts is published on the Clearing House's website from time to time.

An FCM Joint Rates Service Clearing Member must opt-in to the FCM Portfolio Margining Service in accordance with the procedure set out in paragraph 2.1.24(b) below and meet the FCM Portfolio Margining Eligibility Criteria (as defined below) in order to benefit from the portfolio-margining functionality provided by the service. However, it should be noted that, regardless of whether or not an FCM Joint Rates Service Clearing Member opts in, the FCM SwapClear Clearing Service and the FCM Listed Interest Rates Clearing Services share a common default fund. Accordingly, the risk profile of participating in either one of such Services may be impacted by other FCM Clearing Members participating in the other such Service. In particular, the resources of an FCM Clearing Member that is a member of the FCM SwapClear Clearing Service and the FCM Listed Interest Rates Clearing Services will be made available to cover the Clearing House's losses in a different manner to those of an FCM Clearing Member that is only a member of one of those Services, regardless of whether that FCM Clearing Member opts-in to the FCM Portfolio Margining Service. FCM Clearing Members should therefore familiarise themselves with the provisions of the FCM Rulebook and the Default Rules.

(b) Opt-In Procedure

- (A) FCM Clearing Member Status Opt In. An FCM Joint Rates Service Clearing Member wishing to opt-in to the FCM Portfolio Margining Service in respect of one or more FCM Clients (each, a "Nominated FCM Client") must submit a written request to the Clearing House, using the appropriate form which can be obtained from the Clearing House's Membership team (an "FCM Portfolio Margining Request"). For the avoidance of doubt, the FCM Joint Rates Service Clearing Member must submit a further FCM Portfolio Margining Request when it wishes the FCM Portfolio Margining Service to apply in respect of additional Nominated FCM Clients.
- (B) Assessment of the FCM Portfolio Margining Request. Upon receipt of an FCM Portfolio Margining Request, the Clearing House will assess whether the eligibility criteria set out at paragraph 2.1.24(c) below (the "FCM Portfolio Margining Eligibility Criteria") are met. The FCM Joint Rates Service Clearing Member will provide such information to the Clearing House as the Clearing House may, in its absolute discretion, request, including such information as is required to enable the Clearing House to make the necessary assessments in respect of an FCM Portfolio Margining Request.

(C) Activation of the FCM Portfolio Margining Service. Following a determination by the Clearing House that the FCM Portfolio Margining Eligibility Criteria are met, the Clearing House shall:

- (A) notify the FCM Joint Rates Service Clearing Member; and
- (B) activate the FCM Portfolio Margining Arrangements described in paragraph 2.1.24(d) below in respect of the Nominated FCM Clients.

The Clearing House will endeavour to activate the FCM Portfolio Margining Arrangements within five business days following the determination by the Clearing House that the FCM Portfolio Margining Eligibility Criteria are met, but owes no duty or obligation to the FCM Clearing Member to do so.

Furthermore, notwithstanding the foregoing, the Clearing House may, in its sole discretion, refuse to provide the FCM Portfolio Margining Service (i) to an FCM Joint Rates Service Clearing Member or (ii) in respect of one or more Nominated FCM Clients where it considers it appropriate to do so.

(D) Opt-Out Procedure. In the event that an FCM Clearing Member wishes to terminate the FCM Portfolio Margining Service in respect of one or more Nominated FCM Clients, it may do so by giving written notice to the Clearing House. The FCM Clearing Member shall identify clearly the Nominated FCM Client(s) to which the termination is intended to apply. The termination shall become effective on the date on which the Clearing House confirms to the relevant FCM Clearing Member that the FCM Portfolio Margining Service has been terminated in respect of the relevant Nominated FCM Client(s). In this regard, the Clearing House will endeavour to terminate the FCM Portfolio Margining Arrangements within five business days following receipt of written notice from the FCM Clearing Member, but owes no duty or obligation to the relevant FCM Clearing Member to do so.

In order to prevent abuse of the FCM Portfolio Margining Service, following the termination of the FCM Portfolio Margining Service in respect of an FCM Client, an FCM Clearing Member will not be entitled to submit an FCM Portfolio Margining Request respect of the same FCM Client for a period of 30 calendar days following termination of the FCM Portfolio Margining Service in respect of such FCM Client.

(c) FCM Portfolio Margining Eligibility Criteria

(A) Eligible FCM Clearing Members. For an FCM Clearing Member to offer FCM Portfolio Margining Service to its FCM Clients, the FCM Clearing Member must be approved to participate in both the FCM SwapClear Clearing Service and the FCM Listed Interest Rates Clearing Services.

- (B) Eligible FCM Clients. In order to be eligible for the FCM Portfolio Margining Service, a Nominated FCM Client must receive FCM SwapClear Clearing Services and FCM Listed Interest Rates Clearing Services from the same FCM Clearing Member.
- (C) FCM Client Consent. The FCM Joint Rates Service Clearing Member must confirm to the Clearing House (in the form of a written representation) that each Nominated FCM Client has provided its informed consent to the operation of the FCM Portfolio Margining Service in respect of its positions in FCM SwapClear Contracts and FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts.
- (D) Recent Termination. FCM Portfolio Margining Arrangements in respect of the FCM Client have not, in the last 30 calendar days, been terminated in accordance with paragraph 2.1.24(b)(D) above.
- (E) Restrictions. For the avoidance of doubt, it is not possible to apply the FCM Portfolio Margining Service:
 - (A) to Nominated FCM Clients that are not the same legal entity (*e.g.*, to affiliated Nominated FCM Clients); or
 - (B) between positions held in an FCM Joint Rates Service Clearing Member's Proprietary Account and any positions recorded in any FCM Omnibus Client Account with LCH of such FCM Clearing Member.
- (d) FCM Portfolio Margining Arrangements
 - (A) FCM Portfolio Margining Calculation Tool. The Clearing House has developed a risk management tool that identifies portfolio-margining opportunities as between FCM SwapClear Contracts and FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts held on behalf of the same Nominated FCM Client ("Portfolio Margining Calculation Tool"). FCM Joint Rates Service Clearing Members participating in the FCM Portfolio Margining Service will receive certain information in relation to the operation of the Portfolio Margining Service, as described in more detail in paragraph 2.1.24(e) below.

A list of FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts is published on the Clearing House's website from time to time.

- (B) FCM Portfolio Margining Process.
 - (A) At a predetermined time following the close of the FCM Listed Interest Rates Clearing Services on each business day, the Clearing House will run the FCM Portfolio Margining Calculation Tool. The FCM Portfolio Margining Calculation Tool will identify, in respect of each Nominated FCM Client, any off-setting positions between FCM SwapClear Contracts and FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts, including any FCM Portfolio Margining Eligible FCM Listed Interest Rates Contracts that are FCM Portfolio Margined Contracts (the "Identified Off-Setting FCM Listed Interest Rates Contracts").
 - (B) The FCM Portfolio Margining Calculation Tool is a risk management tool that is not designed to provide FCM Joint Rates Service Clearing Members participating in the FCM Portfolio Margining Service with optimal margining treatment or reduce margin Accordingly, the Clearing House makes representations or assurances as to the impact of the FCM Portfolio Margining Calculation Tool on a participating FCM Clearing Member's margin calls. Furthermore, the Clearing House accepts no liability in respect of the operation of the FCM Portfolio Margining Service of the FCM Portfolio Margining Calculation Tool. The provision and operation of the FCM Portfolio Margining Calculation Tool is subject to FCM Regulation 44.
- (C) Transfer of Identified Off-Setting FCM Listed Interest Rates Contracts. Once identified in accordance with subparagraph (d)(ii)(A) above:
 - (A) any Identified Off-Setting FCM Listed Interest Rates Contracts that are not FCM Portfolio Margined Contracts will be transferred from the relevant FCM Omnibus Listed Interest Rates Client Account with LCH to the relevant FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH, at which point they will become FCM Portfolio Margined Contracts;
 - (B) any FCM Portfolio Margined Contracts that are not identified as Identified Off-Setting FCM Listed Interest Rates Contracts as part of the relevant cycle, will be

transferred from the relevant FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH to the relevant FCM Omnibus Listed Interest Rates Client Account with LCH, at which point they will cease to be FCM Portfolio Margined Contracts; and

- (C) the Clearing House's records will evidence the time of the transfers referred to in (A) and (B) above.
- (D) Treatment of FCM Portfolio Margined Contracts in the FCM Client Sub-Account of the FCM Omnibus SwapClear Client Account with LCH.
 - (A) FCM Portfolio Margined Contracts will continue to be treated as FCM Listed Interest Rates Contracts.
 - (B) For the avoidance of doubt, FCM Portfolio Margined Contracts are not eligible for compression runs.
 - (C) For so long as an FCM Listed Interest Rates Contract is an FCM Portfolio Margined Contract, any lifecycle events in connection with such FCM Portfolio Margined Contract, including trade transfer, position transfer and give-ups, shall be suspended.
 - (D) FCM Portfolio Margined Contracts and associated offsetting FCM SwapClear Contracts are not eligible for transfer. An FCM Clearing Member that wishes to transfer an FCM Portfolio Margined Contract and associated off-setting FCM SwapClear Contract must reverse the FCM Portfolio Margining Process for such Contracts prior to, and as a precondition to, the transfer of such Contracts.

(e) Portfolio Margining Reports

The Clearing House will provide each FCM Joint Rates Service Clearing Member participating in the FCM Portfolio Margining Service details of the transfers described in paragraph 2.1.24(d)(C) above once each business day.

SCHEDULE 2.1A SWAPCLEAR PROCESSING SCHEDULE

This table outlines the daily processes and timetable of the FCM SwapClear operation and constitutes a "**Business Day**" for the purpose of the FCM Regulations. FCM Clearing Members will be informed of changes to this timetable via member circular. All times shown are in London time.

SWAPCLEAR PROCESSING SCHEDULE						
Time						
05:00	SwapClear Opens					
by 09:30	Registration of Backloaded Trades and confirmation of deleted trades from T-1 (see Section 2.1.3(e)2.1.3(e))					
16:00	Deadline for PPS calls in London					
24:00	SwapClear Closes					

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SCHEDULE 2.1B CONFIDENTIALITY, NON-DISCLOSURE AND PARTICIPATION IN THE 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 FCM Clearing Member, its associated companies and advisers, or to which the FCM Clearing Member, its associated companies and advisers obtains or otherwise has access as a result of participation in the Rates Service DMP, (which, for the avoidance of doubt, does not include any information, data or documents provided to the Clearing House by the FCM Clearing Member).
- 1.2 "**DMG Member**" means an individual appointed by a Nominating FCM Clearing Member.
- 1.3 "Nominating FCM Clearing Member" means a SwapClear Member who, through their obligations under the Rates Service DMP, makes available a representative to serve on the Rates Service DMG.
- 1.4 "Permitted Purpose" means proper fulfillment by the FCM Clearing Member of its duties under the Rates Service DMP Annex and includes, after the completion of the Auction, the use by the FCM Clearing Member, 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 on-going portfolio management and to enable it to comply with on-going legal or regulatory requirements.
- 1.5 References denoting the masculine (including "his" and "he") shall be construed as the feminine if the DMG Member is female.
- 1.6 All other terms have the meaning ascribed to them in the FCM Rulebook, which includes the Default Rules (including the Rates Service DMP Annex).

General Obligations of the FCM Clearing Member

The obligations of an FCM Clearing Member set forth in this Schedule shall only apply in the event such FCM Clearing Member does not have an affiliated SwapClear Clearing Member that has agreed to participate in the Rates Service DMP on behalf of such FCM Clearing Member.

Confidentiality and Non-Disclosure

2. **Confidentiality**

2.1 The FCM Clearing Member 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 Schedule in respect thereof and, subject to paragraph 2.3, 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 FCM Clearing Member shall be relieved of such an obligation of confidentiality in respect of any Confidential Material if:

- 2.1.1 it comes into the public domain other than through a breach by the FCM Clearing Member of this Schedule; or
- 2.1.2 the FCM Clearing Member 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 FCM Clearing Member.
- 2.2 The FCM Clearing Member further agrees that it will not use any Confidential Material for any purpose other than the Permitted Purpose. In this regard the FCM Clearing Member 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 might result in the gaining of an unfair commercial advantage by the FCM Clearing Member over other members of the Clearing House SwapClear Service.
- 2.3 Subject to paragraph 2.5, the FCM Clearing Member 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 FCM Clearing Member agrees to establish and adhere to adequate procedures (including, without limitation, the establishment of information barriers) 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 Agreement and, in relation to any Confidential Material, shall expire on the second anniversary of the date the Confidential Material was first provided to the FCM Clearing Member.

3. **Secrecy**

- 3.1 Except in accordance with the terms of this Annex, the FCM Clearing Member agrees that it shall treat as strictly confidential and shall not disclose or allow to be divulged to any person:
 - 3.1.1 Confidential Material;
 - 3.1.2 the fact that it has received any Confidential Material;
 - 3.1.3 the existence of any discussions or negotiations between the parties in this matter:
 - 3.1.4 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 FCM

Clearing Member being relieved of such an obligation because of the circumstances covered in paragraphs 2.1.1 and 2.1.2.

3.2 The Clearing House undertakes to ensure that the FCM Clearing Member is fully apprised of information on the Rates Service DMP that it makes public and which is accordingly of relevance to the FCM Clearing Member's obligations.

4. **Property**

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

5. Return of Confidential Material

5.1 Upon request by the Clearing House, and in any event upon fulfillment of the Permitted Purpose, the FCM Clearing 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 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 FCM Clearing Member 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 paragraph 7, 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 by the FCM Clearing Member and any of its employees or representatives to whom Confidential Material is provided in accordance with this Schedule, the FCM Clearing Member's participation in the Rates Service DMP shall not prevent the FCM Clearing Member from carrying out any transaction, or otherwise providing investment services in respect of, investments that the FCM Clearing Member 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 FCM Clearing Member 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 FCM Clearing Member or any of its directors, employees or other representatives.

7. **Liability**

7.1 Subject to FCM Regulation 44 (*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 FCM Clearing Member 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 willful 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 Rates Service DMG, and for the accuracy of the information (confidential material as defined in the Annex to this Agreement) that it distributes to the FCM Clearing Member in connection with the Rates Service DMP.
- 7.3 Under no circumstances shall the Clearing House have any liability to the FCM Clearing Member for (a) any consequential loss or other indirect loss of whatsoever kind or (b) loss of anticipated profit (whether direct or indirect).

8. **Remedies**

8.1 Without affecting any other rights or remedies that the Clearing House may have, the FCM Clearing Member acknowledges that the Clearing House may be irreparably harmed by any breach of the terms of this Schedule 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 Schedule.

Confidentiality and Non-Disclosure and General Terms of Participation in Rates Service DMG

9. **Conflict of interest**

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

10. **Confidentiality**

10.1 Subject to paragraph 10.3 below, the FCM Clearing Member shall procure that the Rates Service DMG Member shall keep all Confidential Material strictly confidential to himself and will not disclose it to any person who is not a Rates Service DMG Member (including, for the avoidance of doubt, the FCM Clearing Member who recommended his appointment to the Rates Service DMG ("the Nominating FCM Clearing Member") or his employer (if different) or any other employee, adviser, officer or fellow worker of that FCM Clearing Member or his employer) without the prior written permission of the Managing Director, Risk of the Clearing House or his properly authorized delegate, providing always that the Rates Service DMG 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 2.1.1 and 2.1.2.

10.2 Subject to paragraph 10.3 below, the FCM Clearing Member shall procure that the Rates Service DMG Member shall not use any Confidential Material for any purpose other than the proper fulfillment of his duties as a Rates Service DMG Member.

- 10.3 The parties acknowledge that, in the event that a Default Notice is issued by the Clearing House in respect of any SwapClear Clearing Member, the Rates Service DMG Member may be required by the Nominating FCM Clearing Member 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 Rates Service DMG 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 Rates Service DMG 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 Rates Service DMG Member of the Rates Service DMG, the FCM Clearing Member shall procure that the Rates Service DMG 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 Rates Service DMG Member is permitted to retain a copy thereof to comply with applicable legal or regulatory requirements.

11. Warranty and Representation

- 11.1 The FCM Clearing Member represents and warrants that it will procure that:
 - the Nominating FCM Clearing Member and the Rates Service DMG Member's employer (if different) are aware of the obligations of confidentiality arising out of this Agreement; and
 - 11.1.2 nothing in this Schedule will cause the Rates Service DMG Member to breach any duty or obligation (whether arising pursuant to contract or otherwise) which he owes to the Nominating FCM Clearing Member or to his employer, if different, or any other contract counterparty of the Rates Service DMG Member.

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

12.1 The Clearing House will treat all Confidential Material in the terms envisaged in this Annex to the Agreement, confining use to the Rates Service DMP, 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.

13. Third Party Rights

13.1 A person who is not a party to this Annex shall have no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any of its terms.

SCHEDULE 2.1C

RATE CHANGE ANNEXES

<u>SWAPCLEAR FCM SERVICE - RATE CHANGE ANNEX – SECURED OVERNIGHT</u> <u>FINANCING RATE (SOFR)</u>

1. SCOPE AND INTERPRETATION

- (a) This Annex constitutes a "Rate Change Annex" as defined in and pursuant to the FCM Regulations and supplements and forms part of the FCM Rulebook.
- (b) This Annex relates to the change in the rate from the Fed Funds Rate to the Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as administrator (or a successor administrator) (**SOFR**) for the purposes of (i) calculating the Price Alignment Amount, and (ii) constituting the relevant underlying benchmark for the instruments used to construct the Clearing House's zero coupon yield curves under 2.1.7 of the FCM Procedures to calculate the net present value, each in relation to the Impacted FCM SwapClear Contracts.
- (c) The terms of this Annex shall apply to all Impacted FCM SwapClear Contracts (as set-out in the Rate Change Notice relating to SOFR) that are registered with the Clearing House as set out below. For the avoidance of doubt, (i) no other FCM SwapClear Contract shall be subject to, or affected by, the terms of this Annex and each FCM SwapClear Contract shall remain in full force and effect, and (ii) the FCM SwapClear Contract Terms shall not be amended by the terms of this Annex.
- (d) Capitalized terms used but not otherwise defined in this Annex have the meaning given to them in the FCM Regulations.
- (e) The terms of this Annex relating to operational or procedural matters may be supplemented, modified, amended, replaced or withdrawn from time to time by the Clearing House in its sole discretion through a member circular or such other method as the Clearing House shall determine is appropriate.

2. **DEFINITIONS**

For the purposes of this Annex:

Auction Adjustment per Unit means, in relation to a Maturity Bucket, an amount in USD equal to (i) the aggregate of all Auction Winner Amounts for that Maturity Bucket divided by (ii) the total notional amount of Discounting Risk Swaps in that Maturity Bucket which have been liquidated pursuant to the Cash Settlement Schedule.

Auction Date means, in relation to a Rate Change Notice relating to SOFR, the date specified as such by the Clearing House in such Rate Change Notice, being the date on which the auctions referred to herein and the Cash Settlement Supplement shall be held and certain amounts payable hereunder shall be calculated.

Auction Winner means, in relation to the Net Auction Contract Pair in respect of a Maturity Bucket, each Cash Settlement Participant (as defined in the Cash Settlement Schedule) that has submitted the

winning price for such Net Auction Contract Pair, as determined by the Clearing House in accordance with the Cash Settlement Supplement.

Auction Winner Amount means, in relation to the Net Auction Contract Pair for Maturity Bucket and an Auction Winner, an amount in USD equal to the product of: (i) that Auction Winner's Winning Bid Quantity; (ii) the difference between that Auction Winner's Winning Bid Price and the Mid-Price; and (iii) the SOFR Basis Point Cash Value per Million, each for that Maturity Bucket. If the Auction Winner's Winning Bid Price is a price that by reference to the Mid-Price is (a) in favor of the Clearing House, the Auction Winner Amount shall be a positive amount or (b) in favor of the Auction Winner, the Auction Winner Amount shall be a positive amount.

Cash Compensation Contract means each contract determined by the Clearing House and registered in the relevant Proprietary Account, or an FCM Client Sub-Account pursuant to Section 8 below.

Cash Only Client means an FCM Client that has its positions recorded in a Cash Only Client Position Account.

Cash Only Client Position Account means each FCM Client Sub-Account registered in the name of an FCM Client that is identified as a Cash Only Client Position Account in a Cash Only Election Notice.

Cash Only Client Position Account Auction Adjustment means, in relation to a Cash Only Client Position Account and a Maturity Bucket, an amount in USD in favor of the Clearing House or an FCM Clearing Member (as applicable) equal to the product of (i) the notional amount of Discounting Risk Swaps for that Maturity Bucket that would, but for the delivery of the Cash Only Election Notice, have been registered in that Cash Only Client Position Account and which have been liquidated pursuant to the Cash Settlement Schedule, and (ii) the Auction Adjustment per Unit for that Maturity Bucket.

Cash Only Election Cut-Off Date is the date specified as such by the Clearing House in a Rate Change Notice relating to SOFR, being the date by which FCM Clearing Members must deliver any Cash Only Election Notices to the Clearing House.

Cash Only Election Notice means a written notice delivered by an FCM Clearing Member to the Clearing House in accordance with this Annex identifying those FCM Clients and the related FCM Client Sub-Accounts which have elected to be Cash Only Client Position Account(s) in accordance with Section 4 of this Annex.

Cash Settlement Schedule means the schedule to the SCM SOFR Rate Change Annex which setsout the terms on which the Clearing House shall conduct one or more auctions for purposes of determining certain amounts, curves and spreads and related information relevant to this Annex, as supplemented by any Cash Settlement Supplement published by the Clearing House from time to time. The Cash Settlement Schedule supplements, and forms part of, this Annex.

Cash Settlement Supplement means any document identified as such by the Clearing House which supplements and forms part of the Cash Settlement Schedule and sets out further terms in relation to the auctions.

Cash Valuation Change Amount (MXN) means each amount denominated in MXN and determined in accordance with Section 7.5 of this Annex.

Cash Valuation Change Amount (USD) means each amount denominated in USD and determined in accordance with Section 7.1, Section 7.2 or Section 7.3 of this Annex.

De Minimis Participant Account means, in relation to a Maturity Bucket, any Proprietary Account, or any FCM Client Sub-Account that, as of the Swap Portfolio Calculation Date, would have an allocation of Discounting Risk Swaps in a given Maturity Bucket with a notional amount that is closer to zero than to the integral number set out in the table in paragraph 5.1(c) in relation to that Maturity Bucket.

Discounting Risk Auction has the meaning given to it in the Cash Settlement Schedule.

Discounting Risk Swaps means the FCM SwapClear Contracts determined, identified and notified by the Clearing House in accordance with Section 5 of this Annex and entered into and registered between the Clearing House and an FCM Clearing Member pursuant to Regulation 48A.

FedFunds Discounted Value means, in relation to an Impacted FCM SwapClear Contract, the net present value, as of the end of the Business Day in New York on the Auction Date, of all future cash flows under that Impacted FCM SwapClear Contract calculated using the Fed Funds Rate as the discounting rate for the purposes of constructing the zero coupon yield curves under 2.1.7 of the FCM Procedures (with the future cash flows calculated in the same manner as for the determination of the SOFR Discounted Value). If the net present value represents an asset or positive value for the Clearing House, such FedFunds Discounted Value shall be a positive amount and if the net present value represents a liability or negative value for the Clearing House, such FedFunds Discounted Value shall be a negative amount.

Maturity Bucket means, in relation to the Impacted FCM SwapClear Contracts, Discounting Risk Swaps and Net Auction Contract Pairs, a group of such contracts which all have the same maturity, being either two years, five years, ten years, fifteen years, twenty years or thirty years from the date of registration.

Mid-Price has, in relation to the Net Auction Contract Pair for a Maturity Bucket, the meaning given to it in the Cash Settlement Schedule, and shall be expressed in basis points.

Mid-Price Auction has the meaning given to it in the Cash Settlement Schedule.

MXN Impacted SwapClear Contracts has the meaning given to it in Section 7 of this Annex.

Net Auction Contract Pair has the meaning given to it in the Cash Settlement Schedule.

SCM SOFR Rate Change Annex means the rate change annex published by the Clearing House in relation to SOFR under Regulation 60B of the UK General Regulations.

SOFR Basis Point Cash Value per Million means, in relation to the Net Auction Contract Pair for a Maturity Bucket, an amount in USD equal to the change (expressed as a positive if a gain and a negative if a loss) in value of such Net Auction Contract Pair with a notional amount of USD one million as a result of adding a one basis point spread to the SOFR leg, as determined by the Clearing House in its sole discretion.

SOFR Discounted Value means, in relation to an Impacted FCM SwapClear Contract, the net present value, as of the end of the Business Day in New York on the Auction Date, of all future cash flows under that Impacted FCM SwapClear Contract using the SOFR Discounting Curve for the purposes of such calculation (with the future cash flows calculated in the same manner as for the determination of the FedFunds Discounted Value). If the net present value represents an asset or positive value for the Clearing House, such SOFR Discounted Value shall be a positive amount and if the net present value represents a liability or negative value for the Clearing House, such SOFR Discounted Value shall be a negative amount.

SOFR Discounting Curve means the SOFR pricing curve constructed by the Clearing House in accordance with Section 4 of the Cash Settlement Schedule.

Swap Portfolio Calculation Date means, in relation to a Rate Change Notice relating to SOFR the date specified as such by the Clearing House in such Rate Change Notice relating to SOFR, being the date on which the Clearing House shall determine the portfolios of Discounting Risk Swaps in relation to all Impacted FCM SwapClear Contracts registered with the Clearing House on such date.

Winning Bid Price means, in relation to the Net Auction Contract Pair for a Maturity Bucket and an Auction Winner, the price payable to, or by, that Auction Winner to the Clearing House, expressed as a positive or negative spread in basis points on the SOFR leg of the Net Auction Contract Pair for that Maturity Bucket and determined through a modified Dutch auction as further set-out in the Cash Settlement Supplement(s). For the avoidance of doubt: (a) if the Clearing House is the receiver of SOFR under the Net Auction Contract Pair, and (1) the spread is a positive amount, the Winning Bid Price shall be a negative amount; and (b) if the Clearing House is the receiver of the Fed Funds Rate under the Net Auction Contract Pair, and (1) the spread is a positive amount, the Winning Bid Price shall be a negative amount; or (2) the spread is a negative amount, the Winning Bid Price shall be a negative amount; or (2) the spread is a negative amount, the Winning Bid Price shall be a positive amount; or (2) the spread is a negative amount, the Winning Bid Price shall be a positive amount.

Winning Bid Quantity means, in relation to an Auction Winner and a Net Auction Contract Pair for a Maturity Bucket, the notional amount (expressed in units of USD one million) of the Discounting Risk Swap related to such Net Auction Contract Pair (or the part thereof) which will be determined by the Clearing House pursuant to the Cash Settlement Supplement and registered in the Proprietary Account of the Auction Winner.

3. OBLIGATIONS TO MAKE CERTAIN CALCULATIONS AND ENTER INTO CERTAIN CONTRACTS

(a) In connection with the change from the Fed Funds Rate to SOFR described in Section 1(b) above, pursuant to and in accordance with the Clearing House's powers under Regulation 48A of the FCM Regulations, this Annex sets out the method by which the Clearing House will:

Cash Valuation Change Amount (USD), Cash Valuation Change Amount (MXN) and Cash Compensation Contracts

- (i) for each Proprietary Account and each FCM Client Sub-Account, calculate the following amounts, in each case, if any:
 - (A) Cash Valuation Change Amount (USD); and
 - (B) Cash Valuation Change Amount (MXN),
 - each of which are "Rate Change Payments" for the purpose of Regulation 48A.
- (ii) determine and register, pursuant to Regulation 48A, certain Cash Compensation Contracts in each Proprietary Account and FCM Client Sub-Account in accordance with Section 8 of this Annex in order to effect the payment of each Cash Valuation Change Amount (USD), Cash Valuation Change Amount (MXN), Cash Only Client Position Account Auction Adjustment, and Auction Winner Amount, in each case, if any:

Discounting Risk Swaps and Auction Winner Amounts

(iii) subject to (b) below, for (x) each Proprietary Account and (y) each FCM Client Sub-Account which is not a Cash Only Client Position Account, determine how certain Discounting Risk Swaps shall be identified in accordance with Section 5, registered and entered into between the Clearing House and each FCM Clearing Member pursuant to Regulation 48A and the terms of those Discounting Risk Swaps;

- (iv) subject to (b) below, for each Cash Only Client Position Account, calculate the related Cash Only Client Position Account Auction Adjustments (which shall also each be a "Rate Change Payment" for the purpose of Regulation 48A); and
- (v) for each Auction Winner, calculate the Auction Winner Amount (which shall also be a "Rate Change Payment" for the purpose of Regulation 48A).
- (b) Any account that is a De Minimis Participant Account in relation to a Maturity Bucket shall not have any Discounting Risk Swaps in that Maturity Bucket determined or registered in its name and shall not be obliged to pay, or entitled to receive, any Cash Only Client Position Account Auction Adjustments. Any Cash Only Election Notice received in relation to an FCM Client Sub-Account that is a De Minimis Participant Account as of the Auction Date shall be invalid and shall have no effect whatsoever (and, for the avoidance of doubt, the Discounting Risk Swaps that would otherwise be registered in any De Minimis Participant Account shall not count towards the Net Auction Contract Pair for any Maturity Bucket).

4. CLEARING MEMBER DEALINGS WITH FCM CLIENTS AND CLIENT CASH ONLY ELECTIONS

Client Cash Only Elections

- (a) In relation to its SwapClear Client Clearing Business, an FCM Clearing Member shall provide each FCM Client with an election not to have Discounting Risk Swaps registered on that FCM Client's behalf in relation to Impacted FCM SwapClear Contracts registered in the relevant FCM Client Sub-Account and instead, subject to Section 4(d) below, to assume a right, or an obligation to pay or be paid an amount equal to the Cash Only Client Position Account Auction Adjustment in respect of each FCM Client Sub-Account, as determined pursuant to this Annex (except in the circumstances provided for in the Cash Settlement Schedule, where the election not to have Discounting Risk Swaps registered may be overridden).
- (b) An FCM Clearing Member shall be entitled to deliver Cash Only Election Notices to the Clearing House at any time up to, and including, the Cash Only Election Cut-Off Date. All Cash Only Election Notices must be delivered to the Clearing House via the SwapClear Portal.
- (c) No FCM Clearing Member shall be entitled to deliver a Cash Only Election Notice in respect of its Proprietary Accounts and any such notice shall be invalid and shall have no effect whatsoever.
- (d) The Clearing House reserves the right to reject any Cash Only Election Notice received by the Clearing House after the end of the Business Day in New York on the Cash Only Election Cut-Off Date. An FCM Clearing Member shall only be entitled to deliver a Cash Only Election Notice in respect of all, but not some only, of the FCM SwapClear Contracts registered in the name of an FCM Client in a single FCM Client Sub-Account.
- (e) The delivery by an FCM Clearing Member of a Cash Only Election Notice shall be deemed, as of the end of the Business Day in New York on the Cash Only Election Cut-Off Date, to be

an irrevocable instruction of that FCM Clearing Member (for itself and acting on behalf of the relevant FCM Client(s) for whom the FCM Client Sub-Account which such Cash Only Election Notice affects is held) to the Clearing House to determine the Cash Valuation Change Amount (USD), the Cash Valuation Change Amount (MXN) and each Cash Only Client Position Account Auction Adjustment payable to or by that FCM Clearing Member in accordance with Section 7.3, Section 7.4 and Section 7.5 of this Annex and to register the related Cash Compensation Contracts in the relevant FCM Client Sub-Account in accordance with this Annex.

- (f) If an FCM Clearing Member does not deliver a Cash Only Election Notice in respect of an FCM Client Sub-Account held for an FCM Client then that shall be deemed, as of the end of the Business Day in New York on the Cash Only Election Cut-Off Date, to be an irrevocable instruction of that FCM Clearing Member (for itself and acting on behalf of that FCM Client) to the Clearing House to (i) determine the Cash Valuation Change Amount (USD) and the Cash Valuation Change Amount (MXN) in accordance with Section 7.2 and Section 7.5 of this Annex and to register the related Cash Compensation Contract in the relevant FCM Client Sub-Account in accordance with this Annex, and (ii) determine the Discounting Risk Swaps to be allocated to such FCM Client's FCM Client Sub-Account in accordance with this Annex and to register such Discounting Risk Swaps in such account.
- (g) By not delivering a Cash Only Election Notice, in relation to an FCM Client Sub-Account, each FCM Clearing Member represents and warrants to the Clearing House on the Cash Only Election Cut-Off Date that (i) it has used reasonable endeavors to obtain instructions from the FCM Client in relation to the exercise of an election not to receive Discounting Risk Swaps in relation to such account and (ii) it has not received instructions from any FCM Client to deliver a Cash Only Election Notice in respect of such account.

Clearing Member Obligations

- (h) Each FCM Clearing Member (and in the case of (h)(vi) below, each FCM Clearing Member and the Clearing House):
 - (i) agrees to use reasonable endeavors to provide its FCM Clients with information on (i) the change in the rate from the Fed Funds Rate to SOFR pursuant to the terms of Regulation 48A and this Annex, (ii) the amounts payable pursuant to the terms the Cash Compensation Contracts which may be registered in that FCM Client's FCM Client Sub-Account pursuant to the terms of this Annex, (iii) the Discounting Risk Swaps which may be allocated to that FCM Client's FCM Client Sub-Account pursuant to the terms of this Annex, and (iv) other information (indicative or otherwise) in relation to each FCM Client's FCM Client Sub-Account that the Clearing House has notified FCM Clearing Members must be provided to FCM Clients.. Such information shall include the terms of this Annex and any information which it has received from, or is made available by, the Clearing House in connection with this Annex, including any risk disclosure statements relating to the matters herein;
 - (ii) agrees that it, and each applicable FCM Client, shall be bound by the terms of any Cash Compensation Contracts and Discounting Risk Swaps registered pursuant to this Annex and all payment obligations thereunder (as determined by the Clearing House pursuant to this Annex);
 - (iii) represents and warrants to the Clearing House as at the Cash Only Election Cut-off Date that each Cash Only Client in relation to which it has delivered a Cash Only Election Notice (A) has instructed the FCM Clearing Member to deliver the Cash

Only Election Notice on its behalf, and (B) has expressly agreed (i) that by electing for its FCM Client Sub-Account to be a Cash Only Client Position Account under this Annex it shall not, other than if (X) the Cash Settlement Schedule provides that one or more Discounting Risk Auctions have failed, or (Y) some of the Discounting Risk Swaps are not successfully auctioned and liquidated in accordance with the Cash Settlement Schedule, be party to any Discounting Risk Swaps (ii) that it shall be obliged to pay or entitled to receive the Cash Valuation Change Amount (USD), the Cash Valuation Change Amount (MXN) and, provided the Cash Only Client Position Account is not a De Minimis Participant Account, each Cash Only Client Position Account Auction Adjustment determined in accordance with Section 7.3, Section 7.4 and Section 7.5 of this Annex, and (iii) that the Cash Only Client Position Account Auction Adjustment may not be economically equivalent to being party to any such Discounting Risk Swaps or liquidating, closing-out, selling or replacing the Discounting Risk Swaps in the relevant market;

- (iv) acknowledges that the Cash Valuation Change Amounts, the Auction Winner Amounts, each Cash Only Client Position Account Auction Adjustment, and the spread in relation to the Discounting Risk Swaps shall be determined by reference to the Discounting Risk Auctions and the Mid-Price Auctions, and agrees to be bound by the results of such auctions and the terms of the Cash Settlement Schedule and the Cash Settlement Supplement;
- (v) agrees to perform all obligations and exercise all rights under this Annex, the Cash Settlement Schedule, the Cash Settlement Supplement, the Cash Compensation Contracts and the Discounting Risk Swaps in accordance with Applicable Law; and
- (vi) agrees that each Cash Compensation Contract and Discounting Risk Swap is being registered in the relevant account in connection with the matters specified in this Annex and the obligations thereunder are for the sole purpose of addressing the value and discounting risk impact of the change from the Fed Funds Rate to SOFR and effecting the payment of amounts owed to, or payable by, the Auction Winner.

5. DETERMINING THE PORTFOLIO OF DISCOUNTING RISK SWAPS

- 5.1 On the Swap Portfolio Calculation Date, the Clearing House shall allocate Impacted FCM SwapClear Contracts into different Maturity Buckets based on the tenor of the discounting risk associated with such Impacted FCM SwapClear Contracts. Any Impacted FCM SwapClear Contract that has discounting risk with a tenor that falls between two different Maturity Buckets shall be allocated to the nearest two Maturity Buckets in the Clearing House's sole and absolute discretion. Separately in respect of the Impacted FCM SwapClear Contracts allocated to each Maturity Bucket in each Proprietary Account and FCM Client Sub-Account, determine a portfolio of Discounting Risk Swaps which is designed to, in the Clearing House's sole and absolute discretion and to the extent practicable, replicate the Fed Funds Rate discounting risk profile in relation to such FCM SwapClear Contracts as of the Swap Portfolio Calculation Date. For the avoidance of doubt, the determination by the Clearing House pursuant to this paragraph may be different from an FCM Clearing Member's or FCM Client's models or methodologies. Each pair of Discounting Risk Swaps will:
 - (a) have a maturity of two years, five years, ten years, fifteen years, twenty years or thirty years from the date of registration;
 - (b) when registered, comprise a pair of FCM SwapClear Contracts whereby:

(i) under the first FCM SwapClear Contract, the Clearing House or the FCM Clearing Member (**Party X**) will receive Fed Funds and pay to the other party (**Party Y**) fixed amounts, which shall be determined by reference to the fixed rate, determined by the Clearing House in accordance with its usual processes, that would be payable on the fixed leg of a FCM SwapClear Contract at the close of business on the Swap Portfolio Calculation Date where the floating rate is the Fed Funds Rate and the maturity date corresponds to the applicable maturity referred to in (a) above; and

- (ii) under the second FCM SwapClear Contract, Party X will pay SOFR and receive from Party Y a fixed amount, which shall be a fixed rate, determined by subtracting the spread equal to the Mid-Price determined pursuant to the Cash Settlement Schedule from the fixed rate referred to in (i) above provided that if the process referred to in the Cash Settlement Schedule fails to provide the Mid-Price for the relevant Maturity Bucket, the Clearing House shall determine the spread for that Maturity Bucket using its customary methodology and applying it to observable market data points and applying linear interpolation where the Clearing House considers appropriate; and
- (c) have a notional amount that is determined by the Clearing House, in its sole and absolute discretion, where such notional amount shall be rounded to the nearest integral number set out in the following table:

Maturity Bucket	2Y	5Y	10Y	15Y	20Y	30Y
Amount in USD to which the notional amount will be rounded to	5,000,000	2,500,000	1,250,000	500,000	500,000	500,000

- 5.2 The Clearing House shall separately determine the portfolio of Discounting Risk Swaps in respect of each of the following (excluding, in relation to a Maturity Bucket, any De Minimis Participant Accounts in relation to that Maturity Bucket) as of the Swap Portfolio Calculation Date:
 - (a) the Impacted FCM SwapClear Contracts then registered in each FCM Clearing Member's Proprietary Account; and
 - (b) the Impacted FCM SwapClear Contracts then registered in each FCM Client's FCM Client Sub-Account.
- 5.3 The Clearing House shall promptly notify each FCM Clearing Member of each portfolio of Discounting Risk Swaps it has determined pursuant to this Section 5 in respect of each account held by each FCM Clearing Member as set out above.
- 5.4 Without prejudice to the above, at any time prior to the Swap Portfolio Calculation Date, the Clearing House may publish indicative portfolios of the Discounting Risk Swaps in relation to

the Impacted FCM SwapClear Contracts then registered in the name of an FCM Clearing Member for information only.

6. THE AUCTIONS

- On the Auction Date the Clearing House shall conduct one or more Discounting Risk Auctions and Mid-Price Auctions and each such auction shall be conducted in respect of both LCH's SCM service and LCH's FCM service. The initial terms of the Discounting Risk Auctions and the Mid-Price Auctions shall be as set out in the Cash Settlement Schedule and the Clearing House shall supplement such terms to provide further detail on the operation of the auctions through publication of one or more Cash Settlement Supplements, provided however that, the Clearing House shall not be entitled to materially alter the nature of the obligations of any FCM Clearing Member under this Rate Change Annex via any Cash Settlement Supplement. Each Cash Settlement Supplement shall be deemed to supplement, and form part of, the Cash Settlement Schedule and the Clearing House shall be entitled to supplement, modify, amend, replace or withdraw the Cash Settlement Schedule or Cash Settlement Supplements (in whole or in part) from time to time in its sole discretion through such method as the Clearing House shall determine is appropriate.
- 6.2 Each FCM Clearing Member that is an Expected Cash Settlement Participant (as defined in the Cash Settlement Schedule) agrees that it shall use all reasonable efforts to submit pricing in accordance with this Cash Settlement Schedule for the Net Auction Contract Pair in each Maturity Bucket.
- 6.3 If, having taken the steps in Section 4(a) of the of the Cash Settlement Schedule in connection with a Discounting Risk Auction, where applicable, no prices are received in relation to one or more of the Maturity Buckets then the Clearing House will determine that no further auctions shall take place with respect to the relevant Maturity Bucket(s) and all Cash Only Clients shall have Discounting Risk Swaps for such relevant Maturity Bucket(s) registered in the FCM Client Sub-Accounts notwithstanding any Cash Only Election Notices previously delivered in respect of such FCM Clients.
- If, in relation to a Maturity Bucket, the Clearing House is unable to auction and liquidate the full notional amount of the Discounting Risk Swaps that are the subject of the auction for that Maturity Bucket (including, without limitation, because the aggregate notional amount for which bids are received in relation to that Maturity Bucket is less than the entire notional amount of such Discounting Risk Swaps) (the Non-Auctioned Swaps), then the Clearing House shall, notwithstanding any Cash Only Election Notices previously delivered, allocate the Non-Auctioned Swaps to each Cash Only Client Position Account, with each Cash Only Position Client Account being allocated a share of the Non-Auctioned Swaps pro rata to that Cash Only Client Position Account's share of the total notional amount of Discounting Risk Swaps for that Maturity Bucket that would, but for the delivery of the Cash Only Election Notices, have been registered in each of the Cash Only Client Position Accounts.

7. THE CASH VALUATION CHANGE AMOUNTS AND THE CASH ONLY CLIENT POSITION ACCOUNT AUCTION ADJUSTMENTS

All Impacted FCM SwapClear Contracts other than TIIE Interest Rate Swaps denominated in MXN

The following provisions are applicable in relation to all Impacted FCM SwapClear Contracts other than Impacted FCM SwapClear Contracts that are TIIE interest rate swaps denominated in MXN. With respect to the calculations to be performed under Section 7.1 to 7.3 (inclusive) below, for the purposes of determining the Cash Valuation Change Amount (USD) in relation

to non-deliverable interest rate swaps the Clearing House shall first convert into USD the value of the discounted future cash flows which are not denominated in USD by applying the relevant rate of exchange as determined by the Clearing House in accordance with its usual procedures. Each of the calculations performed under Sections 7.1 to 7.3 (inclusive) below shall include any non-deliverable interest rate swaps registered in the relevant account as of the end of the Business Day in New York on the Auction Date.

Proprietary Accounts

- 7.1 Immediately following the conclusion of Discounting Risk Auctions (or determination by the Clearing House that such auctions shall not occur) on the Auction Date, the Clearing House shall calculate the Cash Valuation Change Amount (USD) in respect of each Proprietary Account as follows:
 - (a) the Clearing House shall calculate the aggregate FedFunds Discounted Value and the aggregate SOFR Discounted Value in relation to each Impacted FCM SwapClear Contract registered in each Proprietary Account as of the end of the Business Day in New York on the Auction Date;
 - (b) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in a Proprietary Account exceeds the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the difference and shall be an amount in favor of the Clearing House in relation to such Proprietary Account; and
 - (c) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in a Proprietary Account is less than the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the difference and shall be an amount in favor of the FCM Clearing Member in relation to such Proprietary Account.

FCM Client Sub-Accounts (excluding Cash Only Position Client Accounts)

- 7.2 The following only applies in relation to each FCM Client Sub-Account that is not a Cash Only Client Position Account. Immediately following the conclusion of the Discounting Risk Auctions (or determination by the Clearing House that such auctions shall not occur) on the Auction Date the Clearing House shall determine the Cash Valuation Change Amount (USD) in respect of the Impacted FCM SwapClear Contracts registered in each FCM Client Sub-Account that is not a Cash Only Client Position Account as follows:
 - (a) the Clearing House shall calculate the aggregate FedFunds Discounted Value and the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account as of the end of the Business Day in New York on the Auction Date;
 - (b) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account exceeds the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the excess and shall be an amount in favor of the Clearing House in relation to such account; and

(c) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account is less than the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the difference and shall be an amount in favor of the FCM Clearing Member in relation to such account.

Cash Only Client Position Accounts

- 7.3 The following applies only in relation to Cash Only Client Position Accounts. Immediately following the conclusion of the Discounting Risk Auctions (or determination by the Clearing House that such auctions shall not occur) on the Auction Date the Clearing House shall determine the Cash Valuation Change Amount (USD) in respect of the Impacted FCM SwapClear Contracts registered in a Cash Only Client Position Account as follows:
 - (a) the Clearing House shall calculate the aggregate FedFunds Discounted Value and the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account as of the end of the Business Day in New York on the Auction Date;
 - (b) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account exceeds the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the difference and shall be an amount in favor of the Clearing House in relation to such account;
 - (c) if the aggregate SOFR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in such account is less than the aggregate FedFunds Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (USD) shall be an amount equal to the absolute value of the difference and shall be an amount in favor of the FCM Clearing Member in whose name such Cash Only Client Position Account is held; and
- 7.4 Immediately following the conclusion of the Discounting Risk Auctions on the Auction Date, provided that the Discounting Risk Auction for the relevant Maturity Bucket occurs in accordance with the Cash Settlement Schedule, the Clearing House shall calculate, in respect of each Cash Only Client Position Account the aggregate Cash Only Client Position Account Auction Adjustment in relation to each Maturity Bucket.

Impacted FCM SwapClear Contracts which are TIIE Interest Rate Swaps denominated in MXN

- 7.5 Immediately following the conclusion of the Discounting Risk Auctions (or determination by the Clearing House that such auctions shall not occur) on the Auction Date the Clearing House shall determine the Cash Valuation Change Amount (MXN) separately in respect of each Impacted FCM SwapClear Contracts that is a TIIE interest rate swap denominated in MXN (MXN Impacted SwapClear Contracts) registered in each Proprietary Account or FCM Client Sub-Account, as follows:
 - (a) first, for the purposes of determining the Cash Valuation Change Amount (MXN) in relation to the MXN Impacted FCM SwapClear Contracts, the value of the discounted future cash flows thereunder shall be multiplied by the relevant USD/MXN rates of

- exchange determined by the Clearing House in accordance with the Clearing House's usual procedures;
- (b) second, the Clearing House shall calculate the aggregate FedFunds Discounted Value and the aggregate SOFR Discounted Value in relation to all MXN Impacted FCM SwapClear Contracts registered in such account as of the end of the Business Day in New York on the Auction Date;
- (c) if the aggregate SOFR Discounted Value in relation to all such MXN Impacted FCM SwapClear Contracts registered in such account exceeds the aggregate FedFunds Discounted Value in relation to all such MXN Impacted SwapClear Contracts then the Cash Valuation Change Amount (MXN) shall be an amount in MXN equal to the absolute value of the difference and shall be an amount in favor of the Clearing House in relation to such account; and
- (d) if the aggregate SOFR Discounted Value in relation to all MXN Impacted FCM SwapClear Contracts registered in such account is less than the aggregate FedFunds Discounted Value in relation to all such MXN Impacted FCM SwapClear Contracts then the Cash Valuation Change Amount (MXN) shall be an amount in MXN equal to the absolute value of the difference and shall be an amount in favor of the FCM Clearing Member in whose name such Cash Only Client Position Account is held.

8. REGISTRATION OF CASH COMPENSATION CONTRACTS

- 8.1 On the basis of the calculations set forth in Section 7 above, the Clearing House shall determine, as applicable, the Cash Valuation Change Amount (USD), the Cash Valuation Change Amount (MXN), the Cash Only Client Position Account Auction Adjustments and the Auction Winner Amount in respect of each Proprietary Account and each FCM Client Sub-Account and each FCM Clearing Member and the Clearing House (as applicable) irrevocably agrees that it shall be bound to pay such amounts to the other pursuant to the terms of the related Cash Compensation Contracts.
- 8.2 The Clearing House shall, pursuant to Regulation 48A, register a separate Cash Compensation Contract in each Proprietary Account and each FCM Client Sub-Account in relation to each of the following amounts (to the extent such amounts are applicable to such account)
 - (a) Cash Valuation Change Amounts (USD);
 - (b) Cash Valuation Change Amounts (MXN);
 - (c) Cash Only Client Position Account Auction Adjustments; and
 - (d) Auction Winner Amounts.
- 8.3 Each Cash Compensation Contract shall be registered for the sole purpose of effecting the payment of the Cash Valuation Change Amount (USD), Cash Valuation Change Amount (MXN), Cash Only Client Position Account Auction Adjustments or Auction Winner Amount (as applicable) to which it relates. It shall operationally be recorded as having a "Notional Amount" (as defined in the FCM SwapClear Contract Terms) of USD1 (or, in the case of the Cash Compensation Contract relating to the Cash Valuation Change Amount (MXN), MXN1), a "Termination Date" (as defined in the FCM SwapClear Contract Terms) falling two Business Days after the Auction Date, and an obligation on the Clearing House or the FCM Clearing Member (as applicable) to pay to the other an amount equal to the Cash

Valuation Change Amount (USD), Cash Valuation Change Amount (MXN), Cash Only Client Position Account Auction Adjustments or Auction Winner Amount (as applicable) in relation to the relevant account, with such amounts determined in accordance with Section 7 of this Annex. However, neither the Clearing House nor an FCM Clearing Member shall be required to pay any amounts under a Cash Compensation Contract other than the Cash Valuation Change Amount (USD), Cash Valuation Change Amount (MXN), Cash Only Client Position Account Auction Adjustment or Auction Winner Amount (as applicable) to which such Cash Compensation Contract relates.

8.4 Each FCM Clearing Member agrees to be bound by each Cash Compensation Contract registered pursuant to this Section 8, which shall, when registered, constitute an FCM SwapClear Contract between the Clearing House and the relevant FCM Clearing Member that has arisen by reason of the application of the Regulations to the Impacted FCM SwapClear Contracts.

9. REGISTRATION OF DISCOUNTING RISK SWAPS

- 9.1 Immediately following the conclusion of the Discounting Risk Auctions (or determination by the Clearing House that such auctions shall not occur) on the Auction Date the Clearing House shall notify all FCM Clearing Members of the Discounting Risk Swaps that will be registered in the accounts in accordance with this Annex. If the Clearing House exercises its powers pursuant to Section 4(b) of the Cash Settlement Schedule, then, as soon as practicable following such exercise, it shall notify all FCM Clearing Members of the Discounting Risk Swaps that will be registered in their Proprietary Accounts and FCM Client Sub-Accounts and it shall register such Discounting Risk Swaps in such accounts without regard to any Cash Only Election Notice.
- 9.2 Except as provided in Section 9.3 below, on the first Business Day immediately following the Auction Date the Clearing House shall:
 - (a) in relation to each Auction Winner, register the related Discounting Risk Swaps (or portion thereof) in the Proprietary Account of the Auction Winner and each Auction Winner and the Clearing House shall become party to such Discounting Risk Swaps;
 - (b) in relation to each Proprietary Account other than De Minimis Participant Accounts, register the Discounting Risk Swaps determined pursuant to Section 5.2(a) in each FCM Clearing Member's Proprietary Account; and
 - (c) in relation to each FCM Client Sub-Account other than Cash Only Client Position Accounts and De Minimis Participant Accounts, register the Discounting Risk Swaps determined pursuant to Section 5.2(b) in relation to such FCM Client in the relevant account.
- 9.3 Each FCM Clearing Member agrees to be bound by each Discounting Risk Swap registered pursuant to this Section 9, which shall, when registered, constitute FCM SwapClear Contracts between the Clearing House and the relevant FCM Clearing Member that have arisen by reason of the application of the Regulations to the Impacted FCM SwapClear Contracts.

10. DETERMINATIONS BINDING

Subject to Section 13, all determinations and calculations made by the Clearing House pursuant to this Annex and the Cash Settlement Schedule shall be binding and may in no circumstances (other than in the case of manifest error) be called into question by any person.

11. RECORDS

The Clearing House shall update its books and records to reflect the Discounting Risk Swaps, Cash Compensation Contracts, Cash Valuation Change Amounts (USD), Cash Valuation Change Amounts (MXN), Auction Winner Amounts and Cash Only Client Position Account Auction Adjustments resulting from the operation of this Annex and the Cash Settlement Schedule. The obligation to pay, or the right to receive, any amounts determined under this Annex may be reflected in the books and records of the Clearing House in such manner as the Clearing House determines is necessary to meet its operational requirements.

12. MISCELLANEOUS

- (a) The obligations of the Clearing House to each FCM Clearing Member shall be to perform its obligations as principal to such FCM Clearing Member in accordance with the Rulebook, but subject to the restrictions on the Clearing House's obligations and liabilities contained in the Rulebook and Section 13.
- (b) The terms of this Annex are without prejudice to the Clearing House's rights under the FCM Procedures to change the rate used for the purposes of (i) calculating the Price Alignment Amount, and (ii) constructing the Clearing House's zero coupon yield curves under 2.1.7 of the FCM Procedures from time to time and such terms shall not be relevant or binding on the Clearing House in respect of any such changes.
- (c) The performance by the Clearing House of its obligations hereunder shall always be subject to the provisions of the Rulebook.

13. LIMITATION OF LIABILITY

- 13.1 Without prejudice to the generality of Regulation 44, each FCM Clearing Member agrees:
 - (a) that neither the Clearing House nor any other member of the LCH Group will have any liability whatsoever to any FCM Clearing Member or any other person (including, without limitation, any FCM Client) whether in contract, tort (including, without limitation, negligence), trust, as a fiduciary or under any other cause of action, and whether in respect of any damages, loss or gain, cost or expense (whether direct, indirect, general, special, consequential, punitive or otherwise); and
 - (b) to waive any claim against the Clearing House or any member of the LCH Group; arising or that may arise in connection with:
 - (i) any determination, calculation, notification, registration, publication, exercise of discretion, or decision, taken or not taken by the Clearing House or any other member of the LCH Group in connection with this Annex; or
 - (ii) the determination or publication of any price, curve, data, quote or other information arising from, or in connection with, this Annex;

except in the case of fraud or wilful misconduct on the part of the Clearing House or any other member of the LCH Group.

13.2 Without prejudice to the generality of Regulation 44 and clause 14.1 above, each FCM Clearing Member further agrees:

that neither the Clearing House nor any other member of the LCH Group will have any liability whatsoever to any FCM Clearing Member or any other person (including, without limitation, any FCM Client) in tort (including, without limitation, negligence), trust, as a fiduciary or under any other non-contractual cause of action, or under any implied contractual term, and whether in respect of any damages, loss or gain, cost or expense (whether direct, indirect, general, special, consequential, punitive or otherwise); and

(b) to waive any non-contractual claim or claim under any implied contractual term against the Clearing House or any member of the LCH Group;

arising or that may arise in connection with the Clearing House's performance of its contractual duties or obligations under this Annex, except in the case of fraud or wilful misconduct on the part of the Clearing House or any other member of the LCH Group.

- 13.3 Each FCM Clearing Member agrees that neither the Clearing House nor any other member of the LCH Group (i) owes any duty of care to any person in connection with the performance of the Clearing House's duties or obligations or exercise of its rights under this Annex, save for the express contractual duties set forth in this Annex; (ii) is under any obligation to research, investigate, supplement, or verify the veracity of, any price, data, quote or other information received from an FCM Clearing Member in connection with this Annex; (iii) is acting as a fiduciary for, or as an advisor to, any FCM Clearing Member or FCM Client in connection with this Annex or any FCM SwapClear Contract registered as a result of the matters specified in this Annex; (iv) shall be under any requirement to consult with, or individually notify (other than as expressly set out in this Annex), an FCM Clearing Member or FCM Client in connection with making its determinations, exercising its discretions or performing its duties or obligations or exercising its rights, each under this Annex; or (v) has made any representation, express or implied, in relation to this Annex, and each FCM Clearing Member acknowledges that it has not relied on any representations made by the Clearing House or any other member of the LCH Group in relation to this Annex.
- 13.4 For the avoidance of doubt, notwithstanding anything herein or in the Cash Settlement Supplement or Cash Settlement Schedule, neither the Clearing House nor any other member of the LCH Group shall be liable for any obligations of, or to any person who is not, an FCM Clearing Member.

SWAPCLEAR FCM SERVICE - RATE CHANGE ANNEX – EURO SHORT TERM RATE (ESTR)

1. SCOPE AND INTERPRETATION

- (a) This Annex constitutes a "Rate Change Annex" as defined in the FCM Regulations and supplements and forms part of the FCM Rulebook.
- (b) This Annex relates to the change in the rate from the Euro OverNight Index Average (EONIA) to the Euro Short Term Rate (€STR) for the purposes of (i) calculating the Price Alignment Amount, and (ii) constituting the relevant underlying benchmark for the instruments used to construct the Clearing House's zero coupon yield curves under 2.1.7 of the FCM Procedures to calculate the net present value, each in relation to Impacted FCM SwapClear Contracts.
- (c) The terms of this Annex shall apply to all Impacted FCM SwapClear Contracts of the type set-out in the Rate Change Notice relating to €STR as set out below. For the avoidance of doubt, (i) no other FCM SwapClear Contract shall be subject to, or affected by, the terms of this Annex and each FCM SwapClear Contract shall remain in full force and effect, and (ii) the FCM SwapClear Contract Terms shall not be amended by the terms of this Annex.
- (d) Capitalized terms used but not otherwise defined in this Annex have the meaning given to them in the FCM Regulations.
- (e) The terms of this Annex relating to operational or procedural matters may be supplemented, modified, amended, replaced or withdrawn from time to time by the Clearing House in its sole discretion through a member circular or such other method as the Clearing House shall determine is appropriate.

2. **DEFINITIONS**

For the purposes of this Annex:

Cash Compensation Amount means, in relation to the Impacted FCM SwapClear Contracts in a Proprietary Account or an FCM Client Sub-Account, the amount determined in accordance with Section 4 below.

Cash Compensation Contract means each contract determined by the Clearing House and registered in the relevant Proprietary Account or an FCM Client Sub-Account pursuant to Section 4 below.

EONIA Discounted Value means, in relation to an Impacted FCM SwapClear Contract, the net present value, as of the end of the Business Day in New York on the €STR Calculation Date, of all future cash flows under that Impacted FCM SwapClear Contract calculated using EONIA as the discounting rate for the purpose of constructing the zero coupon yield curves under 2.1.7 of the FCM Procedures (with the future cash flows calculated in the same manner as for the determination of the €STR Discounted Value). If the net present value represents an asset or positive value for the Clearing House, such EONIA Discounted Value shall be a positive amount and if the net present value represents a liability or negative value for the Clearing House, such EONIA Discounted Value shall be a negative amount

€STR Calculation Date means in relation to a Rate Change Notice relating to **€STR** the date specified as such by the Clearing House and specified in the Rate Change Notice relating to **€STR**,

being the date on which the Clearing House shall calculate the amounts and values specified in Section 4 below.

ESTR Discounted Value means, in relation to an Impacted FCM SwapClear Contract, the net present value as of the end of the Business Day in New York on the €STR Calculation Date of all future cash flows under that Impacted FCM SwapClear Contract using €STR as the discounting rate for the purpose of constructing the zero coupon yield curves under 2.1.7 of the FCM Procedures (with the future cash flows calculated in the same manner as for the determination of the EONIA Discounted Value). If the net present value represents an asset or positive value for the Clearing House, such €STR Discounted Value shall be a positive amount and if the net present value represents a liability or negative value for the Clearing House, such €STR Discounted Value shall be a negative amount.

3. OBLIGATIONS TO MAKE CERTAIN CALCULATIONS AND ENTER INTO CERTAIN CONTRACTS

Pursuant to Regulation 48A of the Regulations, this Annex sets out the method for (i) calculating the Cash Compensation Amounts (which are Rate Change Payments" for purposes of Regulation 48A), and (ii) determining the terms of the Cash Compensation Contracts which shall be registered in order to effect the payment of the Cash Compensation Amounts

4. DETERMINATION OF THE CASH COMPENSATION AMOUNT AND THE CASH COMPENSATION CONTRACTS FOLLOWING THE CHANGE TO €STR

- (a) Immediately following the €STR Calculation Date the Clearing House shall calculate:
 - (i) the aggregate EONIA Discounted Value and the aggregate €STR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in each Proprietary Account as of the end of the Business Day in New York on the €STR Calculation Date; and
 - (ii) the aggregate EONIA Discounted Value and the aggregate €STR Discounted Value in relation to all Impacted FCM SwapClear Contracts registered in each FCM Client Sub-Account as of the end of the Business Day in New York on the €STR Calculation Date.
- (b) The Clearing House shall determine a single Cash Compensation Amount separately in respect of all of the Impacted FCM SwapClear Contracts in each Proprietary Account and each FCM Client Sub-Account as follows. If:
 - (i) the aggregate €STR Discounted Value in relation to all such Impacted FCM SwapClear Contracts exceeds the aggregate EONIA Discounted Value in relation to all such Impacted FCM SwapClear Contracts the Cash Compensation Amount in relation to such Impacted FCM SwapClear Contracts shall be equal to the absolute value of the difference, and shall be an amount in favor of the Clearing House in relation to such Proprietary Account or FCM Client Sub-Account (as applicable); and
 - (ii) the aggregate €STR Discounted Value in relation to all such Impacted FCM SwapClear Contracts is less than the aggregate EONIA Discounted Value in relation to all such Impacted FCM SwapClear Contracts then the Cash Compensation Amount in relation to such Impacted FCM SwapClear Contracts shall be equal to the absolute value of the difference, and shall be an amount in favor of the FCM Clearing Member in relation to such Proprietary Account or FCM Client Sub-Account (as applicable).

(c) The Clearing House shall, pursuant to Regulation 48A, register a separate Cash Compensation Contract in each Proprietary Account and each FCM Client Sub-Account, Cash Compensation Amount (to the extent such amounts are applicable to such account). Each FCM Clearing Member and the Clearing House (as applicable) irrevocably agrees that it shall be bound to pay the Cash Compensation Amount to the other pursuant to the terms of the related Cash Compensation Contract. Each Cash Compensation Contract shall be registered for the sole purpose of effecting the payment of the Cash Compensation Amount to which it relates. It shall operationally be recorded as having a "Notional Amount" (as defined in the FCM SwapClear Contract Terms) of EUR1, a "Termination Date" (as defined in the FCM SwapClear Contract Terms) falling two Business Days after the €STR Calculation Date, and an obligation on the Clearing House or the FCM Clearing Member (as applicable) to pay to the other the Cash Compensation Amount related to the relevant Proprietary Account, or FCM Client Sub-Account, in each case as determined pursuant to Section 4(b) above, with a positive Cash Compensation Amount representing an amount payable by the Clearing House to the FCM Clearing Member and a negative Cash Compensation Amount representing an amount payable to the Clearing House by the FCM Clearing Member. However, neither the Clearing House not a FCM Clearing Member shall be required to pay any amounts under a Cash Compensation Contract other than the Cash Compensation Amount to which such Cash Compensation Contract relates.

- (d) Each FCM Clearing Member agrees to be bound by each Cash Compensation Contract registered pursuant to this Section 4, which shall, when registered, constitute an FCM SwapClear Contract between the Clearing House and the relevant FCM Clearing Member that has arisen by reason of the application of the Regulations to the Impacted FCM SwapClear Contracts.
- (e) Each FCM Clearing Member agrees (and in the case of (e)(iv) below, each FCM Clearing Member and the Clearing House agrees):
 - (i) to use reasonable endeavors to provide each of its FCM Clients with information on (i) the change in the rate from EONIA to €STR pursuant to the terms of Regulation 48A and this Annex, and (ii) the amounts pursuant to the terms of the Cash Compensation Contracts which may be allocated to that FCM Clearing Client's FCM Client Sub-Account pursuant to the terms of this Annex. Such information shall include the terms of this Annex and any information which it has received from, or is made available by, the Clearing House in connection with this Annex;
 - (ii) that it, and each of its FCM Clients, shall be bound by the terms of any Cash Compensation Contracts registered pursuant to this Annex and all payment obligations thereunder (as determined by the Clearing House pursuant to this Annex);
 - (iii) to perform all obligations and exercise all rights under this Annex in accordance with Applicable Law; and
 - (iv) that each Cash Compensation Contract is being registered in the relevant account in connection with the matters specified in this Annex and the obligations thereunder are for the sole purpose of addressing the value impact of the change from EONIA to €STR.

5. DETERMINATIONS BINDING

Subject to Section 8, all determinations and calculations made by the Clearing House pursuant to this Annex shall be binding and may in no circumstances (other than in the case of manifest error) be called into question by any person.

6. RECORDS

The Clearing House shall update its books and records to reflect the Cash Compensation Contracts and the amounts payable thereunder and the obligation to pay, or the right to receive, any such amounts may be reflected in the books and records of the Clearing House in such manner as the Clearing House determines is necessary to meet its operational requirements.

7. MISCELLANEOUS

- (a) The obligations of the Clearing House to each FCM Clearing Member shall be to perform its obligations as principal to such FCM Clearing Member in accordance with the Rulebook, but subject to the restrictions on the Clearing House's obligations and liabilities contained in the Rulebook and Section 8.
- (b) The terms of this Annex are without prejudice to the Clearing House's rights under the Procedures to change the rate used for the purposes of (i) calculating the Price Alignment Amount, and (ii) constructing the Clearing House's zero coupon yield curves under 12.1.7 of the FCM Procedures from time to time and such terms shall not be relevant or binding on the Clearing House in respect of any such changes.
- (c) The performance by the Clearing House of its obligations hereunder shall always be subject to the provisions of the Rulebook.

8. LIMITATION OF LIABILITY

- 8.1 Without prejudice to the generality of Regulation 44, each FCM Clearing Member agrees:
 - that neither the Clearing House nor any other member of the LCH Group will have any liability whatsoever to any FCM Clearing Member or any other person (including, without limitation, any SwapClear Clearing Client) whether in contract, tort (including, without limitation, negligence), trust, as a fiduciary or under any other cause of action, and whether in respect of any damages, loss or gain, cost or expense (whether direct, indirect, general, special, consequential, punitive or otherwise); and
 - (b) to waive any claim against the Clearing House or any member of the LCH Group;

arising or that may arise in connection with:

- (i) any determination, calculation, notification, registration, publication, exercise of discretion, or decision, taken or not taken by the Clearing House or any other member of the LCH Group in connection with this Annex; or
- (ii) the determination or publication of any price, curve, data, quote or other information arising from, or in connection with, this Annex;

except in the case of fraud or wilful misconduct on the part of the Clearing House or any other member of the LCH Group.

8.2 Without prejudice to the generality of Regulation 44 and clause 8.1 above, each FCM Clearing Member further agrees:

- (a) that neither the Clearing House nor any other member of the LCH Group will have any liability whatsoever to any FCM Clearing Member or any other person (including, without limitation, any FCM Client) in tort (including, without limitation, negligence), trust, as a fiduciary or under any other non-contractual cause of action, or under any implied contractual term, and whether in respect of any damages, loss or gain, cost or expense (whether direct, indirect, general, special, consequential, punitive or otherwise); and
- (b) to waive any non-contractual claim or claim under any implied contractual term against the Clearing House or any member of the LCH Group;

arising or that may arise in connection with the Clearing House's performance of its contractual duties or obligations under this Annex, except in the case of fraud or wilful misconduct on the part of the Clearing House or any other member of the LCH Group.

- 8.3 Each FCM Clearing Member agrees that neither the Clearing House nor any other member of the LCH Group (i) owes any duty of care to any person in connection with the performance of the Clearing House's duties or obligations or exercise of its rights under this Annex, save for the express contractual duties set forth in this Annex; (ii) is under any obligation to research, investigate, supplement, or verify the veracity of, any price, data, quote or other information received from an FCM Clearing Member in connection with this Annex; (iii) is acting as a fiduciary for, or as an advisor to, any FCM Clearing Member or FCM Client in connection with this Annex or any FCM SwapClear Contract registered as a result of the matters specified in this Annex; (iv) shall be under any requirement to consult with, or individually notify (other than as expressly set out in this Annex), an FCM Clearing Member or FCM Client in connection with making its determinations, exercising its discretions or performing its duties or obligations or exercising its rights, each under this Annex; or (v) has made any representation, express or implied, in relation to this Annex, and each FCM Clearing Member acknowledges that it has not relied on any representations made by the Clearing House or any other member of the LCH Group in relation to this Annex.
- 8.4 For the avoidance of doubt, notwithstanding anything to the contrary herein, neither the Clearing House nor any other member of the LCH Group shall be liable for any obligations of, or to any person who is not, an FCM Clearing Member.

2.2 **FOREXCLEAR**

2.2.1 Introduction and Interpretation

This Section 2.2 of the FCM Procedures governs the FCM ForexClear Service and must be read in conjunction with the other parts of the FCM Rulebook.

A reference to an "FXCCM" is generic and encompasses both ForexClear Clearing Members (as defined in the UK General Regulations) and FCM ForexClear Clearing Members.

References to "Business Day", "Calculation Agent", "Currency Pair", "Disruption Fallback", "Notional Amount", "Reference Currency", "Settlement Currency Amount", "Settlement Date", "Settlement Rate", "Settlement Rate Option", "Trade Date", "Valuation Date", and "Valuation Postponement" shall have the meanings given to them in the FCM ForexClear Contract Terms.

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

"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 or Non-Deliverable Currency Option Transaction for a particular Currency Pair that are in effect and published by EMTA on its website on the relevant Trade Date.

"LCH G10 Contract Template" means, where applicable, the template terms for an FCM Transaction for a particular Currency Pair that are set forth in the LCH G10 NDF Contract Terms or LCH G10 NDO Contract Terms.

"Relevant EMTA Template" means, for a particular FCM ForexClear Contract, the EMTA Template that is incorporated by reference into the FCM ForexClear Contract Terms applicable to such Contract, together with any amendments thereto as set out in the FCM 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 32 (*Exclusion of Liability*), which applies to these FCM Procedures in its entirety unless provided otherwise.

2.2.2 Users of FCM ForexClear Service

The FCM ForexClear Service is an interface that processes and stores all FCM ForexClear Transactions. FCM Clearing Members approved by the Clearing

House to clear in the FCM ForexClear Service ("**FX FCMs**"), FCM Clients of FX FCMs and, in respect of hedging FCM ForexClear Transactions executed for the purpose of Risk Neutralisation, the Clearing House are known as ForexClear Participants ("**FXPs**"). For membership procedures, please see Section 1 of the FCM Procedures.

For identification purposes each FX FCM is assigned a unique three-character mnemonic for purposes of the FCM ForexClear Service.

2.2.3 Termination of FX FCM Status

FCM 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 FCM ForexClear Service.

2.2.4 Service Scope

(a) Eligibility

FCM ForexClear Transactions may be presented for clearing through the FCM ForexClear Service. To be eligible to be registered as a ForexClear Contract, an FCM ForexClear Transaction must meet the FCM ForexClear Product Eligibility Criteria.

(b) Service Operating Hours

Opening Days:

The FCM ForexClear Service will be open each day, except weekends, Christmas Day and New Year's Day.

Opening Hours:

The FCM ForexClear Service will be open between 20:00 hours, London time, Sunday night and 01:00 hours, London time, Saturday morning ("**Opening Hours**"). The FCM ForexClear Service will not accept FCM ForexClear Transactions outside of these hours.

2.2.5 **Position Accounts**

(a) FCM Accounts

For identification purposes, each FCM Clearing Member is assigned a unique three-character mnemonic with respect to its accounts relating to FCM ForexClear Transactions and FCM ForexClear Contracts. An FCM Clearing Member's position and financial information are further identified by position-keeping accounts corresponding to a single character code: C for client business and H for house business.

(b) Position-Keeping Accounts

FCM Clearing Member Accounts:

The account types are: H for house business (Proprietary Account); and C for segregated client business (FCM Omnibus ForexClear Client Account with LCH). An FCM Clearing Member's FCM ForexClear Contract positions are also recorded within the FCM ForexClear Clearing System in ForexClear accounts.

All registered FCM ForexClear Contracts will be identifiable to FCM Clearing Members via ForexClear Reporting (see All registered FCM ForexClear Contracts will be $2.2.24\overline{2.2.24}$). maintained only in ForexClear accounts (identified as such by a unique three letter mnemonic) and separate from all accounts containing FCM Contracts attributable to other Business Categories of FCM Contracts (provided that FCM Contracts attributable to any Business Categories of FCM Contracts and related Collateral may be physically commingled in the same depository accounts, subject to the requirements of the Rulebook to properly segregate all FCM Client assets). Each FCM ForexClear Contract will also be assigned a unique trade identifier. The FCM Clearing Member Reporting functionality also allows each FCM Clearing Member to identify all FCM ForexClear Contracts registered in its name.

Sub-accounts within the FX FCM's Proprietary Account may be set up (e.g., for branches). Each such sub-account will carry the unique Bank Identifier Code ("BIC") (or equivalent unique identifier) of the relevant branch.

(c) Clients

Where an FX FCM enters into an agreement with an FCM Client in accordance with FCM Regulation 7(a) (FCM Client Business and Proprietary Account Trading), the FX FCM must submit an "FCM Client Static Data" form to the Clearing House's membership department. Positions of an FCM Client will be identifiable in ForexClear Reporting through that FCM Client's BIC/unique identifier.

2.2.6 Other Accounts

The Clearing House will open operational accounts in respect of an FX FCM, which are used to record cash and securities balances and its ForexClear Contributions. The Clearing House may open and close such operational accounts, in its sole discretion, upon notice to the relevant FX FCM ForexClear Operations will provide details of such accounts to an FX FCM upon request.

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2.2.7 Novation and Registration

An FCM ForexClear Transaction must satisfy the FCM ForexClear Product Eligibility Criteria at the Registration Time. Upon an FCM ForexClear Transaction being submitted to the Clearing House for registration, the Clearing House will determine whether to accept or reject the FCM ForexClear Transaction within the required timeframe under all Applicable Law. Where the Clearing House determines to accept the FCM ForexClear Transaction, registration shall occur immediately and the FCM ForexClear Transaction shall be automatically replaced by two separate FCM ForexClear Contracts.

Prior and as a condition to the registration of an FCM ForexClear Contract (except where such FCM ForexClear Contract results from an FCM ForexClear Transaction that is a Sub-Block Trading Venue Transaction), the Clearing House will require the FX FCM in whose name such FCM ForexClear Contract is to be registered to provide and maintain sufficient Margin for its Liabilities (as defined in Section 2.2.172.2.17) (or its estimated Liabilities) (taking into account any MER Buffer and/or ForexClear Tolerance, if any) as a precondition to registration(the "Incremental Risk Check").

If an FX FCM has not transferred sufficient Margin for its Liabilities or estimated Liabilities (taking into account any MER Buffer and/or ForexClear Tolerance, if any) at the time of the relevant Incremental Risk Check, subject to Section 2.2.8(c), such ForexClear Transaction will be rejected.

Once an FCM ForexClear Transaction has passed the Validation Checks (as defined in Section 2.2.8(a)2.2.8(a)), and the Clearing House has determined to accept the FCM ForexClear Transaction for registration, the Clearing House will send a message confirming the registration of the FCM ForexClear Transaction as two FCM ForexClear Contracts (or one FCM ForexClear Contract and one Non-FCM ForexClear Contract, as applicable), including a date stamp, in accordance with Section 2.2.8(a)(iii)). For the purpose of the FCM Regulations, the time of dispatch of such message shall be the "Registration Time" of such FCM ForexClear Contract(s).

The definitive report of a registered FCM ForexClear Contract will be shown on the "All Open Contracts" report issued by ForexClear Reporting (as defined in Section 2.2.242.2.24).

If the Clearing House declares an FX FCM a Defaulter, the Clearing House will not register any ForexClear Contracts in the name of the Defaulter (except pursuant to the Default Rules). FCM ForexClear Transactions in respect of Non-Defaulting FX FCMs will continue to be registered in accordance with, and subject to, the FCM Rulebook.

(a) Trade Capture

Once the FCM Approved Trade Source System receives the trade instructions from the FXPs who are parties to the trade, the FCM

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Approved Trade Source System matches both instructions (a "**trade**"). The FCM Approved Trade Source System validates the trade using the applicable FCM ForexClear Product 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, an "**FCM ForexClear Transaction**").

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

- (A) an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs, the FCM Trading Venue and, if the originating FCM Approved Trade Source System is different to the FCM Trading Venue, the originating FCM Approved Trade Source System of the registration or rejection of the FCM ForexClear Transaction; or
- (B) not an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs (via the originating FCM Approved Trade Source System or ClearLink API) of registration or rejection of the FCM ForexClear Transaction,

in each case within the required timeframe under Applicable Law.

(b) ForexClear FCM Approved Trade Source Systems

Application for 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 FCM 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 FCM Approved Trade Source System, it will notify FCM Clearing Members via member circular.

FCM ForexClear Transactions presented through an FCM Approved Trade Source System must be in an acceptable message format, as prescribed by the Clearing House.

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

Notwithstanding the designation by the Clearing House of any system as an FCM 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 FCM Approved Trade Source System or the timeliness or otherwise of the delivery of any FCM ForexClear Transaction details by that FCM Approved Trade Source System to the Clearing House. Such matters form part of the relationship between the FCM Clearing Members and that FCM Approved Trade Source System and the terms of such relationship may entitle the FCM Approved Trade Source System to suspend the ability of an FX FCM to make submissions from time to time.

FX FCMs must not submit instructions to the Clearing House for trades which will not meet the FCM ForexClear Eligibility Criteria. The Clearing House will process any FCM ForexClear Transaction reported to it by an FCM Approved Trade Source System on an "as is" basis, and subject to the FCM Regulations and these FCM Procedures, will register any such FCM ForexClear Transaction on the basis of the data provided to it by the FCM Approved Trade Source System and approved by the relevant FCM Clearing Member. The Clearing House has no obligation to verify that the details received, properly reflect the trade entered into by the relevant Executing Parties.

The Clearing House accepts no liability for any error within or corruption of any data sent by an FCM Approved Trade Source System to the Clearing House or to an FCM Clearing Member 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 FCM ForexClear Contract on the basis of incorrect or corrupted data sent to it by an FCM Approved Trade Source System and accepted by an FCM Clearing Member, the FCM Clearing Member concerned shall be bound by the terms of such FCM ForexClear Contract, unless the FCM ForexClear Contract is subsequently cancelled in accordance with FCM Regulation 49 (Cancellation of FCM ForexClear Contracts).

FCM Clearing Members shall ensure that transaction details accepted for registration are accepted by appropriately authorized personnel. Apart from the foregoing acceptance, the Clearing House is not able to, and will not, verify the authorization of the source of any details of any transaction reported to it for registration by any FCM Approved Trade Source System. The Clearing House shall have no liability in the event that any FCM Clearing Member suffers any loss through the unauthorized acceptance of an FCM Notification.

2.2.8 Trade Validation and Registration

- (a) Process flow description
 - (A) The Clearing House performs a validation check on each trade presented by FXPs to ensure that each such trade meets: (A) the applicable FCM ForexClear Product Eligibility Criteria and the Counterparty Technical Validation Check (as defined below); (B) where applicable, the Incremental Risk Checks (as defined

below); and (C) where applicable, the Acceptance Validation Checks (as defined below), in each case, required for FCM ForexClear Transactions (collectively, the "Validation Checks").

- (B) The Clearing House will create two trade records for an FCM ForexClear Transaction that passes the Validation Checks and is accepted for clearing by the Clearing House: one for the FCM ForexClear Contract between the Clearing House and the relevant FX FCM and the other for the FCM ForexClear Contract between the Clearing House and the same or another FX FCM (or, where applicable, the Non-FCM ForexClear Contract between the Clearing House and the relevant ForexClear Clearing Member).
- (C) In respect of an FCM ForexClear Transaction which is:
 - (A) an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs, FCM Trading Venue and, if the originating FCM ForexClear Approved Trade Source System is different to the FCM Trading Venue, the originating FCM ForexClear Approved Trade Source System of registration or rejection of the FCM ForexClear Transaction; and
 - (B) not an FCM Trading Venue Transaction, the Clearing House will notify the FX FCMs (via the originating FCM ForexClear Approved Trade Source System or ClearLink API) of registration or rejection of the FCM ForexClear Transaction,

in each case within the required timeframe under Applicable Law.

- (D) As provided in Section 2.2.7, in respect of messages confirming registration, the time of dispatch of such message shall be the Registration Time of that FCM ForexClear Contract.
- (E) The account (H or C) and sub-account (if applicable) into which each trade record is booked is derived from the BIC/unique identifier code within the message from the FCM Approved Trade Source System. The BIC links to the FX FCM reference data.
- (F) 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 must be (a) the parties submitted in trade particulars, (b) are

each a Non-Defaulting FX FCM and (c) approved by the Clearing House to clear the relevant trade type.

Valuation Date and Settlement Date: in respect of an FCM ForexClear Non-Deliverable Transaction, the Valuation Date and Settlement Date for the FCM ForexClear Transaction meet the criteria set forth in the relevant FCM ForexClear Contract Terms

(c) Incremental Risk Checks

The Clearing House will apply an "Incremental Risk Check" to each FCM ForexClear Transaction that is not a Sub-Block Trading Venue Transaction. The Incremental Risk Check uses a suitable approximation methodology to estimate an FX FCM's Liabilities (including the new FCM ForexClear Transaction) against available Margin (taking into account MER Buffer and/or ForexClear Tolerance, if any). However, any FCM ForexClear Transaction presented by an FX FCM that is risk reducing (i.e. results in a reduction of that FX FCM's Liabilities) will always pass the Incremental Risk Check, even if the FX FCM does not have sufficient Margin for its Liabilities.

Each relevant FX FCM must pass the Incremental Risk Check in order for the Clearing House to register two FCM ForexClear Contracts (or one FCM ForexClear Contract and one Non-FCM ForexClear Contract, as applicable).

If either (or both) FX FCM(s) fail(s) the Incremental Risk Check(s), then the FCM ForexClear Transaction will be rejected immediately and a notification sent in accordance with Section 2.2.8(a)(iii).

(d) FCM Acceptance

- (A) In the case of an FX FCM that has been nominated to register an FCM ForexClear Transaction on behalf of a third party Executing Party, the Clearing House will (only where such FCM ForexClear Transaction is not an FCM Trading Venue Transaction) provide notification to such FX FCM of the relevant FCM ForexClear Transaction and that it has been so nominated, via member reports, the ClearLink API or otherwise ("FCM Notification"). Where an FX FCM is nominated to clear both FCM ForexClear Contracts arising from the registration of an FCM ForexClear Transaction in the capacities described in this paragraph, such FX FCM will receive two separate FCM Notifications from the Clearing House in relation to such FCM ForexClear Transaction. All FCM Notifications shall be provided within the required timeframe under Applicable Law. In all other cases, no FCM Notification will be provided to any FX FCM.
- (B) In respect of an FCM ForexClear Transaction that is not an FCM Trading Venue Transaction, following receipt of an FCM

Notification, an FX FCM may choose to grant or refuse consent to register the ForexClear Transaction. It is a condition for registration of such an FCM ForexClear Transaction that an FX FCM grants a separate consent (each, an "FCM Acceptance") in respect of each FCM Notification received by it in relation to the registration of such FCM ForexClear Transaction. Clearing House has an automated system that it operates on each business day for the purposes of rejecting FCM ForexClear Transactions presented for clearing, but in respect of which the relevant FX FCM did not provide an FCM Acceptance to the Clearing House prior to the LCH Cut-off Time. The "LCH Cut-off Time" in respect of an FCM ForexClear Transaction will be the expiry of the timeframe determined by the Clearing House. If an FX FCM has not provided the Clearing House of an FCM Acceptance by the LCH Cut-off Time, it will be deemed to have rejected the relevant FCM ForexClear Transaction. Any FCM Acceptance of an FCM ForexClear Transaction provided by an FX FCM to the Clearing House prior to the LCH Cut-off Time is irrevocable. Any FCM Acceptance provided by an FX FCM to the Clearing House after the LCH Cut-off Time shall be invalid.

- (C) In circumstances where the registration of an FCM ForexClear Transaction is conditional upon one or more FCM Acceptance(s) being notified by the applicable FX FCM(s), the relevant FCM ForexClear Transaction shall be deemed to have been "submitted" to the Clearing House by each such FX FCM at the time when it notifies the Clearing House of its FCM Acceptance. In all other circumstances, an FCM ForexClear Transaction shall be "submitted" to the Clearing House by the applicable FX FCM upon being presented to the Clearing House for clearing by or on behalf of such FX FCM.
- (D) Where, in the context of a Default, the Clearing House executes a hedging FCM ForexClear Transaction, which is:
 - (A) not an FCM Trading Venue Transaction, with a Hedging ForexClear Service Clearing Member for the purpose of Risk Neutralisation, and such FCM ForexClear Transaction is presented for clearing to the Clearing House, the Defaulting ForexClear Service Clearing Member shall be deemed to have received an FCM Notification, in respect of such FCM ForexClear Transaction, and to have notified an FCM Acceptance, in respect of such FCM ForexClear Transaction, to the Clearing House before the relevant LCH Cut-off Time; and
 - (B) a FCM Trading Venue Transaction, with a Hedging ForexClear Service Clearing Member for the purpose of Risk Neutralisation, and such FCM ForexClear

Transaction is presented for clearing to the Clearing House, the FCM Trading Venue on which such FCM ForexClear Transaction was executed shall be deemed to be an FCM Eligible Trading Venue, in respect of the Defaulting ForexClear Service Clearing Member, at the time of execution of such FCM ForexClear Transaction and such FCM ForexClear Transaction shall be deemed to be an FCM Eligible Trading Venue Transaction, in respect of the Defaulting ForexClear Service Clearing Member.

(E) The Clearing House will (where applicable) apply an "Acceptance Validation Check" in respect of an FCM ForexClear Transaction presented for clearing that is not an FCM Trading Venue Transaction in order to ensure that the Clearing House has received all required FCM Acceptances, in accordance with this Section 2.2.8(d).

(e) Registration

- (i) Once it is confirmed that an FCM ForexClear Transaction has passed the applicable Validation Checks for the relevant FX FCMs, and the Clearing House has determined to the accept the FCM ForexClear Transaction for registration, the Clearing House:
 - (A) registers the FCM ForexClear Transaction as two FCM ForexClear Contracts (or one FCM ForexClear Contract and one Non-FCM ForexClear Contract, as applicable) and changes the status for the FCM ForexClear Transaction to "NOVATED"; and
 - (B) acknowledges the FCM ForexClear Contract status and sends a notification in accordance with Section 2.2.8(a)(iii) that the FCM ForexClear Transaction is "NOVATED".
- (ii) Where, in the context of a Default, the Clearing House executes a hedging FCM ForexClear Transaction with a Hedging ForexClear Service Clearing Member for the purpose of Risk Neutralisation, and such FCM ForexClear Transaction is presented for clearing to the Clearing House, the Clearing House may determine (in its sole discretion) that any Validation Check(s) in respect of such FCM ForexClear Transaction are deemed to have been passed

(f) Trade Rejection

Trades presented for registration that do not meet the FCM ForexClear Product Eligibility Criteria or any other requirement for registration under the FCM Rulebook, including a trade (i) presented by or on

behalf of an FCM ForexClear Clearing Member in respect of a third party Executing Party where such trade was executed on an FCM Trading Venue that was not at the time of execution of such trade an FCM Eligible Trading Venue in respect of such FCM ForexClear Clearing Member, (ii) presented by or on behalf of an FCM ForexClear Clearing Member 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 an FCM Trading Venue (iii) that contains invalid or incomplete message data, or (iv) that is not a Sub-Block Trading Venue Transaction and with respect to which the Clearing House has not received sufficient Margin (taking into account MER Buffer and/or ForexClear Tolerance, if any) will, in each case, be rejected.

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

(g) Manual Trade Rejection, Novation and Cancellation (Exceptional Event)

From time to time, as an exceptional event, it may be necessary for the Clearing House to (i) reject a trade submitted for registration, (ii) register an FCM ForexClear Transaction, or (iii) accept or reject a cancellation request for an FCM ForexClear Contract or an FCM ForexClear Transaction, in each case, manually prior to a Margin Run (e.g. in the case of a Default, when an FCM ForexClear Transaction needs to be registered immediately to expedite the hedging and auction process or to reject an FCM ForexClear Transaction received from an FX FCM which is a Defaulter).

The Clearing House acknowledges the action:

- (i) in respect of trades being manually rejected or manually registered, by notifying the relevant entities specified in Section 2.2.8(a)(iii) of such rejection or registration (as applicable); and
- (ii) in respect of trades being manually cancelled, by sending a message to the FCM Approved Trade Source System that it is "CANCELLED".

(h) Trade Cancellation

The Clearing House accepts cancellation messages from Executing Parties against both non-novated trades (FCM ForexClear Transactions) and novated trades (FCM ForexClear Contracts).

With respect to any FCM ForexClear Contract, cancellation messages may be submitted via the FCM Approved Trade Source System until (i) such FCM ForexClear Contract is "fixed" (i.e., when its Settlement Rate has been determined on the relevant Valuation Date) or (ii) the end of the day on the Business Day preceding the relevant Expiration Date of the FCM ForexClear Contract, as applicable.

A successful cancellation message results in a "CANCELLED" status message if the FCM ForexClear Transaction or the FCM ForexClear Contract (as the case may be) is cancelled during the Opening Hours. The status messages are sent from the Clearing House to the FX FCM via the FCM Approved Trade Source System.

(i) Process flow description

The Clearing House accepts trade cancellation instructions from the FCM Approved Trade Source System for FCM ForexClear Transactions or FCM ForexClear Contracts (as the case may be) that have previously been submitted to the FCM ForexClear Service. Cancellation instructions must include the ForexClear ID.

The Clearing House checks that the cancellation instruction contains a valid ForexClear ID which relates to: (a) an FCM ForexClear Transaction or FCM ForexClear Contract (as the case may be) that has not been previously cancelled; and (b) in the case of an FCM ForexClear NDF Contract , an FCM ForexClear NDF Contract with respect to which the relevant Valuation Date has not yet occurred.

Where a trade has already been rejected (as a result of having failed a Counterparty Technical Validation Check), the FCM ForexClear Service sends a "CANCEL REJECTED" message to the FCM Approved Trade Source System for the relevant FXPs.

All trade cancellation instructions must pass the Incremental Risk Check. If an FX FCM does not have sufficient Margin for its Liabilities or estimated Liabilities (taking into account MER Buffer and/or ForexClear Tolerance, if any) at the time of the relevant Incremental Risk Check, then a 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 FX FCM's Liabilities) will always pass the Incremental Risk Check, even if the FX FCM does not have sufficient Margin for its Liabilities.

(j) Trade Amendment

No amendment of the financial terms of an FCM ForexClear Transaction or FCM ForexClear Contract is permitted. FX FCMs who wish to change the FCM Client information on a ForexClear Transaction should contact ForexClear Business Operations at 0207 426 3729 for further information.

(k) 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 FCM ForexClear Contract.

On the Valuation Date with respect to each FCM ForexClear Contract, the Settlement Rate will be retrieved as set forth in the relevant FCM ForexClear Contract Terms. The Market Data provider for Settlement Rates is Reuters.

The FCM ForexClear Service applies the relevant Settlement Rate to FCM ForexClear Contracts using the:

- (A) Settlement Rate Option source code; and
- (B) Valuation Date.

The Clearing House applies the Settlement Rate to all relevant FCM ForexClear Contracts at a predefined time following its publication or as otherwise provided for in the relevant FCM ForexClear Contract Terms.

The Clearing House calculates the Settlement Currency Amount in the Settlement Currency per FCM ForexClear Contract. FX FCMs can retrieve the Settlement Rate and Settlement Currency Amount in the Settlement Currency via ForexClear Reporting on the ForexClear Service Portal and on MemWeb, which are internet services onto which information is loaded and can be accessed by FX FCMs.

(l) FX Package Transactions

In certain circumstances an FCM Approved Trade Source System may present to the Clearing House, in a single submission, a group of two or more FCM ForexClear Transactions for simultaneous registration (such group of FCM ForexClear Transactions, an "FX Package Transaction"). An FX 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 FX Package Transaction is not presented in the prescribed format, each constituent FCM ForexClear Transaction within the FX Package Transaction will be rejected.

Where the Clearing House receives an FX Package Transaction for registration it shall treat each FCM ForexClear Transaction that forms part of the FX Package Transaction as a new FCM ForexClear Transaction in accordance with the FCM Rulebook and, where each constituent FCM ForexClear Transaction within the FX Package Transaction meets the registration requirements as set out in the FCM Rulebook (including the provision of sufficient Margin, where applicable), the Clearing House will simultaneously register all of the FCM ForexClear Transactions within that FX Package Transaction.

Where one or more of the constituent FCM ForexClear Transactions does not meet the Clearing House's registration requirements then all the constituent FCM ForexClear Transactions of the FX Package Transaction shall be rejected.

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

In respect of an FX Package Transaction presented in an FX FCM's name, such FX FCM's Margin requirement and other Required Registration Amounts will be assessed on a net basis based on all of the constituent FCM ForexClear Transactions of such FX Package Transaction.

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

(m) Valuation Date Event Management: Process flow description

After the Registration Time for an FCM ForexClear Contract, the FCM ForexClear Service links a Settlement Rate Option to it in accordance with the Relevant EMTA Template or given LCH G10 Contract Template, as applicable.

On the Valuation Date, the Clearing House uses the Settlement Rate for the Currency Pair for the FCM ForexClear Contract when it is published by Reuters, and calculates the Settlement Currency Amount for each FCM ForexClear Contract in the Settlement Currency by applying the relevant Settlement Rate Option as referenced in the Relevant EMTA Template or given LCH G10 Contract Template, as applicable.

If the Settlement Rate Option set out in the Relevant EMTA Template or given LCH G10 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 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.

(n) Settlement

With respect to each FCM ForexClear Contract, the Clearing House calculates a Settlement Currency Amount by applying of the Settlement Rate to the Notional Amount in accordance with the applicable FCM ForexClear Contract.

With respect to each FCM ForexClear Contract, on the Business Day immediately preceding the Settlement Date, the Clearing House nets the Settlement Currency Amount against the Cumulative Variation Settlement of the FCM ForexClear Contract, the remainder after which is the Net Settlement Amount ("NSA"), which will be reflected in the FX FCMs' cash accounts with the Clearing House on the Settlement Date. As such, with respect to each FCM ForexClear Contract, the payment in full of all the Variation Settlement required during the term of such FCM ForexClear Contract shall satisfy the relevant party's obligation to pay the Settlement Currency Amount on the Settlement Date of such FCM ForexClear Contract. For the purpose of providing Nostro reconciliation, to the relevant parties, the Clearing House will provide Reporting (as below) which will reflect an entry for the "Settlement Currency Amount" and a separate entry for the Cumulative Variation Settlement of the FCM ForexClear Contract. This paragraph applies even if the Settlement Date was adjusted in accordance with the relevant FCM ForexClear Contract Terms.

(o) Premiums

Premiums on FCM ForexClear NDO Contracts shall be paid on the spot date or Settlement Date in an eligible currency for the given Currency Pair (such currency(ies) to be determined by the Clearing House from time to time, and notified to FX CCMs).

(p) Reference Data

Holiday Event Calendar:

The FCM ForexClear Service uses the SwapsMonitor Financial Calendar (as published by Swaps Monitor Publications, Inc.) ("SwapsMonitor Financial Calendar") in order to determine holidays. All FCM ForexClear Participants must be licensees of the SwapsMonitor Financial Calendar.

If a change is declared that affects the SwapsMonitor Financial Calendar that is referenced on FCM ForexClear, then a corresponding calendar adjustment will be made to the FCM ForexClear system, unless the Clearing House informs FXCCMs by notice on its website (at https://www.lch.com/services/forexclear, or such other web page as the Clearing House determines) that the relevant change will not apply to FCM ForexClear Contracts.

The Clearing House may temporarily close the FCM ForexClear Service to process a calendar adjustment in its clearing system. FX FCMs will be notified in advance of the date, time and expected duration of such closure.

Date Adjustment:

As a result of the calendar adjustment process, the Valuation Date, the Settlement Date and/or Premium Payment Date of any affected FCM ForexClear Contracts will automatically be adjusted in accordance with the provisions of the Relevant EMTA Template, relevant LCH G10 Contract Template or ISDA definitions as applicable.

The Clearing House will notify the FX FCMs via file download from the Clearing Member Reporting as to any FCM ForexClear Contracts affected and the date adjustments made.

2.2.9 Market Data

(a) Sources used by FCM ForexClear Service

The FCM ForexClear Service collates instrument quotes for the following from multiple market sources (as detailed in Section 2.2.9(b)) in relation to each Currency Pair:

- (A) FX spot rates ("**FX Spot Rates**");
- (B) FX swap points ("FX Swap Points");
- (C) Settlement Rate Option;
- (D) Interest rate curves and overnight index swap curves ("Interest Rate Curves");
- (E) PAA rates ("PAA Rates"); and
- (F) Country credit spreads (see Section 2.2.9(f) below) ("Country Credit Spreads"),

together, "Market Data".

FX Spot Rates and FX Swap Points are received by the Clearing House via a live link from all eligible FXCCMs (including FX FCMs) during the Opening Hours.

(b) Market Data Sources and Frequencies

The Clearing House receives the following updated raw prices:

FX Spot Rates:

- (A) Source FXCCMs.
- (B) Frequency every time updated by FXCCMs up to a maximum rate of once every five minutes.

FX Swap Points:

- (i) Source all FXCCMs.
- (ii) Frequency every time updated by FXCCMs up to a maximum rate of once every five minutes.
- (iii) Tenors as shown in the table below.

Tenor
O/N
T/N
S/N
1 week
1 month
2 months
3 months
6 months
9 months
12 months
24 months
36 months
48 months
60 months

Settlement Rate Options:

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

Interest Rate Curves:

- (i) Source internal Clearing House
- (ii) Frequency at each SwapClear margin run.

Country Credit Spreads:

- (i) Source Bloomberg.
- (ii) Frequency when published.

USD LIBOR Curve:

- (i) Source SwapClear.
- (ii) Frequency at each SwapClear margin run.

PAA rates:

- (i) Source LCH Treasury.
- (ii) Frequency Daily.
- (c) [Not Used]
- (d) Market Data Provision to FX FCMs

Market Data used in a Margin Run is made available to FX FCMs via ForexClear Reporting (as defined in Section 2.2.24).

(e) Curve Building in ForexClear

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 based on interpolation techniques agreed through the ForexClear Risk & Trading Working Group (a group comprising the Clearing House's and FXCCM's (including FX FCM) risk and trading representatives) ("RTWG"). The USD LIBOR Curve is used for discounting; the FX curve is used for capitalization of forward cash flows.

Interest Rate Curve:

The Clearing House applies the linear interpolation method to build the Interest Rate Curve. Linear interpolation is applied on zero coupon curves.

Curve Use:

End of day is defined as 22.00 hours, London time ("**EOD**"). The following EOD data is used in the calculation of risk analytics for an EOD Margin Run (as defined in Section 2.2.16(b)):

(A) FX Spot Rates; and

(B) FX Swap Points.

(f) 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.

2.2.10 FCM ForexClear Contract Valuation

(a) Net Present Value ("NPV")

From (and including) the Registration Time to the EOD Margin Run on the business day preceding the Valuation Date, each FCM ForexClear Contract is valued in USD using the current market rates and discounted from the future Settlement Date to its present value.

On the Valuation Date, the Settlement Rate is used to value the FCM ForexClear Contract.

If Valuation Postponement applies, the FCM ForexClear Contract is valued using the current forward price to (and including) the date on which the Settlement Rate is determined in accordance with the FCM ForexClear 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) Variation Settlement ("VS")

VS for each FCM ForexClear Contract is calculated at EOD as the change from the preceding business day in its NPV. With respect to each FX FCM, the net sum of the VS for all open FCM ForexClear Contracts is, subject to the netting provisions of FCM Regulation 47, credited to or debited from such FX FCM once a day, following the EOD Margin Run.

VS will, subject to the netting provisions of FCM Regulation 47, be paid each business day by or to each FX FCM in respect of all of its open FCM ForexClear Contracts. The VS will be calculated in, and must be paid in, USD.

With respect to each FCM ForexClear Contract, VS 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.

Separate Variation Settlement calculations are performed in respect of an FCM Clearing Member's house "H" account and in respect of an FCM Clearing Member's client "C" account. No offset between the

"C" and the "H" accounts is permitted. The Clearing House shall make or receive a separate Variation Settlement payment with respect to each house "H" account and each client "C" account (subject to the netting provisions of FCM Regulation 47 and the Default Rules).

(c) Reporting Breakdown

ForexClear margin reports show the portfolio of open FCM ForexClear Contracts of each FX FCM by Currency Pairs and in the Settlement Currency (i.e., USD).

(d) Price Alignment Amount ("PAA")

The effect of daily cash VS movements results in the need for PAA. Without this adjustment, the pricing of FCM ForexClear Contracts would differ from identical uncleared trades, as cash earned from favorable daily price moves would be priced into the product.

(e) 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.

In this Section 2.2.10(e), "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 "Cumulative Variation Settlement" or "CVS" means, in respect of a Swap Product, a value equal to the aggregate of the amounts of Variation Settlement that have become owing from the FCM Clearing Member to the Clearing House in respect of such Swap Product minus the aggregate of the amounts of Variation Settlement that have become owing from the Clearing House to the FCM Clearing Member in respect of such Swap Product; provided that any such amounts shall only be counted to the extent the FCM Clearing Member or Clearing House, as applicable, has discharged its obligation to transfer such amounts in accordance with FCM Regulation 47. The Clearing House calculates PAA in USD once a day at EOD.

Principles:

- (A) CVS is calculated at EOD on T-1.
- (B) Variation Settlement in respect of an FX FCM's portfolio of open ForexClear Contracts) is paid/ received, subject to the netting provisions of FCM Regulation 47, 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 CVS of T-1 for FCM ForexClear Contracts up to the business day before their Settlement Date.

(E) PAA is paid / received on morning of T+1 via PPS.

Components:

- (A) PAA Rate.
- (B) Cumulative Variation Settlement of the FX FCM's portfolio open FCM ForexClear Contracts.
- (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).

So:

(A) $PAA T = PAA T Rate \times CVS T--1 \times Accrual Factor.$

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

2.2.11 Initial Margin ("IM")

The Clearing House will require FX FCMs to furnish it with IM. This amount will be calculated intraday and at EOD on each business day as part of each Margin Run. Each FX FCM's IM requirement, is calculated for the portfolio of open FCM ForexClear Contracts and FCM ForexClear Transactions using ForexClear's Portfolio Analysis and Risk ("FxPAR") margining model. FxPAR is based on a modified filtered historical simulation value-at-risk methodology. All open FCM ForexClear Contracts and FCM ForexClear Transactions in each Currency Pair are re-valued under a series of cross portfolio yield curve scenarios to estimate the potential portfolio profit and loss and therefore the IM requirement.

These scenarios will be continually monitored and reviewed periodically or on an ad hoc basis according to market conditions. FX FCMs will usually be notified by the Clearing House of alterations to margin 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 historical (5 year) data submitted by FXCCMs pursuant to Section 2.2.9, which is adapted to current market prices.

Separate Initial Margin calculations are performed for an FX FCM's house "H" and client "C" accounts and, within a "C" account, separately in respect of each FCM Client Sub-Account therein. No offset between the "C" and "H" accounts is permitted.

The Clearing House reserves the right to require additional amounts of Margin from a specific FX FCM or from all FX FCMs in accordance with FCM Regulation 14 (*Margin and Collateral*).

(a) Credit Risk Multiplier ("CRiM")

The CRiM applied will consider the FX FCM's credit worthiness, Initial Margin level and/or stress testing exposures in accordance with LCH Credit Risk Policy.

(b) Liquidity Risk Multiplier ("LRMM")

Where an FXCCM has an exposure above set thresholds in a particular Currency Pair or tenor of FCM ForexClear Contracts, the LRMM is applied and additional IM is charged. The LRMM is calculated in accordance with parameters set by the ForexClear Default Management Group (the "FXDMG") according to tenor and notional concentration. The thresholds are reviewed quarterly and use prevailing perceptions of market conditions as seen by the FXDMG.

LRMM increases IM called due to concentrated Currency Pair exposure by tenor of FCM ForexClear Contracts. Additional IM is called to mitigate the risk of a position not being closed out in seven days and/or the extra hedging costs that may be incurred.

The Clearing House calculates and applies LRMM as part of each Margin Run, based on the IM for each Currency Pair in the FX FCM's house position-keeping account.

(c) Sovereign Risk Multiplier ("SRM")

SRM reflects the additional risk related to a potential country default or a change in a country's currency regime, including risk relating to a country's external debt or level of foreign exchange reserves, which would impact FCM 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

(d) Default Fund Additional Margin

The Clearing House may from time to time require an FX FCM to transfer Collateral to the Clearing House to meet the default fund additional margin requirement as determined and notified by the Clearing House to such FX FCM ("**DFAM**"). The methodology by which the Clearing House determines DFAM is available on the secure area of the Clearing House website. The Clearing House will record any Collateral an FX FCM has provided to meet its DFAM obligation to the FX FCM's Proprietary Account.

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2.2.12 Additional Margin, ForexClear Tolerance, MER Buffer, Completion Margin and Intraday Margin Calls

(a) Additional Margin

The Clearing House may require an FX FCM to furnish additional amounts of Margin (in addition to Initial Margin) as security for the performance by an FX FCM of its obligations to the Clearing House in respect of FCM ForexClear Contracts to which such FX FCM is a party in accordance with FCM Regulation 14 (*Margin and Collateral*). This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in FCM ForexClear Contracts to which such FX FCM is a party is not adequately covered by Initial Margin. This may cover instances where stress testing losses under various scenarios provided in the ForexClear Default Fund Supplement have increased.

(b) Minimum Excess Requirement Buffer ("MER Buffer")

To facilitate the intraday registration of FCM ForexClear Contracts, at each EOD Margin Run, the Clearing House will call from each FX FCM, separately in respect of its Proprietary Account and each of its FCM Client Sub-Accounts, an amount of IM in respect of its and its FCM Clients' potential intraday Liabilities (as defined below in Section 2.2.172.2.17) for the following day ("MER Buffer"), provided that the Clearing House shall not call MER Buffer from an FX FCM that (i) opted-in to ForexClear Tolerance in accordance with paragraph (c) below and (ii) opted-out of MER Buffer (the form and manner of such "opt-out" notice shall be prescribed by the Clearing House from time to time). MER Buffer is part of the FX FCM's Required Margin. An FCM's MER Buffer is calculated in respect of an FCM's Proprietary Account and each of its FCM Client Sub-Accounts, and Margin furnished in respect of MER Buffer is credited to each account (as applicable) as IM. Notwithstanding the foregoing, for purposes of calculating a given FCM's MER Buffer, the Clearing House may from time to time, and in its sole discretion, exclude an FX FCM's given FCM ForexClear Suspension Sub-Accounts from such calculation.

The required amount of MER Buffer for each applicable account of an FX FCM is expressed as a percentage of start-of-day portfolio IM for such account. The MER Buffer for each account is calibrated daily based on recent activity within the relevant account 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 IM changes over a given number of historical business days.

The parameters of MER Buffer are: MER percentile, MER look-back period, relative MER cap and absolute MER floor. The values of these parameters are calibrated based on the quantitative analysis of the FX FCM's IM history across the ForexClear Service.

As FCM ForexClear Contracts are registered in an FX FCM's relevant accounts, the Clearing House will, in accordance with the Margin Run process, calculate the FX FCM's intraday Liabilities (or, in the case of an Incremental Risk Check, the FX FCM's estimated Liabilities), taking into account any IM posted as MER Buffer in the applicable account.

At each EOD Margin Run, the Clearing House will recalculate and call the FCM's Required Margin, which includes MER Buffer for all accounts.

(c) ForexClear Tolerance

In order to facilitate the registration of FCM ForexClear Contracts by FX FCMs, the Clearing House may, in its sole discretion, provide FX FCMs with temporary "tolerance" in the form of initial margin forbearance ("ForexClear Tolerance"). In the event an FX FCM wishes to utilize ForexClear Tolerance, it must provide notice to the Clearing House (the form and manner of such notice shall be prescribed by the Clearing House from time to time). FX FCMs who are approved to utilize ForexClear Tolerance may choose not to utilize MER Buffer in connection with the registration of FCM ForexClear Contracts (for the avoidance of doubt, the utilization of MER Buffer is compulsory for FX FCMs that do not opt-in to ForexClear Tolerance).

The Clearing House may apply ForexClear Tolerance between Margin Runs in an amount equal to the value of the Collateral that would have been required to be transferred by the FX FCM to the Clearing House to cover the relevant Liabilities (or estimated Liabilities) to facilitate the registration of FCM ForexClear Contracts. For the avoidance of doubt, ForexClear Tolerance is provided in the form of temporary initial margin forbearance and an FX FCM's utilization of ForexClear Tolerance does not give rise to any payment or transfer of Collateral by the Clearing House or result in any use of default fund resources (except following a Default).

The Clearing House will determine, in its sole discretion, the maximum value of the ForexClear Tolerance (which may be zero) that it will make available to an FX FCM from time to time ("ForexClear Tolerance Limit"). The Clearing House will notify each FX FCM of its ForexClear Tolerance Limit and will, as soon as reasonably practicable, notify an FX FCM following any adjustment to the amount of its ForexClear Tolerance Limit. Except where the Clearing House exercises its right to reduce an FX FCM's ForexClear Tolerance Limit in accordance with the foregoing, each FXCCM utilizing ForexClear Tolerance shall have an equal ForexClear Tolerance Limit.

The Clearing House may require an FX FCM to transfer Collateral to the Clearing House in respect of any utilization of ForexClear Tolerance at any time and without prior notice to the FX FCM. Without limiting the foregoing, the Clearing House will call for

Collateral to replenish the ForexClear Tolerance utilized by an FX FCM at (i) the last ITD/Ad-hoc Day Margin Run and EOD Margin Run of each Business Day and (ii) in the event an FX FCM utilizes at least 75% of its ForexClear Tolerance during a business day, at the next relevant ITD/Ad-hoc Day Margin Run. Any failure of an FX FCM to satisfy a call for Collateral relating to ForexClear Tolerance may give rise to a Default by such FX FCM.

The Clearing House will not apply ForexClear Tolerance for FCM ForexClear Contracts with a Trade Date earlier than the previous Business Day.

(d) *Completion Margin*

The Clearing House shall calculate and call each FX FCM for "completion margin." Completion margin is a component of each FX FCM's initial margin obligation, and represents potential increases in an FX FCM's initial margin obligations due to position changes resulting from next-day fixing. Completion margin is calculated as the incremental difference between an FX FCM's aggregate initial margin obligations on its FCM ForexClear Contracts and its initial margin obligations in relation to FCM ForexClear Contracts due to fix the next Business Day.

(e) Intra-day Margin Calls

In accordance with the Clearing House's FCM Regulations, the Clearing House is entitled to make additional margin calls for furnishing of Margin on the same day (intra-day margin calls) where it is considered necessary. Intra-day margin calls may be called at any time throughout the business day (08:30 to 21:00 hours, London time). Intra-day margin calls will usually be made via the Protected Payments System (PPS) (see Section 2.2.25(c)2.2.25(c)).

In certain circumstances the Clearing House may wish to make a call for additional Margin after the closure of UK PPS facilities at 16:00 hours, London time. In this event the Clearing House will require payment of additional funds through PPS facilities in the USA (see Section 3.2). Members must ensure, in these circumstances, that they are in a position to fund such calls through their nominated US PPS account within one hour of the call.

2.2.13 Initial Margin Management Events Service ("IMMES")

IMMES aims to find risk and IM reducing FCM ForexClear Contracts and ForexClear Contracts among participating FXCCMs. IMMES can be run on all Currency Pairs that are cleared through the FCM ForexClear Service, although the primary focus will be on those Currency Pairs that contribute to the largest IM requirement. IMMES is available in respect of an FX FCM's house account only.

FX FCMs who wish to obtain further information about, or to participate in, IMMES should contact ForexClear Business Operations at 0207 426 7527. To be eligible to participate in IMMES, an FX FCM must enter into an IMMES agreement with the Clearing House (the "IMMES Agreement").

(a) Step-by-step details

The Clearing House usually conducts the IMMES at least monthly.

A reminder that there is an IMMES run taking place is sent out the week before to each FXCCM which is a party to an IMMES Agreement with LCH and each FXCCM is asked to confirm their participation.

On the day of the scheduled IMMES run, the Clearing House analyses all participating FXCCMs' profiles to find FCM ForexClear Contracts and ForexClear Contracts with equivalent and opposite delta values by tenor and Currency Pair to compile a list of offsetting suggested trades that are mutually beneficial in terms of IM reduction (the "IMMES Trades").

The Clearing House then analyses the relevant FX FCM's FCM ForexClear Contract portfolios with the IMMES Trades and determines the change in NPV, IM, delta and zero yield sensitivity from the IMMES Trades.

The FXCCMs on either side of the trades are advised of the economic details of the IMMES Trades.

If the two FXCCMs agree to undertake the IMMES Trades, the Clearing House will then put them in touch with each other. The FXCCMs will enter into the bilateral IMMES Trades and submit them to the Clearing House through the FCM Approved Trade Source System for registration.

2.2.14 Intra-Day Margin Call: Collateral Management

(a) General – Intra-day Margining

Following an intra-day margin call (except as notified otherwise by an FX FCM at the time of an intra-day margin call), the Clearing House will deduct cash, in the appropriate currency, directly from the relevant FX FCMs PPS account to cover that intra-day margin call.

Cash payments in respect of intra-day Margin are accepted only in USD by the Clearing House.

Each FCM Clearing Member must ensure that it has sufficient cash funds in place with their PPS bank(s) in order to avoid any intra-day liquidity issues.

2.2.15 General Margining Process

A "Margin Run" is the process by which the Clearing House calculates an FX FCM's Initial Margin requirement (if any) and, during an EOD Margin Run, its Variation Settlement and PAA requirements (together, its "Transfer Requirements") and applies that FX FCM's Margin to satisfy the Transfer Requirements for that FX FCM in respect of the FCM ForexClear Contracts within that FX FCM's portfolio.

2.2.16 Types of Margin Runs

There are three types of Margin Run:

(a) ITD / Ad Hoc – Day Margin Run

ITD/Ad-hoc London daytime Margin Runs are initiated as and when dictated by the schedule published by the Clearing House and notified to FX FCMs 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 Run"). PPS times are published on the Clearing House's website at: http://www.lch.com/risk-collateral-management/collateral-management/protected-payments-system.

ITD/Ad-hoc Margin Runs are calls in respect of Initial Margin only. Variation Settlement and PAA are not included in ITD/Ad-hoc Margin Runs.

(b) EOD Margin Run

The EOD Margin Run is the final ITD/Ad-hoc Day Margin Run that completes by 24:00 hours, London time, on that business day (the "EOD Margin Run").

EOD Margin Runs are calls in respect of Initial Margin as well as Variation Settlement, NSA and PAA.

(c) ITD / Ad Hoc - Night Margin Run

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").

ITD/Ad-hoc Night Margin Runs are calls in respect of Initial Margin only. Amounts that are anticipated to be owed in respect of Variation Settlement, NSA and PAA may be considered in the determination of the amount of Initial Margin called in such ITD/Ad-hoc Night Margin Run.

2.2.17 Margin Run Process

Margin Runs cover all registered FCM ForexClear Contracts with the status "NOVATED".

Margin runs will be carried out for each FCM ForexClear Contract and FCM ForexClear Transaction (as the case maybe) until (and including) the later of:

- (a) EOD Margin Run on the Settlement Date; or
- (b) EOD Margin Run after the Settlement Rate is published.

During every Margin Run the Clearing House calculates the Initial Margin required and (where applicable) the Variation Settlement and PAA required to cover each FX FCM's relevant open FCM ForexClear Contracts and FCM ForexClear Transactions (each a "Liability" and together the "Liabilities").

Each FX FCM's Liability is offset against that FX FCM's non-cash Collateral account (being a sub-account of the FX FCM's financial account) (for IM only) or funds in that FX FCM's cash account (being a sub-account of the FX FCM's financial account) (for VS/PAA/IM). Initial Margin will always be a Liability (payable to the Clearing House) and Variation Settlement, NSA and PAA may be a cash posting or a Liability (payable by, or to, the Clearing House, respectively).

FX FCMs are informed via email of their Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)) and are directed to the ForexClear Services portal (being a secure website made available to FXCCMs) (the "ForexClear Service Portal") which provides reports (at the times specified in Section 2.2.242.2.24) informing FX FCMs of their (i) total Liabilities under the FCM ForexClear Service; (ii) current total cover posted with the Clearing House for the FCM ForexClear Service (including MER Buffer and/or ForexClear Tolerance, if any); and (iii) Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)).

If following a Margin Run an FX FCM is required to provide additional Collateral or funds, this is also indicated by email and via the ForexClear Service Portal. In the case of ITD/Ad-hoc Margin Runs, where an FX FCM's Liabilities exceed its available cover and any MER Buffer and/or ForexClear Tolerance, then the Clearing House will issue a margin call for the amount of the shortfall plus 50 per cent. of the FX FCM's MER Buffer amount.

2.2.18 Compression

- (a) An FCM Clearing Member may compress Eligible FCM ForexClear Compression Contracts in accordance with FCM Regulation 49(o) and this Section 2.2.18. There are two options available to an FCM Clearing Member that wishes to compress Eligible FCM ForexClear Compression Contracts:
 - (A) an FCM Clearing Member can request that all Eligible FCM ForexClear Compression Contracts entered into (i) on behalf of a designated FCM Client and in respect of a particular FCM

Client Sub-Account (including an FCM ForexClear Suspension Sub-Account), or (ii) on such FCM 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 FCM Clearing Member after the applicable scheduled compression run) until the FCM Clearing Member notifies the Clearing House to discontinue the compression of Eligible FCM ForexClear Compression Contracts. FCM Clearing Members should contact the Clearing House's Membership Department to request such a compression of Eligible FCM ForexClear Compression Contracts; or

- (B) an FCM Clearing Member may notify the Clearing House through the ClearLink API specifying the Eligible FCM ForexClear Compression Contracts it wishes to be compressed. The FCM 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.
- (b) In order to compress an Eligible FCM ForexClear Compression Contracts, an FCM Clearing Member must follow the process for compression as set out above and must, at the time of compression, have in its applicable FCM Client Sub-Account (or FCM ForexClear Suspension Sub-Account, if applicable) or Proprietary Account two or more FCM ForexClear Contracts with the same compression identifier (being an identifier applied by the Clearing House which indicates that such FCM ForexClear Contracts are eligible for compression).
- (c) In respect of each compression run, the Clearing House will notify Clearing Members of the cut-off time by which the FCM Clearing Members must notify the Clearing House of the requested Eligible FCM ForexClear Compression Contracts to be compressed in order for such Eligible FCM ForexClear Compression Contracts to be included in the relevant compression run. The Clearing House shall process the compression of all Eligible FCM ForexClear Compression Contracts notified to it prior to such cut-off time and shall notify the applicable FCM 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.
- (d) Following the compression process described above and as further set out in FCM Regulation 49(o) (Registration of FCM ForexClear Contracts; Compression; ForexClear Accounts), the applicable FCM 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 FCM ForexClear Contracts as notified to the FCM Clearing Member by the Clearing House.

2.2.19 Portfolio Transfers (BAU)

The Clearing House permits the transfer of one or more Transferring ForexClear Contracts between the Transfer Account of an Eligible Transferor to the Transfer Account of an Eligible Transferee, including, where relevant, the transfer of associated Collateral.

For transfers other than Permitted Transfers (as defined below), please contact the Clearing House's Risk Management Department.

Permitted Transfers

Any transfer that meets the criteria in any of (a) through (g) below shall be a "**Permitted Transfer**" for purposes of Regulation 49(r) and this Section 2.2.19. In certain circumstances, a Permitted Transfer may be effected for all or part of the notional amount associated with the Transferring ForexClear Contracts. Notwithstanding the foregoing, but subject to Applicable Law, the Clearing House may reject any Permitted Transfers in its sole discretion.

- (a) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Client Account; (B) the Transfer Account of the Eligible Transferee is a Client Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are separate legal entities;
- (b) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Client Account; (B) the Transfer Account of the Eligible Transferee is a Client Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are the same legal entity;
- (c) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Client Account; (B) the Transfer Account of the Eligible Transferee is a Proprietary Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are separate legal entities;
- (d) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Proprietary Account; (B) the Transfer Account of the Eligible Transferee is a Client Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are separate legal entities;
- (e) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Proprietary Account; (B) the Transfer Account of the Eligible Transferee is a Client Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are the same legal entity;

(f) a transfer of one or more Transferring ForexClear Contracts where: (A) the Transfer Account of the Eligible Transferor is a Client Account; (B) the Transfer Account of the Eligible Transferee is a Proprietary Account; and (C) the Receiving Clearing Member and the Carrying Clearing Member are the same legal entity; and

(g) any transfer that the Clearing House otherwise approves in its sole discretion.

Other than pursuant to FCM Regulation 13(d), an FCM Clearing Member, acting for its own account or for the account of an FCM Client, may not effect Permitted Transfers in accordance with paragraphs (d) or (e) above.

Transfer Requests

Each transfer request ("**Transfer Request**") pursuant to Regulation 49(r) and this Section 2.2.19 may only be made in respect of a Permitted Transfer and must be prepared and submitted in the form and manner prescribed by the Clearing House from time to time. Following receipt of a Transfer Request, the Clearing House shall notify the Carrying Clearing Member that it received a Transfer Request to transfer Transferring ForexClear Contracts.

In respect of any Permitted Transfer that involves the transfer of all (and not some) of the FCM ForexClear Contracts from the Transfer Account of an Eligible Transferor (with or without the transfer of associated Collateral), once the Carrying Clearing Member receives notice that a Transfer Request has been received, the Carrying Clearing Member shall not be permitted to submit additional FCM ForexClear Contracts in the Transfer Account of the Eligible Transferor whose FCM ForexClear Contracts are to be subject to transfer until the time at which the relevant transfer (including the transfer of any relevant associated Collateral, if applicable) is effected, fails or is rejected in accordance with Regulation 49(r) and these FCM Procedures.

Transfer Notice Period

The timing for Transfer Requests pursuant to Regulation 49(r) and this Section

2.2.19 will be as prescribed by the Clearing House by way of a member circular.

Conditions Precedent to Permitted Transfer

It is a condition precedent to any transfer from the Transfer Account of an Eligible Transferor to the Transfer Account of an Eligible Transferee pursuant to Regulation 49(r) and this Section 2.2.19 that:

- (h) the transfer is a Permitted Transfer;
- (i) the Receiving Clearing Member has provided the Clearing House with:

a Transfer Request in the form and manner prescribed by the Clearing House, which may be submitted by an FCM Client on its behalf; and

such evidence of the authorization of the Permitted Transfer by the Eligible Transferor, Eligible Transferee and the FCM Client, as applicable, as the Clearing House may require in its sole discretion;

- (j) neither the Eligible Transferor, the Eligible Transferee nor the FCM Client, as applicable, has become insolvent (each Eligible Transferor, Eligible Transferee and FCM Client, as the case may be, will be presumed to be solvent by the Clearing House unless evidenced to the contrary by the Carrying Clearing Member in the manner reasonably determined by the Clearing House);
- (k) neither the Carrying Clearing Member nor the Receiving Clearing Member is a Defaulter:
- (l) such transfer would not violate or result in the violation of Applicable Law or regulation, including:
 - (A) the authorization, registration or other regulatory requirements, if any, that may apply to the Receiving Clearing Member as a consequence of the transfer; and
 - (B) where the transfer leads to a change in beneficial ownership, the requirements, if any, that may apply to the method of execution by which the Eligible Transferor has sold the Transferring ForexClear Contracts to the Eligible Transferee;
- (m) the Eligible Transferor, Eligible Transferee, the Receiving Clearing Member, the Carrying Clearing Member and FCM Client, as applicable, have each executed all documents necessary or required by the Clearing House in order to effect such transfer (including, where applicable, a Security Deed, Deed of Charge, Client Charge, Collateral Management Agreement, Clearing Membership Agreement and/or a Clearing Agreement);
- (n) the Receiving Clearing Member has consented to the transfer of the Transferring ForexClear Contracts and, where relevant, the associated Collateral;
- (o) the Receiving Clearing Member has transferred (or has made available) Required Margin to the Clearing House in respect of its current FCM ForexClear Contracts and the Transferring ForexClear Contracts;
- (p) the Carrying Clearing Member has not rejected such transfer in accordance with this Section 2.2.19 (it being presumed that the Carrying Clearing Member has not so rejected the transfer unless evidenced to the contrary by the Carrying Clearing Member in accordance with this Section 2.2.19 or as otherwise reasonably determined by the Clearing House); and
- (q) in the event that the transfer will lead to a requirement for the Carrying Clearing Member to transfer (or make available) additional Collateral

or any other payment to the Clearing House, the Carrying Clearing Member transfers sufficient Collateral or makes such payment to the Clearing House.

In the event that any of the conditions set forth above are not satisfied, including where the Carrying Clearing Member notifies the Clearing House that certain conditions have not been satisfied in a manner reasonably acceptable to the Clearing House, the Clearing House shall not proceed with the transfer of the Transferring ForexClear Contracts or, if applicable, the transfer of any associated Collateral, and shall promptly notify the Receiving Clearing Member of such outcome. If the Receiving Clearing Member wishes to proceed with such transfer or any other transfer of Transferring ForexClear Contracts of the Eligible Transferor(s), it shall be required to submit a new Transfer Request in accordance with these FCM Procedures.

By requesting a transfer of the Transferring ForexClear Contracts from the Transfer Account of an Eligible Transferor and, if applicable, the associated Collateral pursuant to Regulation 49(r) and this Section 2.2.19, including a request submitted by an FCM Client on its behalf, the Receiving Clearing Member shall be deemed to have represented to the Clearing House that all of the conditions to such transfer set forth herein have been satisfied.

Rejection of Transfer Request

The Carrying Clearing Member may be entitled to reject a particular Transfer Request by notifying the Clearing House (in either electronic or written form as prescribed by the Clearing House) only if:

- (r) the Eligible Transferor has failed to satisfy all outstanding obligations that are due and payable to the Carrying Clearing Member and/or its Affiliates, including any requirement for additional collateral that may result from the proposed transfer, where, with the respect to obligations owed to Affiliates of the Carrying Clearing Member by an Eligible Transferor, "obligations" shall consist only of those obligations that arise as a result of cross-margining, cross-netting or other similar arrangements with respect to the Transferring ForexClear Contracts of that Eligible Transferor that are being transferred or that Eligible Transferor's related collateral;
- (s) the transfer of the Transferring ForexClear Contracts of that Eligible Transferor would result in the Eligible Transferor breaching exposure limits with, and/or other risk parameters set by, the Carrying Clearing Member and/or its Affiliates; or
- (t) such rejection is in accordance with terms agreed as between the Carrying Clearing Member and the relevant Eligible Transferor.

Right to Call Collateral

Permitted Transfers will only be effected once adequate Collateral is available (which may be as a consequence of margin forbearance or the transfer of

associated Collateral) in respect of both Transfer Accounts affected by the transfer. In connection with any Permitted Transfer, the Clearing House may call for Collateral in respect of initial and/or variation margin to be deposited in such amounts and at such times as the Clearing House, in its sole discretion, requires. Any Collateral so called and deposited shall be reserved and made available solely in connection with the Permitted Transfer.

Transfer of Associated Collateral Balance

In the case where a transfer of Transferring ForexClear Contracts pursuant to this Section 2.2.19 will include the transfer of associated Collateral to the Transfer Account of the Eligible Transferee:

- upon completion of the transfer, (x) the Clearing House shall have (u) satisfied and discharged all of its obligations under the FCM Clearing Membership Agreement and the FCM Rulebook to repay or return to the Carrying Clearing Member any amounts in respect of such associated Collateral and (y) the associated Collateral furnished to the Clearing House by the Carrying Clearing Member and held by the Clearing House in respect of the Transferring ForexClear Contracts shall be deemed to have been delivered by the Receiving Clearing Member to the Clearing House (aa) where the Receiving Clearing Member is not an FCM Clearing Member, in the case of cash Collateral, by way of title transfer and, in the case of non-cash Collateral, shall be held by the Clearing House on behalf of the Receiving Clearing Member and such Receiving Clearing Member's rights in such non-cash Collateral shall become subject to the relevant Deed of Charge of the Receiving Clearing Member, or (bb) where the Receiving Clearing Member is an FCM Clearing Member, by way of a first-priority security interest granted by the Receiving Clearing Member to the Clearing House under the FCM Clearing Membership Agreement and the FCM Rulebook; furthermore, and for the avoidance of doubt, the Carrying Clearing Member shall have no right or entitlement to assert any claim over, or right with respect to, the associated Collateral transferred;
- (v) where all or a portion of the associated Collateral has been accepted by the Receiving Clearing Member, LCH shall promptly transfer the Transferring ForexClear Contracts and the accepted associated Collateral, and the transfer of the Transferring ForexClear Contracts shall be conditioned on the transfer of the accepted associated Collateral, and vice versa; and
- (w) if the transfer of all Transferring ForexClear Contracts and (if applicable) all accepted associated Collateral is not completed for any reason, then any actual transfer of associated Collateral or Transferring ForexClear Contracts that has occurred, as the case may
- (x) be, shall be deemed not to have occurred, and any actual transfer of associated Collateral or Transferring ForexClear Contracts that has occurred shall be immediately unwound.

Verification and Reliance

Subject to the following paragraph, but otherwise notwithstanding anything to the contrary in the FCM Regulations or these FCM Procedures, in making any Transfer Request in accordance with Regulation 49(r) and this Section 2.2.19, the Clearing House shall be authorized and entitled to rely conclusively on the instructions of, and information provided by, the Receiving Clearing Member and the Carrying Clearing Member, which shall be solely responsible for all such instructions and information.

The Clearing House shall verify that the Transferring ForexClear Contracts identified to it by a Receiving Clearing Member as being the subject of such Transfer Request correspond to FCM ForexClear Contracts that, according to its records, are registered in the Transfer Account of the Carrying Clearing Member on behalf of the Eligible Transferor. In the event that the Clearing House identifies a discrepancy, it will notify the Receiving Clearing Member and the Carrying Clearing Member and no transfer will occur until such time as the Transferring ForexClear Contracts identified to the Clearing House can be verified to the Clearing House.

Fees

Any Permitted Transfer effected pursuant to Regulation 49(r) and in accordance with these FCM Procedures will be subject to such fees as are established by the Clearing House from time to time in its sole and absolute discretion, and notified to FXCCMs via a member circular.

2.2.20 Actions in Respect of an FCM Client Default

This Section describes certain transfers and registrations that, under certain conditions, can be requested by an FCM Clearing Member upon an FCM Client Default with respect to a given Defaulting FCM Client.

The Clearing House shall have no liability in connection with any loss or cost suffered or incurred by any FCM Clearing Member or FCM Client in connection with any actions taken by the Clearing House pursuant to this Section 2.2.20.

Notwithstanding anything to the contrary contained in this Section 2.2.20, the actions described in this section are subject to Applicable Law, including the provisions of the CEA and the CFTC Regulations.

(a) Transfers between Proprietary Accounts and FCM Client Accounts

Pursuant to FCM Regulation 13(d), the UK General Regulations and the UK General Procedures, an FCM Clearing Member may, following the occurrence of an FCM Client Default, request that the Clearing House transfer one or more FCM ForexClear Contracts (including those submitted for registration pursuant to Section 2.2.20(c)) or ForexClear Contracts (as the case may be): (i) from the Defaulting FCM Client's FCM Client Sub-Account to its Proprietary Account or

the Proprietary Account of a ForexClear Clearing Member or an FCM Clearing Member; or (ii) from its Proprietary Account or the Proprietary Account of a ForexClear Clearing Member or FCM Clearing Member to the Defaulting FCM Client's FCM Client Sub-Account, provided that the following conditions precedent are met (in addition to any other generally applicable provisions of the FCM Rulebook): neither the FCM Clearing Member nor any ForexClear Clearing Member or FCM Clearing Member to or from which the ForexClear Contracts are being transferred pursuant to this Section 2.2.20 is a Defaulter (nor would they become a Defaulter upon the completion of the transfer).

For the avoidance of doubt, in the case of an FCM Client Default, the Clearing House will not require that the Defaulting FCM Client provide its consent to the requested transfer in order for the Clearing House effect a transfer requested by the FCM Clearing Member pursuant to Regulation 13(d)(i).

The Clearing House will typically (but shall not be required to) transfer the relevant FCM ForexClear Contract(s) or ForexClear Contract(s) within 24 hours of receipt of (a) the transfer request and (b) such other documents as the Clearing House requested in accordance with the foregoing.

(b) Proprietary Account Position Transfers

An FCM Clearing Member may, following a transfer of open contracts to its Proprietary Account in accordance with paragraph (a) above, and to the extent permitted by Applicable Law (including all applicable laws and provisions of the CEA and the CFTC Regulations), request that the Clearing House transfer an FCM ForexClear Contract from its Proprietary Account to the Proprietary Account of a ForexClear Clearing Member or other FCM Clearing Member pursuant to FCM Regulation 13(d), provided that the following condition precedent is met (in addition to any other generally applicable provisions of the FCM Rulebook): the transferor FCM Clearing Member is permitted (where applicable) by its agreement(s) with the Defaulting FCM Client, and has authority to effect, the transactions specified in the transferor FCM Clearing Member's request(s) to the Clearing House in respect of such transfer.

The Clearing House will typically (but shall not be required to) transfer the relevant FCM ForexClear Contract(s) within 24 hours of receipt of the (a) transfer request and (b) such other documents as the Clearing House requested in accordance with the foregoing.

(c) Registration of FCM ForexClear Contracts in Defaulting FCM Client's FCM Client Sub-Account

Following the occurrence of an FCM Client Default in respect of a Defaulting FCM Client, an FCM Clearing Member may submit FCM

ForexClear Contracts to the Clearing House for registration in such Defaulting FCM Client's FCM Client Sub-Account, provided that the following condition precedent is met (in addition to any other generally applicable provisions of the FCM Rulebook): the submission of such FCM ForexClear Contracts is effected via an Approved Trade Source System or other method such method as the Clearing House shall instruct for such purpose, and on such terms and including such details as the Clearing House shall require.

(d) Representations

A request from an FCM Clearing Member to the Clearing House to carry out any of the actions described in paragraphs (a) to (c) above, shall in every case be deemed a representation by the FCM Clearing Member to the Clearing House that:

- (A) an FCM Client Default has occurred;
- (B) the FCM Clearing Member has provided and will provide (as applicable) any required notices to the Defaulting FCM Client in respect of (i) such FCM Client Default and (ii) any of the actions described in paragraphs (a) to (c) above;
- (C) the FCM Clearing Member is permitted by its agreement(s) with the Defaulting FCM Client and has authority to effect the transfers and/or registrations specified in the FCM Clearing Member's requests to the Clearing House in respect of the Defaulting FCM Client;
- (D) such transfers and/or registrations and all related instructions to the Clearing House are in compliance with Applicable Law; and
- (E) the individual making such request or submission (or issuing any related instructions to the Clearing House) is authorized to do so on behalf of the FCM Clearing Member.

In connection with a request from an FCM Clearing Member to the Clearing House to carry out any of the actions described in paragraphs (a) to (c) above:

(F) the FCM Clearing Member shall provide to the Clearing House (i) satisfactory evidence of the occurrence of the FCM Client Default and (ii) all other documentation required by the Clearing House, which shall include an indemnity from the FCM Clearing Member in favor of the Clearing House, the form and manner of which shall be determined by the Clearing House in its sole discretion. For purposes of this paragraph, "satisfactory evidence" may be, to the extent permitted by the Clearing House in its sole discretion, the FCM Clearing Member's instruction to effect the relevant transfer under

paragraph (a) or (b) above or accept the submission under paragraph (c) above. For the avoidance of doubt, the Clearing House shall be entitled to request additional evidence and/or documentation for legal, regulatory or risk management reasons; and

(G) the relevant FCM Clearing Member shall transfer (or make available) Required Margin into its Proprietary and/or the applicable FCM Client Sub-Account, taking into account that an FCM Clearing Member may not request the transfer of an Associated Collateral Balance in connection with a transfer of an FCM ForexClear Contract from an FCM Client Sub-Account to a Proprietary Account.

2.2.21 Automatic Exercise of FCM ForexClear NDO Contracts

If, at the Expiration Time on the Expiration Date, the In-the-Money Amount of an FCM ForexClear NDO Contract equals or exceeds the product of:

- (a) the number of basis points as published by the Clearing House from time to time as being applicable to the ForexClear Currency Pair referenced in that FCM ForexClear NDO 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 FCM ForexClear Contract, such FCM ForexClear NDO Contract shall be deemed exercised as of such time.

For the purposes of this Section 2.2.19, the Clearing House may change the number of basis point applicable to any ForexClear Currency Pair by giving three business days' prior notice to affected FX CCMs (or such shorter notice period as determined by the Clearing House following consultation with the affected FX CCMs).

The "In-the-Money Amount" in relation to an FCM ForexClear NDO Contract shall, in respect of the Exercise Date, be equal to:

- (c) in the case of a Call, the excess of the FX Spot Reference Price 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
- (d) in the case of a Put, the excess of the Strike Price over the FX Spot Reference Price, 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.

Capitalised terms used in this Section 2.2.19 and not otherwise defined shall have the meanings specified for such terms in (i) the FCM ForexClear Contract Terms applicable to the given FCM ForexClear NDO Contract or, if not 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.

2.2.22 Proprietary Account Position Transfers

The FCM ForexClear Clearing System provides functionality for the transfer of positions from an FCM Clearing Member's Proprietary Account. Any such transfer may only occur if the Receiving Clearing Member is an affiliate of the Carrying Clearing Member.

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 FX FCM regarding any additional collateral that may be required in order to complete the portfolio transfer. An FCM Clearing Member who wishes to effect a position transfer to another FCM Clearing Member should contact the Clearing House's Risk Management Department. Transfers will only be effected once adequate cover has been provided by both parties to the transfer.

2.2.23 FCM Clearing Member's Client Fund Transfer

The FCM ForexClear Clearing System provides functionality for the transfer of FCM ForexClear Contract whereby an FCM Client has incorrectly booked the FCM ForexClear Contract to a fund, and wishes to re-locate the FCM ForexClear Contract to an alternative fund within the accounts of the same FCM Clearing Member.

Transfers can only occur based upon the below rules:

- (a) A valid request has been received by the Clearing House from the applicable FCM Clearing Member on behalf of the FCM Client, as per Schedule 2.2B.
- (b) The FCM ForexClear Contract is registered by the Clearing House, and sufficient Margin has been furnished to cover the FCM ForexClear Contract.
- (c) Transfers are only handled within the accounts of a single FCM Clearing Member (i.e., not a transfer between two FCM Clearing Members).

Transfer requests received by FCM ForexClear Operations prior to 15:00 London time will be managed and included in the 18:00 London time margin run. The transfer of the FCM ForexClear Contract will occur **provided that** sufficient Margin is held for the FCM Clearing Member and outstanding payments of Variation Settlement and other obligations have been made as necessary.

2.2.24 ForexClear Reporting

For purposes of reporting obligations to the CFTC, FXCCMs may only report details of FCM ForexClear Contracts, including terminations and

modifications to an FCM 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 FCM 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 FCM Clients of the list of Approved LCH SDRs, and inform such FCM Clients that the Clearing House is only able to report details of an FCM ForexClear Contract to an Approved LCH 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 (including the FCM ForexClear Service), thus an FX FCM will receive reports in respect of the FCM ForexClear Service 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 website: https://www.lch.com/membership. The terminology used in a report in respect of Margin, Variation Settlement or Price Alignment Amount may reflect terminology commonly used in the industry. Such terminology shall not affect the interpretation or construction of any provisions or terms of the FCM Regulations or FCM Procedures.

In respect of the FCM ForexClear Service, on each business day the Clearing House will provide two sets of reports to FX FCMs: (1) Banking Reports; and (2) reports direct from the FCM ForexClear Service (together "ForexClear Reporting"). These Procedures reference the FCM ForexClear Service specific reports. Each day's report will remain available for download by FX FCMs from the FCM 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 obligations) shall, to the extent required by (and in line with the requirements of) Applicable Law (including Parts 43 and 45 of the CFTC Regulations, and applicable requirements under English law), report to one or more data or trade repositories (including swap data repositories) or similar body the details of all FCM ForexClear Transactions and FCM ForexClear Contracts, including any modifications or terminations without duplication and no later than the working day following the conclusion, modification or termination of such contract. In order to avoid any such duplication of reports, each FX FCM acknowledges and agrees that it will not report the details referred to in this paragraph to the bodies referred to in this paragraph, unless otherwise agreed with the Clearing House.

(a) Margin Liability Reports

Reports detailing Liabilities are provided to FX FCMs following every scheduled Margin Run in accordance with Section <u>2.2.172.2.17</u> and where additional Collateral or other payment has been called by the Clearing House. Additionally, a report, including sensitivities, is provided at ForexClear Contracts level. A report will also be provided

detailing an FX FCM's Margin utilization level. If an FX FCM's Liabilities exceed its total available Margin, ForexClear will alert the FX FCM.

(b) Market Data Reports

Reports detailing Market Data are provided to FX FCMs following every scheduled Margin Run. They include reports of Market Data and Settlement Rate used in the valuation of FCM ForexClear Contracts and reports of Market Data shifts for each historic scenario used in IM calculations.

(c) Trade Reports

Reports are **provided that** enable FX FCMs to monitor their firms' trading events and positions in respect of ForexClear. Reports on open FCM ForexClear Contracts and on cancelled FCM ForexClear Transactions and FCM ForexClear Contracts are generated at EOD and reports on transferred FCM ForexClear Contracts are made on an ad hoc basis.

(d) Trade Fixing and Settlement Reports

Reports are published on each business day detailing the FCM ForexClear Contracts to which the Settlement Rate has been applied on that business day (the "NDF Fixings" report), FCM ForexClear Contracts that have been settled during that current business day (the "Settlements Today" report) and FCM ForexClear Contracts that will settle the next business day (the "NDF's Fixed with Settlement Tomorrow" report).

(e) Fees Reports

Reports on trading volumes on a daily and monthly basis are provided to FX FCMs. 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 FX FCMs choosing to have tariffs levied per transaction.

(f) Banking Reports

Follow this link:

https://www.lch.com/membership

(g) Real-time Reporting

A near real-time view of member liabilities, Collateral pledged, Margin and credit utilization will be available from the ForexClear Service Portal (referred to in Section 2.2.172.2.17).

In accordance with CFTC Part 45 requirements (where the FX FCM has a reporting obligation), FX FCMs 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.

2.2.25 Treasury Operations & Collateral Management

(a) Cover Distribution

The Clearing House nets each FX FCM's Liabilities (i.e., margins, settlements, PAA 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 cover distribution ("Cover Distribution"). FX FCMs can choose whether cash or non-cash Collateral should be applied first. At the end of this process, if an FX FCM has a shortfall, a PPS (as defined in Section 2.2.25(c)2.2.25(c) below) call for additional Collateral, settlement or PAA is made. Conversely, any excess cash remaining after the final overnight Margin Run can, if requested before 09:30 hours be repaid to the FX FCM.

(b) Cover Distribution Notification

FX FCMs are informed via email of their: Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover 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 2.2.242.2.24) informing FX FCMs of their (i) total Liabilities under the ForexClear Service; (ii) current total cover posted with the Clearing House for ForexClear; and (iii) Liabilities as a percentage of their current total cover (such percentage being shown as a percentage of the aggregate cover in their cash and non-cash Collateral account(s)).

The reports accessed via the ForexClear Service Portal will enable FX FCMs to log in and examine the underlying data.

(c) Protected Payment System

The Clearing House operates the Protected Payments System ("**PPS**") for transferring funds to and from its FX FCMs to cover their Transfer Requirements. This is similar to a direct debit arrangement where the PPS bank confirms that any Clearing House-specified call is met.

FX FCMs are obliged to hold an account with a UK 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:

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List of PPS Banks²

(d) Acceptable Forms of Collateral Cover

Follow the link below for a detailed description of acceptable collateral and processes applicable from time to time:

Risk Management/LCH/Acceptable Collateral³

(e) Interest and Accommodation

Interest is <u>paid_payable_to_or_by_FX_FCMs</u> on cash Collateral with respect to the ForexClear Service held by the Clearing House. The <u>rate</u> to be applied will be either LDR – London Deposit Rate, or CDR – Client Deposit Rate, as further described in Section 1.6.3 of Section 3 of the Procedures and as prescribed by the Clearing House from time to time by publication on its website. London Deposit Rate ("LDR") is applied.

A utilization 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:

Overview of interest and charges⁴

The Clearing House shall notify FX FCMs of any change to the LDR for the ForexClear Service via member circular.

2.2.26 **Default Management**

(a) Portfolio Splitting

As part of the ForexClear DMP (contained in the ForexClear DMP Annex to the Default Rules), 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 DMG (as defined in the ForexClear DMP Annex to the Default Rules), 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

https://www.lch.com/risk-collateral-management/sa-collateral-management/sa-acceptable-collateral/sa-acceptable-cash-0

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https://www.lch.com/risk-collateral-management/ltd-collateral-management/ltd-fees-collateral

(B) one or more individual Auction Portfolios which are more risk neutral.

(b) 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 breach 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.

(c) Affiliate Bidding

ForexClear Clearing Members are entitled to bid for an Auction Portfolio on behalf of an affiliated ForexClear Clearing Member or an affiliated FCM Clearing Member. Where a ForexClear Clearing Member makes a bid and that ForexClear Clearing Member has an affiliated ForexClear Clearing Member or FCM 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 or FCM 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 Membership Department (membership@lch.com; +44 (0)207 426 7949).

(d) Outsourcing

Pursuant to Section 1 (*Membership*) of these FCM Procedures, an FX FCM may appoint a third party to fulfill one or both of the Clearing House's FCM clearing membership criteria to: (i) participate in a ForexClear "fire drill" run by the Clearing House; and (ii) participate in the ForexClear DMP operated by the Clearing House. Where an FX FCM 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) a ForexClear Clearing Member
- (B) an FX FCM;
- (C) an FCM Client; or
- (D) any other entity that the Clearing House deems appropriate in its sole discretion.

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

FX FCMs should note that LCH Approved Outsourcing Agents may be subject to a more rigorous driving test and fire-drill than FX FCM (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 FX FCM, 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 FX FCM 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 FX FCM 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 FX FCM, in the event of a default, shall not extend beyond the provision of operational and other ancillary support to that FX FCM.

(e) ForexClear DMG

The necessary involvement of FX FCMs and the ForexClear DMG (which, as defined in the Default Rules, refers to the advisory Default Management Group established by the Clearing House pursuant to the terms of the ForexClear DMP Annex to the Default Rules) 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, chedule 2.2D establishes binding obligations of confidentiality, anonymity and the extent of dissemination of information on FX FCMs (and their executives or directors who participate from time to time in the ForexClear DMG) and on the Clearing House.

Each FX FCM 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 chedule 2.2Dehedule 2.2D covering confidentiality, non-disclosure and other terms.

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(f) Procedures for Liquidation of FCM ForexClear Contracts of FCM Clients

Upon the default of an FCM Clearing Member, the Clearing House has the power and authority, pursuant to the FCM Rulebook, the CEA and the CFTC Regulations, to liquidate the FCM ForexClear Contracts of FCM Clients which, pursuant to the FCM Rulebook, would be conducted in accordance with the ForexClear DMP Annex. This section sets forth certain supplementary procedures (in addition to the Default Rules and other applicable provisions of the FCM Rulebook) that will apply under such circumstances.

In certain circumstances the Clearing House may deem, in its sole discretion, that one or more of the FCM ForexClear Contracts attributable to an FCM Client's FCM Client Sub-Account should be liquidated. Such determination may result from factors including: (i) the Clearing House determining that the FCM Client poses too great a risk to the Clearing House and should therefore be liquidated, (ii) the Clearing House becoming aware of the FCM Client becoming insolvent or otherwise failing in its obligations to the defaulting FCM Clearing Member, (iii) the relevant FCM Client requesting that it be liquidated, or (iv) a request or instruction from a Regulatory Body, whether orally or in writing. In the event of such liquidation the Clearing House shall transfer (either physically or by book-entry) such FCM Client's FCM ForexClear Contracts to be liquidated into an account at the Clearing House established for purposes of liquidating the FCM ForexClear Contracts of FCM Clients of the defaulter (such account, a "Hedged Account"). The Clearing House shall establish a separate Hedged Account for each currency of FCM ForexClear Contracts that are non-transferable and will be subject to liquidation and will include in such Hedged Account the FCM ForexClear Contracts in the applicable currency that are to be liquidated, regardless of the FCM Clients for which such FCM ForexClear Contracts are held. The provisions of this section shall apply equally to any such Hedged Account. Additionally, no FCM Contracts other than FCM ForexClear Contracts will be transferred into a Hedged Account established for liquidating FCM ForexClear Contracts.

An FCM Client whose FCM ForexClear Contracts are transferred into a Hedged Account is referred as a "Non-Porting Client". The Clearing House shall hold the relevant Collateral in respect of Non-Porting Client (segregated as belonging to each such applicable Non-Porting Client in accordance with the CFTC Regulations and Part 22 thereof) in its applicable FCM Omnibus ForexClear Client Account with LCH of the Defaulter until the liquidation of the entire Hedged Account and all FCM ForexClear Contracts and other positions therein, as described below. At the time that the FCM ForexClear Contracts of a Non-Porting Client are transferred into a Hedged Account, any outstanding and accrued but unpaid Variation Settlement and PAA in respect of such FCM ForexClear Contracts shall be

discharged as of the time such FCM ForexClear Contracts are transferred into the Hedged Account, by (i) in the event that Variation Settlement or PAA is accrued but unpaid in favor of the Clearing House, debiting the relevant FCM Client Sub-Account of such FCM Client, or (ii) in the event that Variation Settlement or PAA is accrued but unpaid in favor of the FCM Client, crediting the relevant FCM Client Sub-Account of such FCM Client.

- (A) Administration of a Hedged Account. The Clearing House may enter into hedge transactions and liquidate and/or auction the FCM ForexClear Contracts and hedges for the account of the Hedged Account, and may take related actions with respect to a Hedged Account (and the positions held therein), in its sole discretion as permitted by the FCM Rulebook, the CEA and the CFTC Regulations, or as directed by an applicable Regulatory Body.
- (B) Allocation of Gains and Losses in a Hedged Account to Non-Porting Clients. The Clearing House will allocate losses and gains (including further Variation Settlement and PAA changes, hedging costs including the gains and losses associated with hedging transactions, and liquidation/auction costs and losses) to Non-Porting Clients in a Hedged Account in accordance with the following provisions:
 - (A) At the time an FCM Client becomes a Non-Porting Client, such Non-Porting Client is assigned a risk factor (a "**Risk Factor**") which is equal to such Non-Porting Client's Required Margin with respect to its FCM ForexClear Contracts that are transferred into the Hedged Account at the time such FCM Client became a Non-Porting Client (*i.e.*, at the time of transfer into the Hedged Account).
 - (B) On the first day that FCM Clients become Non-Porting Clients, gains and losses in the Hedged Account on such day shall be allocated on a *pro rata* basis among such Non-Porting Clients based on their individual Risk Factors. The allocation of gains and losses on subsequent days shall be made in the same manner until the occurrence of a day (if applicable) in which additional Non-Porting Clients are included in the Hedged Account. Additional Non-Porting Clients that are included in the Hedged Account on a subsequent day, until further additional Non-Porting Clients are included in the Hedged Account on a further subsequent day, are referred to as "New Non-Porting Clients".
 - (C) On a day when one or more New Non-Porting Clients are included in the Hedged Account, the Clearing House shall calculate a combined risk factor (the

"Existing Non-Porting Clients Combined Risk Factor") in respect of the Non-Porting Clients that were previously included in the Hedged Account and are not New Non-Porting Clients (such existing Non-Porting Clients, "Existing Non-Porting Clients"). Existing Non-Porting Clients Combined Risk Factor shall be based on the amount of Required Margin associated with the Hedged Account with respect to all positions (including all FCM ForexClear Contracts, hedges or other positions) held in the Hedged Account, at the beginning of the day on which New Non-Porting Clients are included in the Hedged Account (i.e., at a time prior to the transfer of the FCM ForexClear Contracts of New Non-Porting Clients into the Hedged Account). For the avoidance of doubt, the Existing Non-Porting Clients Combined Risk calculated without respect to the Required Margin applicable to the transferred FCM ForexClear Contracts of the New Non-Porting Clients.

(D) On any day on which New Non-Porting Clients are included in the Hedged Account, gains and losses in the Hedged Account that are incurred on that day will be allocated among the Existing Non-Porting Clients (as a group) and the New Non-Porting Clients (individually) on a pro rata basis based on the Existing Non-Porting Clients Combined Risk Factor (with respect to the Existing Non-Porting Clients as a group) and the individual Risk Factors of each New Non-Porting Client (with respect to each such New Non-Porting Client individually). The gains and losses allocated in such manner to the Existing Non-Porting Clients as a group shall be further allocated to each individual Existing Non-Porting Client on a pro rata basis based on the Risk Factor of each such Existing Non-Porting Client. The allocation of gains and losses on subsequent days shall occur in the same manner as set forth in this paragraph (D) until the occurrence of a day (if applicable) in which additional Non-Porting Clients are included in the Hedged Account and thus become the New Non-Porting Clients. In such a case, (A) the Existing Non-Porting Clients shall continue to be treated as Existing Non-Porting Clients, (B) the Non-Porting Clients previously constituting the New Non-Porting Clients shall then constitute Existing Non-Porting Clients (in accordance with the definition of New Non-Porting Clients in paragraph (B) above), (C) the additional Non-Porting Clients included in the Hedged Account constitute the New Non-Porting Clients (in accordance with the definition of New Non-

Porting Clients in paragraph (B) above), and (D) the Clearing House shall recalculate the Existing Non-Porting Clients Combined Risk Factor and the allocation of gains and losses shall be in accordance with paragraph (C) above and this paragraph (D).

- (E) Upon the liquidation of the Hedged Account and all FCM ForexClear Contracts and other positions therein, by auction or otherwise, any gains or losses associated with such auction/liquidation shall be allocated among all Non-Porting Clients on a pro rata basis based on the "unit value" of each FCM ForexClear Contract of each Non-Porting Client referenced in such Hedged Account, as adjusted by a "auction value adjustment". purposes of this clause (E), (1) "unit value" means the value applied to each FCM ForexClear Contract, based on the net present value and outstanding notional value associated with each such FCM ForexClear Contract, and (2) "auction value adjustment" means a ratio applied to an FCM ForexClear Contract based on the auction/liquidation costs incurred auctioning/liquidating the Hedged Account and the aggregate notional value of all FCM ForexClear Contracts in the Hedged Account, each of clauses (1) and (2) as determined by the Clearing House. allocations described in this clause (E) are without reference to any Risk Factor or Existing Non-Porting Clients Combined Risk Factor.
- (C) Settlement of Non-Porting Clients Following Liquidation of Hedged Account. Following the liquidation of a Hedged Account, the Clearing House shall allocate the appropriate gains and losses (as determined in accordance with the above provisions) to each Non-Porting Client's FCM Client Sub-Account.

2.2.27 Payment of Stamp Tax

Each FCM Clearing Member shall pay any stamp tax or duty levied or imposed upon it or in respect of its execution or performance of the FCM Clearing Membership Agreement, the FCM Default Fund Agreement, the FCM Regulations and the FCM Procedures (including any registration of an FCM ForexClear Contract) by a jurisdiction in which it is incorporated, organized, managed and controlled, or considered to have its seat, or in which a branch or office through which it is acting is located 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 FCM Clearing Membership Agreement, the FCM Regulations and the FCM Procedures (including any registration of an FCM ForexClear Contract) by any such jurisdiction.

2.2.28 Section 696, Corporation Tax Act 2009

The FCM Clearing Member agrees that should a situation arise where HM Revenue and Customs ("HMRC") raises an enquiry, or makes an information request, to the Clearing House regarding an FCM Transaction or FCM Contract that the FCM Clearing Member is submitting (or has submitted) to the Clearing House, and that enquiry or information request is in respect of the application of s696 - s697 Corporation Tax Act 2009, the FCM Clearing Member will use its reasonable efforts to provide such information and support as the Clearing House may reasonably require in order to respond to and effectively deal with the queries raised by HMRC.

2.2.29 **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 FCM 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 Clearing House rules or any FCM 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 FCM 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.

2.2.30 **Prescribed Terms**

Pursuant to FCM Regulation 7 the Clearing House may prescribe certain provisions that an FCM ForexClear Clearing Member must include in its agreement with an FCM Client.

There an FCM ForexClear Clearing Member provides FCM Clearing Services to an FCM Client that is a registered investment company, as defined in the Investment Company Act of 1940, it shall include provisions in its agreement with that FCM Client to the following effect:

- (a) the FCM ForexClear Clearing Member shall comply with Applicable Law relating to the segregation of FCM Client Funds including without limitation Part 22 of the CFTC Regulations;
- (b) FCM Client Funds delivered by the FCM Client shall be held in accordance with the CEA and the CFTC Regulations and the FCM ForexClear Clearing Member shall obtain an acknowledgement, to the extent required by Parts 1.20 and 22 of the CFTC Regulations, that

- those FCM Client Funds are being held in accordance with the CEA and the CFTC Regulations;
- (c) the FCM ForexClear Clearing Member will promptly furnish copies of or extracts from its records or such other information pertaining to the FCM Client's assets as the Securities Exchange Commission, through its employees or agents, may request;
- (d) any gains on FCM ForexClear Contracts held on behalf of an FCM Client (other than de minimus amounts) may be maintained by the FCM ForexClear Clearing Member only until the next Business Day following receipt;
- (e) the FCM Client has the ability to withdraw its assets from the FCM ForexClear Clearing Member as soon as reasonably practicable if the FCM ForexClear Clearing Member's or the Clearing House's custody of FCM Client Funds no longer meets the requirements of Rule 17f-6 under the Investment Company Act of 1940.

SCHEDULE 2.2D 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 DMP, (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 ForexClear DMG.
- 1.4 "**Permitted Purpose**" means proper fulfillment 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 on-going portfolio management and to enable it to comply with on-going legal or regulatory requirements.
- 1.5 References denoting the masculine (including "his" and "he") shall be construed as the feminine if the ForexClear DMG Member is female.

1.6 All other terms have the meaning ascribed to them in the Default Rules (including the ForexClear DMP Annex).

General Obligations of the FXCCM

The obligations of an FXCCM set forth in this Schedule shall only apply in the event such FXCCM does not have an affiliated FXCCM that has agreed to participate in the ForexClear DMP on behalf of such FXCCM.

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, 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) 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 chedule 2.2Dehedule 2.2D 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 2.5, 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 information barriers) 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 <u>chedule 2.2D</u> 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**

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3.1 Except in accordance with the terms of this <u>chedule 2.2Dehedule 2.2D</u>, 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; or
- (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 apprised of information on the ForexClear DMP that it makes public and which is accordingly of relevance to the FXCCM's obligations.

4. Property

4.1 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

5.1 Upon request by the Clearing House, and in any event upon fulfillment 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 paragraph 7, 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 <u>chedule 2.2Dehedule 2.2D</u> by the FXCCM and any of its employees or representatives to whom Confidential Material is provided in accordance with this <u>chedule 2.2Dehedule 2</u>

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7. Liability

7.1 Subject to Regulation 31 (*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 willful 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 ForexClear DMG, and for the accuracy of the information (confidential material as defined in this chedule 2.2D 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

8.1 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 chedule 2.2Dchedule 2.2D 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

9.1 The FXCCM shall procure that, in the event that a ForexClear DMG 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 ForexClear DMG, who shall act accordingly, taking the advice of other ForexClear DMG Members as appropriate.

10. Confidentiality

10.1 Subject to paragraph 10.3 below, the FXCCM shall procure that the ForexClear DMG Member shall keep all Confidential Material strictly confidential to himself and will not disclose it to any person who is not a ForexClear DMG Member (including, for the avoidance of doubt, the FXCCM who recommended his appointment to the ForexClear DMG (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 authorized delegate, providing always that the ForexClear DMG Member shall be relieved of such an obligation of

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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).

- 10.2 Subject to paragraph 10.3 below, the FXCCM shall procure that the ForexClear DMG Member shall not use any Confidential Material for any purpose other than the proper fulfillment of his duties as a ForexClear DMG 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 ForexClear DMG 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 ForexClear DMG 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 ForexClear DMG 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 ForexClear DMG Member of the ForexClear DMG, the FXCCM shall procure that the ForexClear DMG 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 ForexClear DMG Member is permitted to retain a copy thereof to comply with Applicable Law.

11. Warranty and representation

- 11.1 The FXCCM represents and warrants that it will procure that:
- (a) the Nominating FXCCM and the ForexClear DMG Member's employer (if different) are aware of the obligations of confidentiality arising out of this Agreement; and
- (b) nothing in this <u>chedule 2.2D</u> ehedule <u>2.2D</u> will cause the ForexClear DMG 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 ForexClear DMG Member.

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

12.1 The Clearing House will treat all Confidential Material in the terms envisaged in this <u>chedule 2.2D</u>chedule 2.2D, 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.

13. Third Party Rights

13.1 A person who is not a party to this <u>chedule 2.2D</u> shall have no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any of its terms.

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2.3 LISTED INTEREST RATES

2.3.1 *Introduction*

(a) Background

These FCM Procedures apply to the clearing of FCM Listed Interest Rate Eligible Products listed for trading on Rates Exchanges, and form part of the FCM Rulebook and must be read in conjunction with the other parts of the FCM Rulebook.

FCM Listed Interest Rates Clearing Members must inform themselves fully of their obligations under the FCM Rulebook and other relevant documentation, such as the FCM Clearing Membership Agreement and the terms of any approval by the Clearing House to extend clearing activities. FCM Listed Interest Rates Clearing Members should also familiarise themselves with the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms.

The FCM Rulebook (including these FCM Procedures) and the FCM Listed Interest Rates Contract Terms are subject to change from time to time. Enquiries regarding these FCM Procedures or any other aspects of the operation of the FCM Listed Interest Rates Clearing Service should be directed to the Listed Rates Clearing House Client Services Department on +447426 7651 ListedRates.Ops.UK@lch.com. Enquiries regarding FCM Listed Interest Rates Clearing Member status should be directed to the Onboarding Department on +44(0)20 7426 7949 onboarding@lch.com.

In the event of any conflict between any provision of these FCM Procedures and any requirement or provision of any third party (including but not limited to any requirement or provision in any Rates Exchange Rules), these FCM Procedures shall prevail.

Enquiries relating to: (i) trading FCM Listed Interest Rates Contracts; (ii) Rates Exchange Rules; or (iii) the FCM Listed Interest Rates Contract Terms of any FCM Listed Interest Rates Contract other than a Designated FCM Listed Interest Rates Contract should be directed to the relevant Rates Exchange. Enquiries relating to (i) clearing FCM Listed Interest Rates Contracts; (ii) the FCM Rulebook; or (iii) the FCM Listed Interest Rates Contract Terms of any Designated FCM Listed Interest Rates Contracts should be directed to the Clearing House.

(b) Interpretation

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

Except where otherwise stated, all times shown are London time and the twenty four hour clock is used.

(c) FCM Listed Interest Rates Eligible Products

FCM Listed Interest Rates Clearing Members are advised for the purposes of the FCM Regulations and these FCM Procedures, that the eligibility criteria for FCM Listed Interest Rate Eligible Products is available on the Clearing House's website (www.lch.com).

- (d) Use of the FCM Listed Rates Clearing Service
 - (i) Where any FCM Clearing Member wishes to participate in any part of the FCM Listed Interest Rates Clearing Service, it must first seek appropriate authorisation from the Clearing House. FCM Clearing Members seeking authorisation to participate in the FCM Listed Interest Rates Clearing Service will be required to seek separate authorisation for business undertaken in relation to the service provided by each Rates Exchange.

Details of how to obtain such authorisations may be obtained from the Clearing House's Onboarding Department. The FCM Clearing Member must comply with all membership and other requirements of the Clearing House, including requirements relating to settlement. Specifically, with regard to settlement, each FCM Clearing Member must at all times ensure:

- (A) that it has PPS accounts in all relevant currencies to enable clearing and settlement; and
- (B) that it has settlement accounts with all relevant central securities depositories identified in these FCM Procedures as relevant to such FCM Clearing Member's FCM Listed Interest Rates Clearing Business.
- (ii) Failure to meet the requirements set out in sub-paragraph (d)(i)(A)-(B) above (and other applicable requirements) will result in that FCM Clearing Member not having appropriate settlement arrangements in place and, as a result, any FCM Listed Interest Rates Novation Contract or Rates Exchange Match presented for registration by, or on behalf of, that FCM Clearing Member will not fulfil the relevant eligibility criteria for registration as FCM Listed Interest Rates Contracts (see FCM Regulation 59(c) and FCM Regulation 60(b)). In such a case, such FCM Listed Interest Rates Novation Contract or Rates Exchange Match may be rejected by the Clearing House and no FCM Listed Interest Rates Contracts would arise. The FCM Listed Interest Rates Novation Contract or Rates Exchange Match would then be governed by any applicable Rates Exchange Rules.

(e) Suspension of Trading

For the avoidance of doubt, any action by a Rates Exchange to suspend, de-list or take any other action with regard to an FCM Listed Interest Rate Eligible Product shall not affect any obligations that an FCM Listed Interest Rates Clearing Member may have to the Clearing House with regard to any open FCM Listed Interest Rates Contracts in such Listed Interest Rate Eligible Product.

(f) Liability

- (i) FCM Listed Interest Rates Clearing Members are asked to note that any statements set out in these FCM Procedures regarding the liability of the Clearing House are made without prejudice to the generality of the provisions set out in FCM Regulation 44.
- (ii) The Clearing House does not seek to limit or exclude any liability for personal injury or death caused by its negligence, or for fraud or wilful default on the part of the Clearing House.

(g) Rates Exchange Status

Application for Rates Exchange status shall be made in accordance with the policies published from time to time on the Clearing House's website. A list of Rates Exchanges currently approved by the Clearing House, as well as an indication of whether FCM Listed Interest Rates Eligible Products listed on such Rates Exchange are registered by the Clearing House through an open offer or through novation, shall be made available by the Clearing House. Where the Clearing House approves additional Rates Exchanges, it will notify FCM Listed Interest Rates Clearing Members via a member circular.

2.3.2 General Information

(a) Service Operation

(i) Trading and Clearing System Functions

The respective functions of a Rates Exchange's trading system and the Clearing House's clearing system are contained in the relevant Service Description. All enquiries regarding the FCM Listed Interest Rates Clearing Service should be directed to Client Services on +44 7426 7651 or ListedRates.Ops.UK@lch.com.

(ii) Operating Times

The Clearing House will publish by member circular and on its website details of the days and times during which the FCM Listed Interest Rates Clearing Service will be operational.

(iii) Trade Acceptance Hours

The trade acceptance hours of a given Rates Exchange are set out in the relevant Service Description.

(iv) System Requirements

FCM Clearing Members must have in their office, at a minimum, a PC configured to access the clearing system GUI, a printer and back-up connectivity to the clearing system as required by the Clearing House.

(b) *Member Reporting*

The Clearing House makes available appropriate clearing information via reports, real time confirmations and other means. Full details are contained in the relevant Service Description documentation.

(c) Clearing House Reporting

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 an FCM Listed Interest Rates 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.

(d) Static Data

Prior to presentation of any FCM Listed Interest Rates Novation Contract or Rates Exchange Match for registration as an FCM Listed Interest Rates Contract, an FCM Listed Interest Rates Clearing Member is required to provide sufficient information in respect of the Rates Exchange from which such FCM Listed Interest Rates Novation Contract or Rates Exchange Match will be presented ("Rates Exchange Information"). This applies also to any FCM Listed Interest Rates Novation Contract or Rates Exchange Match traded pursuant to any agency arrangements permitted by the rules of that Rates Exchange.

The format, contents and completion process of the static data form for the provision of the Rates Exchange Information, in respect of each Rates Exchange, is prescribed from time to time by the Clearing House. Copies of the prescribed forms, for each Rates Exchange, are available from the Clearing House Onboarding Department.

Failure to provide the correct Rates Exchange Information in respect of the particular Rates Exchange may result in the rejection of FCM Listed Interest Rates Novation Contract or Rates Exchange Match.

2.3.3 Registration

(a) General

FCM Listed Interest Rates Contracts may arise through either a novation or an open offer clearing mechanism.

(i) Novation

Novation applies to each FCM Listed Interest Rates Eligible Product executed as an FCM Listed Interest Rates Novation Transaction on a Rates Exchange. Where an FCM Listed Interest Rates Novation Transaction is presented to the Clearing House for registration, the Clearing House will determine whether to accept or reject the FCM Listed Interest Rates Novation Transaction within the required timeframe under all Applicable Law. Where the Clearing House determines to accept the FCM Listed Interest Rates Novation Transaction, registration shall occur immediately and the FCM Listed Interest Rates Novation Transaction shall be automatically replaced with (as applicable) (i) two separate FCM Listed Interest Rates Contracts, one between the relevant FCM Listed Interest Rates Clearing Member and the Clearing House and the other between the same or another FCM Listed Interest Rates Clearing Member and the Clearing House, or (ii) one FCM Listed Interest Rates Contract between the relevant FCM Listed Interest Rates Clearing Member and the Clearing House and one Non-FCM Listed Interest Rates Contract between the relevant Listed Interest Rates Clearing Member and the Clearing House.

Novation of FCM Listed Interest Rates Novation Transactions is described in greater detail in FCM Regulation 3(b) and FCM Regulation 54.

(ii) Open Offer

The Clearing House also provides an open offer in respect of FCM Listed Interest Rates Eligible Products listed for trading on one or more Rates Exchanges. Pursuant to this "open offer", once particulars in respect of a Rates Exchange Match are presented to the Clearing House, then, subject to the FCM Regulations and the FCM Procedures, the Clearing House shall automatically and immediately register either (i) two separate FCM Listed Interest Rates Contracts, one between the relevant FCM Listed Interest Rates Clearing Member and the Clearing House and the other between the same or another FCM Listed Interest Rates Clearing Member and the Clearing House, or (ii) one FCM Listed Interest Rates Contract between the relevant FCM Listed Interest Rates Clearing Member and the Clearing House and one Non-FCM Listed Interest Rates Contract between the relevant Listed Interest Rates Clearing Member and the Clearing House.

The Clearing House's open offer arrangements for Rates Exchange Matches are described in greater detail in FCM Regulation 53

(b) Presentation

Presentation of an FCM Listed Interest Rates Novation Contract or a Rates Exchange Match (as applicable) for registration to the Clearing House constitutes immediate confirmation in accordance with the FCM Regulations by the FCM Listed Interest Rates Clearing Member in whose name the FCM Listed Interest Rates Novation Contract or a Rates Exchange Match is presented. However, the Clearing House will only accept for registration, as FCM Listed Interest Rates Contracts, the particulars of an FCM Listed Interest Rates Novation Contract or a Rates Exchange Match presented by a Rates Exchange in a message format and manner acceptable to the Clearing House.

Each FCM Listed Interest Rates Clearing Member authorised to participate in the FCM Listed Interest Rates Clearing Service must be familiar with the operating procedures and deadlines of each Rates Exchange in respect of which it has been approved by the Clearing House.

(c) Intra-Day Registration

The Clearing House registers all FCM Listed Interest Rates Contracts on an intra-day basis.

(d) Risk Pending Trades

Except as otherwise required by Applicable Law, trades presented to the Clearing House for registration can be validated against a number of risk parameters, including: quantity, price, premium, strike price, trade value or mark-to-market profit/loss parameters ("Risk Parameters"). Any trades that fall outside of the validation parameters will enter a pending state (the "Risk Pending Queue") and require validation by Risk Management before being accepted or rejected by the Clearing House.

The Risk Parameter ranges are set by Risk Management and can be amended during periods of low or high volatility to capture or avoid suspension of trades which are within the day's trading range.

(e) Conditions for Acceptance of Risk Pending Trades

Except as otherwise required by Applicable Law, registration of trades held in the Risk Pending Queue is conditional on the transfer of sufficient Collateral to the Clearing House.

If the Clearing House decides that additional Collateral is required it will advise the FCM Listed Interest Rates Clearing Member as soon as possible. The currency and method of funds transfer, or type of Collateral to be provided, will be agreed between the Clearing House

and the FCM Listed Interest Rates Clearing Member. Only when the Clearing House has received the Collateral or has received confirmation from the transferring bank that the cash Collateral has been, or is, in the process of being transferred will it accept the pending trade.

The Clearing House will carry out the process of accepting pending trades on an hourly basis throughout the day, or more frequently where possible. The acceptance process will apply to both sides of a trade at the same time.

It is the responsibility of each FCM Listed Interest Rates Clearing Member to ensure that any trades likely to require acceptance are input as early as possible in the day; and that either sufficient surplus Collateral is maintained with the Clearing House or arrangements are in place to meet additional calls for Collateral. Trades not accepted by the Clearing House will not be registered. In order to achieve registration the trade must be re-submitted (in accordance with the relevant Rates Exchange Rules) the next business day, when the same process will apply.

(f) Rejection

Where (a) an FCM Listed Interest Rates Novation Transaction, or (b) the particulars of a Rates Exchange Match are presented to the Clearing House for registration as two FCM Listed Interest Rates Contracts (or one FCM Listed Interest Rates Contract and one Non-FCM Listed Interest Rates Contract), the Clearing House may reject such registration where:

- (i) the relevant FCM Listed Interest Rates Eligibility Criteria are not met;
- (ii) such transaction or particulars (as applicable) have as their subject a product which is not an FCM Listed Interest Rates Eligible Product;
- (iii) such transaction or particulars (as applicable) contain invalid or incomplete message data;
- (iv) such transaction or particulars (as applicable) are required or requested by any Regulatory Body or the relevant Rates Exchange to be rejected or treated as void or voided; or
- (v) the Clearing House considers that rejection is advisable for its own protection or the protection of the relevant market.

If the Clearing House rejects the registration of an FCM Listed Interest Rates Novation Transaction or a Rates Exchange Match, the relevant FCM Listed Interest Rates Clearing Member(s) and Listed Interest Rates Clearing Member, and the relevant Rates Exchange, will be notified of such rejection within the required timeframe under all Applicable Law.

If an FCM Listed Interest Rates Novation Transaction or the particulars of a Rates Exchange Match are presented to the Clearing House for registration and rejected, such FCM Listed Interest Rates Novation Transaction or Rates Exchange Match (as applicable) may be re-presented for registration in the form of a new FCM Listed Interest Rates Novation Transaction or Rates Exchange Match (as applicable) but with the same economic terms in accordance with, and subject to, the FCM Rulebook and all Applicable Law, and such FCM Listed Interest Rates Novation Transaction or Rates Exchange Match (as applicable) will, for the purposes of the FCM Rulebook and upon such re-presentation, constitute a new FCM Listed Interest Rates Novation Transaction or Rates Exchange Match (as applicable).FCM Listed Interest Rate Novation Transactions must be executed, matched and presented for registration prior to the relevant Rates Exchange deadline for registration. Any FCM Listed Interest Novation Transactions presented after that time will be rejected.

Where a transaction or particulars (as applicable) are rejected by the Clearing House, no FCM Listed Interest Rates Contracts arise between the Clearing House and the FCM Listed Interest Rates Clearing Members concerned. Subject to FCM Regulation 44(e), the Clearing House has no liability in respect of such rejection.

2.3.4 Accounts

- (a) Position Accounts
 - (A) FCM Accounts. For identification purposes, each FCM Listed Interest Rates Clearing Member is assigned a unique three-character mnemonic with respect to its accounts relating to FCM Listed Interest Rates Contracts. An FCM Listed Interest Rates Clearing Member's position and financial information are further identified by position-keeping accounts corresponding to a single character code: C for client business and H for house business.
 - (B) Position-Keeping Accounts. The account types are H for house business (Proprietary Account) and C for segregated client business (an FCM Omnibus Listed Interest Rates Client Account with LCH). An FCM Listed Interest Rates Clearing Member's FCM Listed Interest Rates Contract positions are also recorded within the FCM Listed Interest Rates Clearing Service in Listed Interest Rates accounts. The FCM Listed Interest Rates Clearing Member reporting functionality also allows each FCM Listed Interest Rates Clearing Member to identify all FCM Listed Interest Rates Contracts registered in its name.

(b) Other Accounts

The Clearing House will open operational accounts, in respect of an FCM Listed Interest Rates Clearing Member, which are used to record cash and securities balances and its Listed Interest Rates Contributions. The Clearing House may open and close such operational accounts, in its sole discretion, upon notice to the relevant FCM Listed Interest Rates Clearing Member. FCM Listed Interest Rates Operations will provide details of such accounts to an FCM Listed Interest Rates Clearing Member upon request.

2.3.5 Margin and Collateral

(a) Initial Margin

The Clearing House will require FCM Listed Interest Rates Clearing Members to furnish it with Initial Margin. Initial Margin requirements in respect of an FCM Listed Interest Rates Clearing Member's FCM Omnibus Listed Interest Rates Client Account with LCH are calculated on a gross basis for each FCM Client equal to the sum of the Initial Margin that would be required by the Clearing House as if each such FCM Client was an FCM Listed Interest Rates Clearing Member. The Clearing House reserves the right to require additional amounts of Margin from a specific FCM Listed Interest Rates Clearing Member or from all FCM Listed Interest Rates Clearing Members in accordance with FCM Regulation 14.

(A) Initial Margin Parameters

Initial margin parameters are set by the Clearing House after consultation with the relevant Rates Exchange. However, in accordance with the FCM Regulations, the Clearing House retains the right at its discretion to vary the rates for the whole market or for an FCM Listed Interest Rates Clearing Member's accounts.

FCM Listed Interest Rates Clearing Members will be notified by the Clearing House of alterations to initial margin parameters no later than the day before PPS Calls are made based on the new rates.

(B) Intra-Day Margin Calls

In accordance with the FCM Regulations the Clearing House is entitled to make additional margin calls for payment the same day (intra-day margin calls) where it considers necessary. Intra-day margin calls will be made via the Protected Payments System (see FCM Procedure 3.2).

(C) Calculation of Initial Margin

Value at Risk (VaR). Initial margin obligations are re-calculated at the close of each business day using a VaR algorithm developed to calculate margin requirements on FCM Listed Interest Rates Contracts.

Technical questions about this algorithm should be directed to the Clearing House Risk Management Department on +44 (0)20 7426 7520.

(b) Daily Settlement Amounts and Contingent Margin

All open contracts are marked to market daily by the Clearing House in accordance with the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms. The official quotation is used as the market price. Profits or losses are either credited to or debited from an FCM Listed Interest Rates Clearing Member's FCM Omnibus Listed Interest Rates Client Account with LCH or they form non-realised contingent liabilities or credits.

(A) Realised Daily Settlement Amounts

Realised daily settlement amounts are the calculated profit or loss arising from a comparison between the value of open positions at the relevant official quotations with the value of positions recorded by the Clearing House (i.e. the trade price for new trades and the previous day's official quotation for other positions). Realised daily settlement amounts are realised into postings to the FCM Omnibus Listed Interest Rates Client Account with LCH.

(B) Contingent Margin

Contingent margin is calculated with reference to the official quotation at which a contract went to delivery and the underlying asset value or the next nearest futures delivery month official quotation, dependent on the terms of the FCM Listed Interest Rates Contract or these FCM Procedures. Contingent margin is calculated for FCM Listed Interest Rates Contracts which are subject to delivery of an underlying asset.

(C) Option Daily Settlement Amounts

Option daily settlement amounts are the value of unexpired options, calculated with reference to the official quotation. Bought and sold options generate credit and debit option daily settlement amounts respectively.

(c) Additional Margin

In accordance with FCM Regulation 14 (*Margin and Collateral*), the Clearing House may call additional amounts of Collateral (on top of the amounts of Collateral previously transferred to the Clearing House

in respect of initial margin and daily settlement obligations) as security for the performance by an FCM Listed Interest Rates Clearing Member of its obligations to the Clearing House in respect of FCM Listed Interest Rates Contracts registered in its name. This may be required from time to time where, in the opinion of the Clearing House, the risk inherent in FCM Contracts held by the FCM Listed Interest Rates Clearing Member is not adequately covered by the Collateral in respect of the initial or daily settlement obligations. This may cover instances where stress losses under various scenarios are larger than the predefined thresholds of the default fund. The Clearing House may only apply such additional Collateral against the FCM Contracts generating such losses, and may not apply it as a credit in respect of initial margin obligations generally.

(d) Official Quotations

Official Quotations are based on the "Daily Settlement Price (DSP)" and are supplied by the relevant Rates Exchange (or, in respect of Designated FCM Listed Interest Rates Contracts, by the Clearing House) at the close of business each day. Should the relevant Rates Exchange fail to determine DSPs, the Clearing House will determine these as necessary. This will be done at the Clearing House's discretion and announced as soon as possible.

(e) Settlement

(A) Cash Settlement

Cash settlement is a final settlement derived from the difference between the expiry price and the previous business day's official quotation or such other quotation as is specified in the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms. This is debited from or credited to the FCM Omnibus Listed Interest Rates Client Account with LCH.

(B) Delivery

Deliverable contracts, as specified by the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms, remaining open at expiry, or as notified via early delivery notice, are settled by physical delivery of the underlying at the Final Settlement Price (FSP), as determined by the relevant FCM Listed Interest Rates Contract Terms.

2.3.6 Trade and Position Management

(a) Allocations

FCM Listed Interest Rates Novation Transactions and Rates Exchange Matches can be allocated to an FCM Listed Interest Rates Clearing Member's Position Keeping Accounts in a number of different ways based on the information provided:

- (A) by including the Position Account Owner and the Position account type (e.g., House or Client);
- (B) by giving-up the trade to another FCM Listed Interest Rates Clearing Member (GUI or message function);
- (C) by carrying out an internal give-up (GUI or message) to move the trade between an FCM Listed Interest Rates Clearing Member's own accounts; and
- (D) by modifying the trade or particulars (GUI only).

(b) Give-Ups

An FCM Listed Interest Rates Novation Transaction or Rates Exchange Match that has been accepted can be given up, either to another Position Account Owner within a different FCM Listed Interest Rates Clearing Member's accounts ("External Give-up"), or to a different Position Account within the same FCM Listed Interest Rates Clearing Member's accounts ("Internal Give-up"). A "partial give-up" is achieved by a splitting the FCM Listed Interest Rates Novation Transaction or Rates Exchange Match followed by a Give-up.

An Internal Give-up is actioned immediately after the give-up instruction is successfully validated and the trade is allocated to the target Position Account Owner specified in the instruction. Once an External Give-up instruction is successfully validated it is marked as "Alleged". The target Position Account Owner will be informed of the alleged Give-up.

A Give-up that is still in an Alleged status can be cancelled, in which case the give-up instruction will be marked as cancelled and a confirmation sent to both the source and target Position Account Owners.

Give-ups are also passed through the risk validation checks described in Section 2.3.3(c) and (d) above.

Give-ups are permitted up until the close of trading on the day following the date on which a contract is executed ("**Position Management Window**"). Give-ups on expiring contracts are only permitted until the end of the Position Management Window of the expiry process.

(c) Take-Ups

Any "Alleged" external Give-up instruction can either be Taken-up or Rejected by the target Position Account Owner, which must enter the position account it wishes the trade to be allocated to if it accepts the give-up. The trade is then re-allocated to the new position account and the Give-up and Take-up transactions are marked as Transferred.

If the Take-up is rejected the trade will remain in the source position account and the Give-up and Take-up transactions marked as Rejected.

Take-ups are permitted up until the end of the Position Management Window. Take-ups on expiring contracts are only permitted until the end of the Position Management Window of the expiry process.

(d) Position Transfers

Without prejudice to any approval that may be required under the relevant Rates Exchange Rules, FCM Listed Interest Rates Clearing Members wishing to effect a position transfer to another FCM Listed Interest Rates Clearing Member approved to participate in the FCM Listed Interest Rates Clearing Service may do so directly through Synapse, provided that, where a transfer would exceed any applicable Risk Parameters, such transfer will be subject to the validation process described in Section 2.3.3(c) and (d) above before being accepted or rejected by the Clearing House.

Otherwise, FCM Listed Interest Rates Clearing Members wishing to effect a position transfer should submit a written request by sending an email to derivatives.ops.uk@lch.com.

Provided they relate to valid positions and adequate Collateral is available from both FCM Listed Interest Rates Clearing Members, the transfer will normally be authorised. Should insufficient Collateral be available, the transfer may not be authorised until additional Collateral is transferred to the Clearing House.

2.3.7 Option Exercise and Expiry

(a) General

Each contract is exercised through the Clearing System. Exercise Rules are specified by the relevant Rates Exchange Rules and/or the relevant FCM Listed Interest Rates Contract Terms, which determine the form and manner in which exercise notifications must be given, and the time frames for doing so. Exercise may be automatic or manual.

Options are exercised manually except on the last trading day when a combination of auto exercise and manual exercise is used and open futures contracts are created.

When exercised against, the Clearing House will select sellers against which to exercise, based on their open position. The method of allocation used for options is random scatter. The allocation process randomly determines each lot to be assigned in such a way that its

selection is independent of either the proceeding lot or of the subsequent lot in the selection process.

An option shall be deemed to be exercised at such time as confirmed by the Clearing House on the FCM Clearing System.

Exercised Index Option contracts are settled in cash. The settlement amount is the difference between the strike price of the contract and the relevant Final Settlement Price (FSP).

FCM Listed Interest Rates Clearing Members should consult the Service Description for more information and refer any enquiries to Client Services on +44 7426 7651 or <u>ListedRates.Ops.UK@lch.com</u>. to the 'Synapse Derivatives Member User Guide' for operating instructions and full details.

(b) Options Exercise Instructions

(A) Manual Exercise

Exercise instructions are submitted via the Options Exercise screen on the Clearing House clearing system, between times as specified by relevant Rates Exchange Rules and/or the relevant FCM Listed Interest Rates Contract Terms on any business day from the business day following the day of trade until the expiry day.

Exercise instructions can be cancelled via the Options Exercise screen up until the exercise deadline on the day the exercise instruction is input to the FCM Clearing System.

Warning messages will be displayed on the following conditions:

- when an exercise is performed on Out-of-the-Money options;
- when a cancel is performed on In-the-Money options;
- the number of lots exceed the lot limit, if the lot limit parameter is set by the FCM Clearing Member in the BP Exercise Limit screen; and
- early exercise, i.e. non-spot month, if this parameter is set by the Clearing Member in the BP Exercise Limit screens

An option exercise maker-checker facility ensures exercise instructions are authorised by another authorised person before being submitted. FCM Listed Interest Rates Clearing Members should ensure that they allow sufficient time for submitting

instructions within contract deadlines, if this facility is switched on.

(B) Automatic Exercise on Expiry Day

Preset limits within the Clearing House clearing system define which options will be subject to automatic exercise at expiry.

Buyers of options may, in accordance with the relevant FCM Listed Interest Rates Contract Terms, choose not to exercise option series that would be subject to automatic exercise. FCM Listed Interest Rates Clearing Members that wish not to exercise such options must have done so by the exercise deadline of the expiring options. Failure to do so will result in the automatic exercise of the series.

(c) Expiry Day

Options expire at the time specified by relevant FCM Listed Interest Rates Contract Terms on the expiry date. FCM Listed Interest Rates Clearing Members who wish to exercise positions for strike prices which are not subject to automatic exercise for the expiring series, must do so by this time.

It is not possible for FCM Listed Interest Rates Clearing Members to input exercise or exercise cancellation instructions after the expiry time.

(d) Unavailability of System for Options Exercise

In the event that the Clearing House clearing system option exercise facilities are unavailable (in particular if an expiry or exercise deadline is imminent), it is essential that the FCM Listed Interest Rates Clearing Member contacts Client Services on +44 7426 7651.

2.3.8 [Reserved]

2.3.9 *Deliverable Bond Futures – Delivery Procedures*

These delivery procedures should be read in conjunction with the rest of this document, the FCM Rulebook, the relevant Rates Exchange Rules and the relevant FCM Listed Interest Rates Contract Terms. FCM Listed Interest Rates Clearing Members must be fully aware of their obligations under the relevant contracts.

In the event of any conflict between the Rulebook and the relevant Rates Exchange Rules and the FCM Listed Interest Rates Contract Terms, the Rulebook shall prevail.

Enquiries concerning the procedures in this Section should be directed to Client Services on +44 7426 7651.

(a) Common Delivery Procedures

(A) Allocation Method

For all deliverable bond contracts the following method is used by the Clearing House to allocate stock delivered by Sellers to Buyers:

- (A) Buying FCM Clearing Members' accounts are listed in mnemonic sequence and numbered sequentially;
- (B) a number is chosen at random;
- (C) the allocation of the lowest coupon bond commences with the selected mnemonic and progresses through the list referred to in (a) above; and
- (D) when no further allocation of the lowest coupon bond can be made, the allocation continues with the next lowest coupon bond and so on, until the process is completed with the allocation of the highest coupon bond.

If bonds of equal coupon but with different maturity dates have been nominated then the bond with the earliest maturity will be allocated first.

For the purpose of settlement efficiency the results of the allocation will be subject to settlement shaping with each instruction not exceeding a nominal value of GBP 50 million for Gilts or EUR 50 million for Bund, Bobl and Schatz.

(B) Clearing Accounts

FCM Clearing Members' position keeping accounts, following any applicable netting, are aggregated to settlement account level for deliveries. FCM Clearing Members must submit separate notifications (Seller's Delivery Notices, etc) to the Clearing House for each settlement account.

(C) Final Settlement Prices (FSP)

The FSP for bond deliveries will be determined in accordance with the relevant FCM Listed Interest Rates Contract Terms. This is published as soon as possible after it has been set.

(D) Days and Times

All days are London business days unless otherwise stated.

All times are London times unless otherwise stated.

(E) Margin

The Clearing House continues to require Collateral in respect of initial and contingent margin requirements on open delivery contracts.

(F) Delivery System

The "Delivery System" is the Clearing House Delivery System for deliverable FCM Listed Interest Rates Contracts, which allows users to send and receive data to and from the Clearing House.

FCM Clearing Members must submit delivery information using the Delivery System GUI.

When using the Delivery System GUI, FCM Clearing Members must always ensure that they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. Clearing Members experiencing connection difficulties should contact Client Services on +44 7426 7651.

(G) Seller's Delivery Notice

Sellers must submit a *Delivery Notice* to the Clearing House via the Delivery System.

(H) Delivery Failure – Designated FCM Listed Interest Rates Contracts Only

This paragraph 2.3.9(a)(viii) applies only in respect of Designated FCM Listed Interest Rates Contracts. For all other FCM Listed Interest Rates Contracts, the treatment of delivery failures is set out in the relevant Rates Exchange Rules.

Where the seller does not make delivery, or the buyer make payment, this will constitute a "delivery failure" within the meaning of FCM Regulation 65. A delivery failure may occur for any reason whatsoever, including, without limitation:

- (A) the failure of the Clearing House's clearing system to effect settlement of such delivery or payment;
- (B) any error, failure, closure or suspension of the Clearing House's clearing system;
- (C) a failure by any third party to make any required transfer of such deliverable bonds to seller or any

settlement agent for seller in time to enable seller to make delivery to buyer; or

(D) any failure by either buyer or seller, or any settlement agent for either buyer or seller, to input any necessary instructions required by the Clearing House's clearing system or pursuant to the Regulations to effect settlement, including as a result of any fault or failure of any computer or communication system.

Where a delivery failure occurs, any decision as to alternative settlement procedures made by the Clearing House shall be binding on buyer and seller. The Clearing House may, but is not required to, require the buyer to pay an amount ("Settlement Adjustment Amount") equal to the product of: (i) the settlement payment required under the contract; (ii) the average of the Clearing House's base rate as at the close of each business day during the period that settlement is delayed; and (iii) the number of calendar days in the settlement delay period over 365.

In addition, if a delivery failure occurs and any dividend or coupon is paid on the deliverable bonds during the delayed settlement period, the Clearing House may, but is not required to, require the seller to pay an amount ("Dividend Adjustment Amount") equal to the gross amount of such dividend (without any withholding or deduction on account of any tax).

The delivery failure shall be "cured" on the business day on which the delivery has been made by the seller (including, where applicable, any Dividend Adjustment Amount) and the buyer to make payment (including, where applicable, any Settlement Adjustment Amount).

(b) Long Gilt

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;
- Delivery and receipt versus payment means a transfer of Gilts, against payment of the consideration amount specified in the Gilt contract terms; and
- Euroclear UK and Ireland The Euroclear UK and Ireland System.
- **Delivery Mechanism** (A)

Deliveries under the Gilt contract must be made or taken via an account at Euroclear UK and Ireland (EUI).

Clearing House Delivery Account Details. Details of the Clearing House's account at Euroclear UK and Ireland (EUI) are as follows: Clearing House account number 5172.

(B) Delivery Communication and the Delivery System

Delivery documentation must be submitted using The Delivery System. When using The Delivery System, FCM Clearing Members must always ensure they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. FCM Clearing Members experiencing difficulties should contact Client Services on +44 7426 7651.

(C) Consideration Value Calculation

The amount due to Sellers and payable by Buyers is calculated in accordance with the Gilt contract terms (all values in GBP):

Consideration value per lot = (1000 x FSP x Price Factor) + Initial Accrued + (Daily Accrued x Delivery Days in Month)

Consideration Calculation Example

FSP(N) = 107.41 Price Factor = 1.2554334 Initial Accrued = 1746.58 Daily Accrued = 17.1233 Delivery Days in Month = 10

Single lot value = $(1000 \times 107.41 \times 1000)$

1.2554334) + 1746.58 +

(17.1233 x 10)

= 136,763.914494

Consideration value per lot = 136,763.91

The Clearing House establishes the consideration amount by calculating the full value of **1 lot** using the formula (i.e. up to 7 decimal places on the price factor and 5 on the FSP) and rounding to the nearest whole penny (.5 rounded down). This **per** lot value is then multiplied by the number of lots to establish the total consideration value.

(D) Delivery Timetable (Except for Last Notice Day)

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
Notice Day	By 11:00	Sellers submit Seller's Delivery Notices in Synαpse and the Delivery System	
		Synαpse position keeping deadline	Synαpse position keeping deadline
	By 11:30	FSP established	FSP established
	By 12:00		Allocation of lots to Buyers
		Delivery Positions for Futures Report available	Delivery Positions for Futures Report available
	By 15:00		Deliverable gilts allocated to Buyers
Notice Day + 1	By 05:00	The Clearing House makes Account Sales and Delivery Instructions report available	The Clearing House makes Invoices and Delivery Instructions report available
	From 09:00	Seller to commence matching	Buyer to commence matching
	By 12:30	All deliveries must be matched in Euroclear UK & Ireland	All deliveries must be matched in Euroclear UK & Ireland
Settlement Day (Notice day + 2)	By 13:00	Gilts delivered against payment	Gilts received against payment
S + 1		The Clearing House releases Collateral in respect of initial and contingent margin	The Clearing House releases Collateral in respect of initial and contingent margin

(E) Delivery Timetable (Last Notice Day)

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
Last Notice Day (the business day following the last trading	By 10:00	Sellers submit Seller's Delivery Notices to The Delivery System	

DAY	TIME LONG GILT	ACTION	
		SELLERS	BUYERS
day)			
		Synαpse position keeping deadline	Synαpse position keeping deadline
	By 11:00		Allocation of lots and gilts to Buyers
	By 15:00	The Clearing House makes Account Sales and Delivery Instructions report available	The Clearing House makes Invoices and Delivery Instructions report available
		Seller to commence matching	Buyer to commence matching
	By 17:30	All deliveries must be matched in Euroclear UK & Ireland	All deliveries must be matched in Euroclear UK & Ireland
Settlement Day (Last Notice Day + 1)	By 13:00	Gilts delivered against payment	Gilts received against payment
S + 1		The Clearing House releases Collateral in respect of initial and contingent margin	The Clearing House releases Collateral in respect of initial and contingent margin

(F) Long Gilt Delivery Procedures

(A) Last Trading, Notice and Settlement Day Definitions

The First and Last Notice Day, and Settlement Day, are defined in the FCM Listed Interest Rates Contract Terms for the Long Gilt contract.

(B) Notice Day

By 11:00 hours - Long Gilt

Deliverable positions are based on FCM Clearing Members' positions at the close of business the previous day. The positions may be transferred or settled to establish the deliverable.

On each business day during the notice period, a Seller may input an 'Early Delivery Notification' to Syn α pse and must then, in addition, submit to the Clearing House the corresponding *Seller's Delivery Notice*. The

input of a delivery notification to Synapse without the corresponding *Seller's Delivery Notice* (or vice versa) will not constitute a valid notification to the Clearing House. Any notices submitted after this deadline will be rejected and Sellers must submit on the following business day if they still wish to deliver early (if the next business day is the Last Notice Day, then the Last Notice Day procedures apply).

By 11:30 hours (approx.)

The Final Settlement Price (FSP) is announced.

By 12:00 hours (approx) – Long Gilt

A Delivery Positions for Futures report indicating the number of lots allocated to Buyers is made available on Synαpse.

By 15:00 hours

The Clearing House allocates Gilts to Buyers.

(C) Business Day Following Notice Day

By 05:00 hours

- Delivery Instructions for Sellers
- Delivery Instructions for Buyers

The instructions as described **must** be utilised by Clearing Members in order to match the instructions entered by the Clearing House.

Clearing Members should endeavour to match with the Clearing House at the **earliest** possible time. The times stipulated below are the latest possible times for prematching.

From 09:00 hours

Details of the delivery contracts must be submitted and matched in Euroclear UK & Ireland.

All entries **must** be made with the necessary fields completed in order to match with the Clearing House instruction.

By 12:30 hours

FCM Clearing Members must have successfully matched all trades with the Clearing House in Euroclear UK & Ireland.

Failure to match with the Clearing House contravenes Clearing House Procedures.

The Clearing House informs the operations personnel of the relevant Rates Exchange of any outstanding matching problems after this time.

(D) Last Trading Day (LTD)

At 11:00 hours

Trading ceases two business days prior to the last business day in the delivery month.

(E) Last Notice Day

The Last Notice Day is the business day following the Last Trading Day.

By 10:00 hours - Long Gilt

Sellers holding open positions must submit a Seller's Delivery Notice to the Clearing House via the Delivery System. FCM Clearing Members are not required to give notification via Synapse. FCM Clearing Members with open positions in the expired delivery month are obliged to make or take delivery.

By 15:00 hours - Long Gilt

The Clearing House makes the following available:

- Account Sales
- **Invoices**
- Delivery Instructions for Sellers
- Delivery Instructions for Buyers

FCM Clearing Members commence matching with the Clearing House.

By 17:30 hours

FCM Clearing Members must have successfully matched all trades with the Clearing House in Euroclear UK & Ireland.

Failure to match with the Clearing House contravenes Clearing House Procedures.

The Clearing House informs the operations personnel of the relevant Rates Exchange of any outstanding matching problems after this time.

(F) Settlement Day

Settlement day means the second business day after the notice day or, where the notice day is the Last Notice Day, settlement day will be the next business day after the Last Notice Day.

The Seller must ensure that their Euroclear UK & Ireland priority settings and cap permit their trades to settle before the Clearing House settlement deadline.

By 13:00 hours

Gilts will have passed from the Seller's Euroclear UK & Ireland account to the Clearing House's Euroclear UK & Ireland account (5172) and subsequently to the Buyer's Euroclear UK & Ireland account on Settlement Day.

The Buyers and the Clearing House's settlement bank will effect payment by the end of the day across Real Time Gross Settlement (RTGS) accounts at the Bank of England.

The Clearing House releases Collateral in respect of initial and contingent margin for successfully completed deliveries.

(c) German Government Bond (Euro Bund)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;
- Delivery and receipt versus payment means a transfer of Bunds, against payment of the consideration amount specified in the FCM Listed Interest Rates Contract Terms for German Government Euro Bund Contracts;
- Euroclear The Euroclear System; and
- Securities correspondent Euroclear, Clearstream Luxemburg SA or Clearstream Frankfurt.

(A) Delivery Mechanism

Deliveries under the Euro Bund contract must be made or taken via accounts at one or more of the following delivery systems:

- Clearstream Frankfurt;
- Euroclear; and
- Clearstream Luxemburg.

Clearing House Delivery Account Details. The Clearing House's delivery agents and account details at Clearstream Frankfurt are as follows:

Deutsche Bank AG Securities & Custody Services PO Box 65755 Eschborn Germany

Clearing House account number : 7077

Details of the Clearing House's accounts at Euroclear and Clearstream Luxemburg are as follows:

Euroclear : Clearing House account number 10167

Clearstream : Clearing House account number 18764

Luxemburg

The Clearing House retains the right to amend the above list without prior notification to FCM Clearing Members.

For each Euro Bund delivery, FCM Clearing Members are advised of the Clearing House's delivery systems, agents, accounts and reference numbers, on the *Delivery Instructions Report*.

(B) Delivery Communication and the Delivery System

Delivery documentation must be submitted using The Delivery System. When using The Delivery System, FCM Clearing Members must always ensure they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. FCM Clearing Members experiencing difficulties should contact Client Services on +44 7426 7651.

(C) Consideration Valuation Calculation

The amounts due to Sellers from Buyers are calculated in accordance with the Euro Bund contract terms.

Consideration = (1000 x FSP x Price Factor) + Accrued

value per lot Interest

Consideration Calculation Example

FSP = 113.41 Price Factor = 0.950491 Accrued Interest = 2258.22

 $(1000 \times 113.41 \times 0.950491) + 2258.22$

= EUR

110,053.40431

Consideration = EUR 110,053.40

Value

The consideration value is calculated using the **full** extent of decimal places for each component of the formula.

The invoice value of **1 lot** is then established by taking the full value and rounding to the nearest Euro cent (.5 being rounded down). This **per** lot value is then multiplied by the number of lots to establish the total invoice value.

(D) Delivery Timetable

DAY	TIME	TIME	ACTION	
	LONDON	CET*	SELLERS	BUYERS
Last trading day	11:30	12:30	Trading ceases	Trading ceases
(LTD)				
	12:00	13:00	FSP established	FSP established
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline
			Sellers submit Sellers Delivery Notice	
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation
	18:00	19:00	The Clearing House makes Account Sales and Delivery Instruction Report available.	The Clearing House makes Invoices and Delivery Instruction Report available.
S - 1 (LTD + 1)	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre
S (LTD + 2)	Following standard delivery cycles	Following standard delivery cycles	The Clearing House receives confirmation of delivery	The Clearing House receives confirmation of delivery
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and contingent margin	The Clearing House releases Collateral in respect of initial and contingent margin

* CENTRAL EUROPEAN TIME INCLUDES FRANKFURT TIME WHERE QUOTED IN THE FCM LISTED INTEREST RATES CONTRACT TERMS, RELEVANT RATES EXCHANGE RULES AND CLEARING HOUSE DELIVERY PROCEDURES.

(E) Transaction Cut Off Times and Clearing House Deadlines

FCM Clearing Members should note that the deadlines quoted by the Clearing House may vary from those quoted by the delivery systems or agents.

It is each FCM Clearing Member's responsibility to ensure that they and their agents are aware of, and adhere to, the Clearing House deadlines.

(F) Delivery Procedures

(A) Deliverable Bonds

A Deliverable Bond is a bond which is listed on the final list of deliverable bonds for a delivery month as defined in the FCM Listed Interest Rates Contract Terms for the Bund Futures Contracts. The initial list of bonds will be available from the Delivery System until such time as the final list is published.

(B) Last Trading, Notice and Settlement Day Definition

The Last Trading Day, Notice Day and Settlement Day are as defined in the FCM Listed Interest Rates Contract Terms for the Bund Futures Contract. The Settlement Day is usually the tenth day of the delivery month, unless this is not a Frankfurt working day, in which case the Frankfurt working day immediately following it is the Settlement Day.

(C) Last Trading Day (LTD)

At 11:30

Trading ceases in the delivery month.

By 12:00

The FSP is announced.

By 17:00 hours - Delivery Notice Deadline

FCM Clearing Members must ensure that all give ups, take ups and settlements are performed via Synαpse by the 17:00 hours deadline. FCM Clearing Members with open positions in the expired contract month are obliged to make or take delivery.

Sellers must submit a *Seller's Delivery Notice* to the Clearing House via the Delivery System.

At 17:30 hours

The Clearing House allocates Bunds to Buyers.

By 18:00 hours

The Clearing House makes the following available:

- Account Sales
- Invoices
- Delivery Instructions for Sellers
- Delivery Instructions for Buyers

In order to meet the relevant deadlines, Buyers and Sellers should ensure that all Clearing House instructions are given priority by their respective Settlement Departments.

The FCM Clearing Member shall have given instructions to, or shall have briefed their delivery agent to have given instructions to the delivery centre specified in the *Delivery Instructions for Sellers/Buyers*. The instructions as described **must** be utilised by FCM Clearing Members in order to match the instructions entered by the Clearing House.

FCM Clearing Members should endeavour to match with the Clearing House at the **earliest** possible time. The time stipulated below is the latest possible time for matching.

(D) S-1 on or before the first Frankfurt working day following the last trading day (LTD)

By 10:00 hours

FCM Clearing Members or their delivery agents shall have instructed their respective delivery system to match all instructions (stated in the *Delivery Instructions*) given by the Clearing House.

By 14:00 hours

All instructions must be matched with the Clearing House.

Failure to match with the Clearing House contravenes Clearing House procedures.

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bunds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bunds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bunds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bunds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent margin for successfully completed deliveries.

(d) German Government Bond (BOBL)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;

- Delivery and receipt versus payment means a transfer of Bonds, against payment of the invoicing amount specified in the FCM Listed Interest Rates Contract Terms for Bobl Futures Contracts;
- Euroclear The Euroclear System; and
- Securities correspondent Euroclear, Clearstream Luxemburg SA or Clearstream Frankfurt.

(A) Delivery Mechanism

Deliveries under the Bobl contract must be made or taken via accounts at one or more of the following delivery systems:

- Clearstream Frankfurt;
- Euroclear; and
- Clearstream Luxemburg.

Clearing House Delivery Account Details. The Clearing House's delivery agents and account details at Clearstream Frankfurt are as follows:

Deutsche Bank AG Securities & Custody Services PO Box 65755 Eschborn Germany

Clearing House account number : 7077

Details of the Clearing House's accounts at Euroclear and Clearstream Luxemburg are as follows:

Euroclear : Clearing House account number 10167

Clearstream: Clearing House account number 18764

Luxemburg

The Clearing House retains the right to amend the above list without prior notification to FCM Clearing Members.

For each delivery, FCM Clearing Members are advised of the Clearing House's delivery systems, agents, accounts and reference numbers, on the *Delivery Instructions Report*.

(B) Delivery Communication and the Delivery System

Delivery documentation must be submitted using The Delivery System. When using The Delivery System, FCM Clearing Members must always ensure they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. FCM Clearing Members experiencing difficulties should contact Client Services on +44 7426 7651.

(C) Consideration Valuation Calculation

The amounts due to Sellers from Buyers are calculated in accordance with the Bobl Futures Contract terms.

Consideration = (1000 x FSP x Price Factor) + Accrued

value per lot Interest

Consideration Calculation Example

FSP = 113.41 Price Factor = 0.950491 Accrued Interest = 2258.22

 $(1000 \times 113.41 \times 0.950491) + 2258.22$

= EUR

110,053.40431

Consideration = EUR 110,053.40

Value

The consideration value is calculated using the **full** extent of decimal places for each component of the formula.

The invoice value of **1** lot is then established by taking the full value and rounding to the nearest Euro cent (.5 being rounded down). This **per** lot value is then multiplied by the number of lots to establish the total invoice value.

(D) Delivery Timetable

DAY	TIME TIME		ACTION		
	LONDON	CET*	SELLERS	BUYERS	
Last	11:30	12:30	Trading ceases	Trading ceases	
trading day (LTD)	12:00	13:00	FSP established	FSP established	
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline	
			Sellers submit Sellers Delivery Notice		
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation	
	18:00	19:00	The Clearing House makes the Account Sales and Delivery Instructions Report available	The Clearing House makes the Invoices and Delivery Instructions Report available	
S - 1 (LTD + 1	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank	
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre	
S (LTD + 2)	Following standard delivery cycles	Following standard delivery cycles	The Clearing House receives confirmation of delivery	The Clearing House receives confirmation of delivery	
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and contingent margin	The Clearing House releases Collateral in respect of initial and contingent margin	

^{*} CENTRAL EUROPEAN TIME INCLUDES FRANKFURT TIME WHERE QUOTED IN THE FCM LISTED INTEREST RATES CONTRACT TERMS, RELEVANT RATES EXCHANGE RULES AND CLEARING HOUSE DELIVERY PROCEDURES.

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(E) Transaction Cut Off Times and Clearing House Deadlines

FCM Clearing Members should note that the deadlines quoted by the Clearing House may vary from those quoted by the delivery systems or agents.

It is each FCM Clearing Member's responsibility to ensure that they and their agents are aware of, and adhere to, the Clearing House deadlines.

(F) Delivery Procedures

(A) Deliverable Bonds

A Deliverable Bond is a bond which is listed on the final list of deliverable bonds for a delivery month as defined in the FCM Listed Interest Rates Contract Terms for the Bobl Futures Contract. The initial list of bonds will be available from the Delivery System until such time as the final list is published.

(B) Last Trading, Notice and Settlement Day Definition

The Last Trading Day, Notice Day and Settlement Day are as defined in the FCM Listed Interest Rates Contract Terms for the Bobl Futures Contract. The Settlement Day is usually the tenth day of the delivery month, unless this is not a Frankfurt working day, in which case the Frankfurt working day immediately following it is the Settlement Day.

(C) Last Trading Day (LTD)

At 11:30

Trading ceases in the delivery month.

By 12:00

The FSP is announced.

By 17:00 hours - Delivery Notice Deadline

FCM Clearing Members must ensure that all give ups, take ups and settlements are performed via Synαpse by the 17:00 hours deadline. FCM Clearing Members with open positions in the expired contract month are obliged to make or take delivery.

Sellers must submit a *Seller's Delivery Notice* to the Clearing House via the Delivery System.

At 17:30 hours

The Clearing House allocates deliveries to Buyers.

By 18:00 hours

The Clearing House makes the following available:

- Account Sales
- Invoices
- Delivery Instructions for Sellers
- Delivery Instructions for Buyers

In order to meet the relevant deadlines, Buyers and Sellers should ensure that all Clearing House instructions are given priority by their respective Settlement Departments.

The FCM Clearing Member shall have given instructions to, or shall have briefed their delivery agent to have given instructions to the delivery centre specified in the *Delivery Instructions for Sellers/Buyers*. The instructions as described **must** be utilised by FCM Clearing Members in order to match the instructions entered by the Clearing House.

FCM Clearing Members should endeavour to match with the Clearing House at the **earliest** possible time. The time stipulated below is the latest possible time for matching.

(D) S-1 on or before the first Frankfurt working day following the last trading day (LTD)

By 10:00 hours

FCM Clearing Members or their delivery agents shall have instructed their respective delivery system to match all instructions (stated in the *Delivery Instructions*) given by the Clearing House.

By 14:00 hours

All instructions must be matched with the Clearing House.

Failure to match with the Clearing House contravenes Clearing House procedures.

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bonds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bonds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bonds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bonds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent margin for successfully completed deliveries.

(e) German Government Bond (Schatz)

The following abbreviations are used in these procedures:

- DVP means delivery versus payment;
- RVP means receipt versus payment;

- Delivery and receipt versus payment means a transfer of Bonds, against payment of the invoicing amount specified in the FCM Listed Interest Rates Contract Terms for Schatz Futures Contracts;
- Euroclear The Euroclear System; and
- Securities correspondent Euroclear, Clearstream Luxemburg SA or Clearstream Frankfurt.

(A) Delivery Mechanism

Deliveries under the Schatz contract must be made or taken via accounts at one or more of the following delivery systems:

- Clearstream Frankfurt;
- Euroclear; and
- Clearstream Luxemburg.

Clearing House Delivery Account Details. The Clearing House's delivery agents and account details at Clearstream Frankfurt are as follows:

Deutsche Bank AG Securities & Custody Services PO Box 65755 Eschborn Germany

Clearing House account number : 7077

Details of the Clearing House's accounts at Euroclear and Clearstream Luxemburg are as follows:

Euroclear : Clearing House account number 10167

Clearstream: Clearing House account number 18764

Luxemburg

The Clearing House retains the right to amend the above list without prior notification to FCM Clearing Members.

For each delivery, FCM Clearing Members are advised of the Clearing House's delivery systems, agents, accounts and reference numbers, on the *Delivery Instructions Report*.

(B) Delivery Communication and the Delivery System

Delivery documentation must be submitted using The Delivery System. When using The Delivery System, FCM Clearing Members must always ensure they allow sufficient time to input their delivery details within the deadlines prescribed in these procedures. Failure to do so will constitute late delivery of documentation and may be subject to disciplinary action. FCM Clearing Members experiencing difficulties should contact Client Services on +44 7426 7651.

(C) Consideration Valuation Calculation

The amounts due to Sellers from Buyers, are calculated in accordance with the FCM Listed Interest Rates Contract Terms for Schatz Futures Contracts.

Consideration = (1000 x FSP x Price Factor) + Accrued

value per lot Interest

Consideration Calculation Example

FSP = 113.41 Price Factor = 0.950491 Accrued Interest = 2258.22

 $(1000 \times 113.41 \times 0.950491) + 2258.22$

= EUR 110,053.40431

Consideration = EUR 110,053.40

Value

The consideration value is calculated using the **full** extent of decimal places for each component of the formula.

The invoice value of **1** lot is then established by taking the full value and rounding to the nearest Euro cent (.5 being rounded down). This **per** lot value is then multiplied by the number of lots to establish the total invoice value.

(D) Delivery Timetable

DAY	TIME TIME		ACTION		
	LONDON	CET*	SELLERS	BUYERS	
Last	11:30	12:30	Trading ceases	Trading ceases	
trading day (LTD)	12:00	13:00	FSP established	FSP established	
	17:00	18:00	Synαpse Position Keeping deadline	Synαpse Position Keeping deadline	
			Sellers submit Sellers Delivery Notice		
	17:30	18:30	The Clearing House performs delivery allocation	The Clearing House performs delivery allocation	
	18:00	19:00	The Clearing House makes the Account Sales and Delivery Instructions Report available	The Clearing House makes the Invoices and Delivery Instructions Report available	
S - 1 (LTD + 1	10:00	11:00	Sellers submit DVP instructions to their custodian bank	Buyers submit RVP instructions to their custodian bank	
	14:00	15:00	Sellers match the Clearing House instruction entered into delivery centre	Buyers match the Clearing House instruction entered into delivery centre	
S (LTD + 2)	Following standard delivery cycles	Following standard delivery cycles	The Clearing House receives confirmation of delivery	The Clearing House receives confirmation of delivery	
S + 1 (LTD + 3)			The Clearing House releases Collateral in respect of initial and contingent margin	The Clearing House releases Collateral in respect of initial and contingent margin	

^{*} CENTRAL EUROPEAN TIME INCLUDES FRANKFURT TIME WHERE QUOTED IN THE FCM LISTED INTEREST RATES CONTRACT TERMS, RELEVANT RATES EXCHANGE RULES AND CLEARING HOUSE DELIVERY PROCEDURES.

- 193 -

(E) Transaction Cut Off Times and Clearing House Deadlines

FCM Clearing Members should note that the deadlines quoted by the Clearing House may vary from those quoted by the delivery systems or agents.

It is each FCM Clearing Member's responsibility to ensure that they and their agents are aware of, and adhere to, the Clearing House deadlines.

(F) Delivery Procedures

(A) Deliverable Bonds

A Deliverable Bond is a bond which is listed on the final list of deliverable bonds for a delivery month as defined in the FCM Listed Interest Rates Contract Terms for the Schatz Futures Contract. The initial list of bonds will be available from the Delivery System until such time as the final list is published.

(B) Last Trading, Notice and Settlement Day Definition

The Last Trading Day, Notice Day and Settlement Day are as defined in the FCM Listed Interest Rates Contract Terms for the Schatz Futures Contract. The Settlement Day is usually the tenth day of the delivery month, unless this is not a Frankfurt working day, in which case the Frankfurt working day immediately following it is the Settlement Day.

(C) Last Trading Day (LTD)

At 11:30

Trading ceases in the delivery month.

By 12:00

The FSP is announced.

By 17:00 hours - Delivery Notice Deadline

FCM Clearing Members must ensure that all give ups, take ups and settlements are performed via Synαpse by the 17:00 hours deadline. FCM Clearing Members with open positions in the expired contract month are obliged to make or take delivery.

Sellers must submit a *Seller's Delivery Notice* to the Clearing House via the Delivery System.

At 17:30 hours

The Clearing House allocates deliveries to Buyers.

By 18:00 hours

The Clearing House makes the following available:

- Account Sales
- Invoices
- Delivery Instructions for Sellers
- Delivery Instructions for Buyers

In order to meet the relevant deadlines, Buyers and Sellers should ensure that all Clearing House instructions are given priority by their respective Settlement Departments.

The FCM Clearing Member shall have given instructions to, or shall have briefed their delivery agent to have given instructions to the delivery centre specified in the *Delivery Instructions for Sellers/Buyers*. The instructions as described **must** be utilised by FCM Clearing Members in order to match the instructions entered by the Clearing House.

FCM Clearing Members should endeavour to match with the Clearing House at the **earliest** possible time. The time stipulated below is the latest possible time for matching.

(D) S-1 on or before the first Frankfurt working day following the last trading day (LTD)

By 10:00 hours

FCM Clearing Members or their delivery agents shall have instructed their respective delivery system to match all instructions (stated in the *Delivery Instructions*) given by the Clearing House.

By 14:00 hours

All instructions must be matched with the Clearing House.

Failure to match with the Clearing House contravenes Clearing House procedures and the FCM Listed Interest Rates Contract Terms for the Schatz Future Contract.

(E) S Settlement Day (LTD + 2)

By 08:00 hours Central European time

The Seller's delivery system or agent shall have transferred Bonds to the Clearing House's account at the relevant delivery system, against payment. The Clearing House shall have transferred Bonds to the Buyer's account at the relevant delivery system against payment.

During Euroclear/Clearstream Luxemburg Overnight Processing

Where the Clearing House is taking delivery of Bonds, via Euroclear or Clearstream Luxemburg, and a Seller fails to deliver Deliverable Bonds to the Clearing House in the overnight processing cycle of Euroclear or Clearstream Luxemburg, the Clearing House will invoke automatic borrowing procedures, subject to supply.

All costs arising as a result of failure to deliver to the Clearing House in the Euroclear/ Clearstream Luxemburg overnight processing cycle will be passed to the defaulting Seller.

During Clearstream Frankfurt standard cycle

Where the Clearing House is taking delivery of Bonds via one of its Clearstream Frankfurt agents, and a Seller fails to deliver to the Clearing House Deliverable Bonds in the standard cycle, the Clearing House will attempt to borrow stock.

All costs arising as a result of failure to deliver to the Clearing House (in the standard cycle) will be passed to the defaulting Seller.

(F) S+1 The first Frankfurt working day immediately following Settlement Day (LTD + 3)

The Clearing House releases Collateral in respect of initial and contingent margin for successfully completed deliveries.

SCHEDULE 2.3A DELIVERABLE BOND FUTURES FORMS

FORM-1 ACCOUNT SALE

06-Mar-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

LONG GILT FUTURE

Delivery Month : MAR 2014 Settlement Date : 10-MAR-2014

Tendered in fulfilment of 104 lots of:

Stock Code : GB0009997114

Coupon Rate : 5.250% Maturity Date : 07-Dec-2020

 Nominal Value
 :
 GBP
 10,400,000.00

 EDSP
 :
 107.41

 Price Factor
 :
 1.2554334

 Initial Accrued
 :
 1746.58

 Delivery Days @
 :
 17.1233

 Total Daily Accrued
 :
 171.233

Countervalue : GBP 14223446.64

E. & O.E.

FORM-2 INVOICE (GILTS)

06-Mar-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

LONG GILT FUTURE

Delivery Month : MAR 2014 Settlement Date : 10-MAR-2014

Tendered in fulfilment of 104 lots of:-

Stock Code : GB0009997114

Coupon Rate : 5.250%

Maturity Date : 07-Dec-2020

 Nominal Value
 : GBP
 10,400,000.00

 EDSP
 : 107.41

 Price Factor
 : 1.2554334

 Initial Accrued
 : 1746.58

 Delivery Days @
 : 17.1233

 Total Daily Accrued
 : 171.233

Countervalue : GBP 14223446.64

E. & O.E.

FORM-3 LONG GILT FUTURE DELIVERY INSTRUCTION FOR SELLERS (GILTS)

06-MAR-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: MAR 2014

Delivery to the Clearing House at CREST

Clearing Member: AAA Subaccount: Client

From Clearing Member's Del Centre : CREST

AAA FUTURES LTD TENDER HOUSE

FENCHURCH STREET Account No : 92506 LONDON Account Name : AAA

FUTURES

FSP : 107.41 Notice Date : 06-MAR-2014

Currency Id: : GBP

Settlement Date : 10-MAR-2014

Instr. Clearing House Agent Name Clearing House Account No Countervalue Stock Code Nominal Value Lots

CREST 5172 14223446.64 GB0009997114 10,400,000.00 104

E. & O.E

Registered in England No. 25932 Registered Office:

Aldgate House, 33 Aldgate High Street, London EC3N 1EA

A Recognised Clearing House under the Financial Services and Markets $Act\ 2000$

FORM-4

LONG GILT FUTURE DELIVERY INSTRUCTION FOR BUYERS (GILTS)

06-MAR-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: MAR 2014

Delivery to the Clearing House at CREST

Clearing Member: AAA Subaccount: Client

To Clearing Member's Del Centre : CREST

AAA FUTURES LTD

TENDER HOUSE

FENCHURCH STREET Account No : 92506

LONDON Account Name : AAA FUTURES

FSP : 107.41 Notice Date : 06-MAR-2014

Currency Id: : GBP

Settlement Date : 10-MAR-2014

Instr. Clearing House Agent Name Clearing House Account No Countervalue Stock Code Nominal Value Lots

CREST 5172 14223446.64 GB0009997114 10,400,000.00 104

E. & O.E

Registered in England No. 25932 Registered Office:

Aldgate House, 33 Aldgate High Street, London EC3N 1EA

A Recognised Clearing House under the Financial Services and Markets Act 2000

FORM-5 ACCOUNT SALE (EURO BUND)

06-JUN-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

GERMAN GOVT. BOND (EURO BUND) FUTURE

Delivery Month : JUN 2014 Settlement Date : 10-JUN-2014

Tendered in fulfilment of 203 lots of:

Stock Code : DE0001135051

Coupon Rate : 5.250%

Maturity Date : 04-JAN-2023

 Nominal Value
 :
 EUR
 20,300,000.00

 EDSP
 :
 113.41

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.20

E. & O.E.

FORM-6 INVOICE (EURO BUND)

06-JUN-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

GERMAN GOVT. BOND (EURO BUND) FUTURE

Delivery Month : JUN 2014 Settlement Date : 10-JUN-2014

Tendered in fulfilment of 203 lots of:

Stock Code : DE0001135051

Coupon Rate : 5.250%

Maturity Date : 04-JAN-2023

 Nominal Value
 :
 EUR
 20,300,000.00

 EDSP
 :
 113.41

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.02

E. & O.E.

FORM-7

GERMAN GOVT. BOND (EURO BUND) FUTURE DELIVERY INSTRUCTION FOR SELLERS (EURO BUND)

06-JUN-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: JUN 2014

Delivery to the Clearing House at CED

Clearing Member: AAA Subaccount: Client

From Clearing Member's Del Centre : CED

AAA FUTURES LTD

TENDER HOUSE

FENCHURCH STREET Agent Name : Clearstream

Luxemburg

LONDON Agent No

Account Name : AAA FUTURES

Account No : 40256

Notice Date : 06-JUN-2014

FSP : 113.41 Currency Id: : EUR

Settlement Date : 10-JUN-2014

Instr. Clearing House Agent Name Clearing House Agent No Clearing House Account No Countervalue Stock Code Nominal Value Lots

51 Clearstream Luxemburg 18764 22,340,840.20 DE0001135051 20,300,000.00 203

E. & O.E

Registered in England No. 25932 Registered Office:

Aldgate House, 33 Aldgate High Street, London EC3N 1EA

A Recognised Clearing House under the Financial Services and Markets Act 2000

FORM-8

GERMAN GOVT. BOND (EURO BUND) FUTURE DELIVERY INSTRUCTION FOR BUYERS (EURO BUND)

06-JUN-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA

Delivery from the Clearing House at CED

Delivery Month: JUN 2014

Clearing Member: AAA Subaccount: Client

To Clearing Member's Delivery Centre : CED

AAA FUTURES LTD

TENDER HOUSE Agent Name : Clearstream Luxemburg

FENCHURCH STREET Agent No

LONDON Account Name : AAA FUTURES

Account No : 40256

FSP : 113.41 Notice Date : 06-JUN-2014

Currency Id: : EUR

Settlement Date : 10-JUN-2014

Instr. Clearing House Agent Name Clearing House Agent Clearing House Account No Countervalue Stock Code Nominal Value Lots

No

41 Clearstream Luxemburg 18764 22,340,840.20 DE0001135051 20,300,000.00 203

E. & O.E

Registered in England No. 25932 Registered Office:

Aldgate House, 33 Aldgate High Street, London EC3N 1EA

A Recognised Clearing House under the Financial Services and Markets Act 2000

FORM-9 ACCOUNT SALE (BOBL)

08-SEP-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

.....

GERMAN GOVT. BOND (BOBL) FUTURE

Delivery Month : SEP 2014 Settlement Date : 10-SEP-2014

Tendered in fulfilment of 203 lots of:

Stock Code : DE0001135052

Coupon Rate : 5.250%

Maturity Date : 04-APR-2019

 Nominal Value
 :
 EUR
 20,300,000.00

 EDSP
 :
 113.41

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.20

E. & O.E.

FORM-10 INVOICE

08-SEP-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

GERMAN GOVT. BOND (BOBL) FUTURE

Delivery Month : SEP 2014 Settlement Date : 10-SEP-2014

Tendered in fulfilment of 203 lots of:

Stock Code : DE0001135052

Coupon Rate : 5.250%

Maturity Date : 04-APR-2019

 Nominal Value
 :
 EUR
 20,300,000.00

 EDSP
 :
 113.41

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.20

E. & O.E.

FORM-11 BOBL FUTURE DELIVERY INSTRUCTION FOR SELLERS

08-SEP-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: SEP 2014 Delivery to the Clearing House at CED

Clearing Member: AAA Subaccount: Client

From Clearing Members Del Centre : CED

AAA FUTURES LTD

TENDER HOUSE Agent Name : Clearstream Luxemburg

FENCHURCH STREET Agent No :

LONDON Account Name : AAA FUTURES

Account No : 40256

FSP : 113.41 Notice Date : 08-SEP-2014

Currency Id: : EUR

Settlement Date : 10-SEP-2014

Instr. Clearing House Agent Name Clearing House Agent No Clearing House Account No Countervalue Stock Code Nominal Value Lots

51 Clearstream Luxemburg 18764 22,340,840.20 DE0001135051 20,300,000.00 203

E. & O.E

Registered in England No. 25932 Registered Office:

Aldgate House, 33 Aldgate High Street, London EC3N 1EA

A Recognised Clearing House under the Financial Services and Markets Act 2000

FORM-12 BOBL FUTURE DELIVERY INSTRUCTION FOR BUYERS (BOBL)

08-SEP-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month:

SEP

2014

Delivery from the Clearing House at CED

Clearing Member: AAA Subaccount: Client

To Clearing Member's Delivery: CED

Centre

AAA FUTURES LTD

TENDER HOUSE

FENCHURCH STREET

LONDON

Agent No

Agent Name

Account Name : AAA FUTURES

: Clearstream Luxemburg

Account No : 40256

Notice Date : 08-SEP-2014

FSP : 113.41 Currency Id: : EUR

Settlement Date : 10-SEP-2014

Instr. Clearing House Agent Clearing House Agent No Clearing House Account No Countervalue Stock Code Nominal Value Lots

Name

41 Clearstream Luxemburg 18764 22,340,840.20 DE0001135052 20,300,000.00 203

E. & O.E

FORM-13 ACCOUNT SALE (SCHATZ)

08-SEP-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

GERMAN GOVT. BOND (SCHATZ) FUTURE

Delivery Month : SEP 2014 Settlement Date : 10-SEP-2014

Tendered in fulfilment of 203 lots of:-

Stock Code : DE0001135053

Coupon Rate : 5.250%

Maturity Date : 04-AUG-2016

 Nominal Value
 :
 EUR
 20,300,000.00

 EDSP
 :
 113.41

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.20

E. & O.E.

FORM-14 INVOICE (SCHATZ)

08-SEP-2014

LCH LIMITED

Aldgate House 33 Aldgate High Street London EC3N 1EA Telephone +44 (0)20-7426 7000 Fax +44 (0)20-7426 7001

Clearing Member : AAA Subaccount : House

Ref Id : 3

AAA FUTURES LTD TENDER HOUSE FENCHURCH STREET LONDON EC3 4DR

In a/c with LCH Limited

GERMAN GOVT. BOND (SCHATZ) FUTURE

Delivery Month : SEP 2014 Settlement Date : 10-SEP-2014

Tendered in fulfilment of 203 lots of:-

Stock Code : DE0001135053

Coupon Rate : 5.250%

Maturity Date : 04-AUG-2016

Nominal Value : EUR 20,300,000.00 EDSP : 113.41

EDSP :
Price Factor :

 Price Factor
 :
 0.950491

 Accrued Interest
 :
 2258.22

Countervalue : EUR 22,340,840.20

E. & O.E.

FORM-15 SCHATZ FUTURE DELIVERY INSTRUCTION FOR SELLERS (SCHATZ)

08-SEP-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: SEP 2014

Delivery to the Clearing House at CED

Clearing Subaccount:
Member: Client

AAA

From Clearing : CED

Member's Del Centre

AAA FUTURES

LTD Agent Name : Clearstream

Luxemburg

TENDER HOUSE

FENCHURCH

STREET

LONDON Agent No :

Account Name : AAA

FUTURES

Account No : 40256

Notice Date : 08-SEP-2014

FSP : 113.41 Currency Id: : EUR Settlement Date : 10-SEP-

2014

Clearing House Ins Clearing House Clearing House Counterva Stock Nominal Lo Agent Name tr. Agent No Account No lue Code Value ts 22,340,84 51 Clearstream 18764 DE00011 20,300.00 20 Luxemburg 0.20 35053 0.00 3

E. & O.E

FORM-16 SCHATZ FUTURE DELIVERY INSTRUCTION FOR BUYERS

08-SEP-2014

LCH LIMITED

Aldgate House, 33 Aldgate High Street, London, EC3N 1EA Telephone +44 (0)20-7426 7000

Delivery Month: SEP 2014

Delivery to the Clearing House at CED

Clearing Subaccount:
Member: Client

AAA

From Clearing : CED

Member's Del Centre

AAA FUTURES

LTD Agent Name : Clearstream

Luxemburg

TENDER HOUSE

FENCHURCH

STREET

LONDON Agent No :

Account Name : AAA

FUTURES

Account No : 40256

Notice Date : 08-SEP-2014

FSP : 113.41 Currency Id: : EUR Settlement Date : 10-SEP-

2014

Clearing House Clearing House Ins Clearing House Counterva Stock Nominal Lo Agent Name Agent No tr. Account No lue Code Value ts 41 Clearstream 18764 22,340,84 DE00011 20,300,00 20 Luxemburg 0.20 35053 0.00 3

E. & O.E

3. FINANCIAL TRANSACTIONS

3.1 Accounts

3.1.1 *Overview*

FCM Clearing Member accounts have financial accounts associated with them. These are, *inter alia*, used to record cash balances and securities Collateral

Refer to Sections 2.1.6, 2.2.6 and 2.3.4 of these FCM Procedures for a full description of financial accounts.

The Clearing House and FCM Clearing Members are permitted to physically commingle the Collateral relating to Swap Products and to physically commingle the Collateral relating to Futures Products. However, Collateral relating to Swap Products and Collateral relating to Futures Products must be segregated (both physically and in bookkeeping accounts) from one another in accordance with the CEA and CFTC Regulations.

3.1.2 Margin Account Postings

Transactions posted to a Margin account include but are not limited to:

- (a) PPS calls and pays;
- (b) option premiums;
- (c) prompt day delivery amounts;
- (d) interest and accommodation charges;
- (e) Clearing House fees, charges and rebates;
- (f) exchange fees, levies and rebates;
- (g) amounts credited or debited in respect of Variation Settlement, Price Alignment Amount and coupons;
- (h) cash settlement; and
- (i) settlement differences.

Details of collateral balances, valuations and instructions are also available using the CMS.

3.1.3 *Ledgers*

Each Margin account may comprise one or more ledgers, including:

(a) non-cover ledger (which is used to record (i) Coupons received on securities held as Collateral, (ii) Variation Settlement and coupon payments relating to FCM SwapClear Contracts which are forward rate

agreements, (iii) fees, charges, levies and rebates, and (iv) interest on cash balances and Price Alignment Amount); and

(b) cover ledger (which is used to record all other items).

Liabilities arising from trading activity are recorded against the relevant Margin account only.

3.1.4 Financial Transaction Reporting

Banking reports are generated each day and provide members with data relating to but not limited to: liabilities by market, cash balances, non-cash balances, cash posting and interest rates.

All reports are available via the Member Reporting Web Site (Member Live site) and can be downloaded via the user interface or directly to Member back-office systems via an SFTP connection.

Details of valuations, cover instructions and cash and non-cash balances are available through the Clearing Management System.

A "Banking Reports Reference Pack" can be requested from the LCH Client Training Team. This contains definitions and examples of each of the available reports.

Details of cover balances, valuations and instructions are also available using the on-line Collateral Management System (CMS).

3.2 **Protected Payments System**

The Clearing House operates a direct debit system, known as the protected payments system ("**PPS**"), for the transfer of funds to and from FCM Clearing Members. The PPS is a recognized interbank payments system overseen by the Bank of England.

PPS is operated in London ("UK PPS") and the United States ("US PPS"). In this Section, a day on which the PPS is open is referred to as a "working day".

FCM Clearing Members should note that the PPS (both in London and in the US) is a system for facilitating payment to the Clearing House of moneys due from FCM Clearing Members to the Clearing House and vice versa. The giving of a commitment by a participating bank through the PPS to make any payment, and the receipt of that commitment by the Clearing House, is not to be regarded as satisfaction of any payment due to the Clearing House.

Each FCM Clearing Member remains fully responsible for the payment to the Clearing House of all moneys due to the Clearing House as required, *inter alia*, by the FCM Clearing Membership Agreement, clearing extension documentation and the applicable provisions of the FCM Rulebook. Payment is only completed when the funds have been credited for value to the relevant Clearing House bank account, and any time permitted by the relevant payment settlement system for the recall of any such payment has expired.

3.2.1 **PPS Mandates**

(a) Introduction

An FCM Clearing Member is required to maintain a:

- (i) US dollar PPS account with any US PPS bank; and
- (ii) PPS bank account with any UK PPS bank in EUR, USD and GBP, and each currency in which it incurs settlement obligations, and provides Securities Collateral, to the Clearing House. An FCM Clearing Member may use different UK PPS banks for different currencies.

Please refer to the following link for details:

www.lch.com/risk_management/ltd/pps/

FCM Clearing Members are responsible at all times for ensuring that their PPS bank accounts have sufficient funds or credit lines to be able to meet calls from the Clearing House.

Any bank charges connected with the holding of any PPS bank accounts or related to any activity on that account must be paid by the FCM Clearing Member holding the relevant account PPS mandates.

The GBP non-segregated PPS account will, *inter alia*, be used to process Contributions for all services other than the ForexClear Service. For ForexClear Service, the USD non-segregated PPS account is used.

Where applicable, all PPS accounts that hold FCM Client Funds must be segregated in accordance with the FCM Regulations and the applicable provisions of the CEA and CFTC Regulations, including but not limited to Part 1, Part 22 and Part 190 of such regulations. Furthermore, PPS accounts that contain FCM Client Funds held with respect to Futures/Options Contracts may not contain FCM Client Funds held with respect to Cleared Swaps, unless permitted under the CEA or CFTC Regulations.

Each FCM Clearing Member is required to complete a standard form UK PPS Mandate and US PPS Mandate (copies are available from treasury.ops.uk@lch.com) for each bank branch at which they wish to operate an account before clearing can commence. The original of the mandate must be signed by a person with the appropriate authority within the FCM Clearing Member institution and then forwarded to the relevant bank. A copy must also be forwarded at the same time to the Clearing House Onboarding Department.

(b) Currency Conversion

The Clearing House supports cross currency collateral, which allows the FCM Clearing Member to elect to use cash cover denominated in one currency in respect of initial and contingent margin liabilities calculated in another currency. FCM Clearing Members must nominate the currency in which they wish to cover margin liabilities by prior arrangement with LCH Limited Treasury Operations.

(c) Morning PPS Calls

FCM Clearing Members' liabilities are calculated overnight. Should the relevant liability not be covered by acceptable forms of Collateral held by the Clearing House (see section 3.3) any shortfall is called through UK PPS with separate calls made for each currency. It is the responsibility of each FCM Clearing Member to ensure that its UK PPS bank(s) meets all payment instructions received from the Clearing House. Confirmation of payments, as notified, must be received by the Clearing House from the relevant PPS bank(s) by 09:00 London time, or within one hour of a subsequent call, on the day on which the PPS call is made. Payments will only be recognized for this purpose if the relevant PPS bank (i) has performed its concentration function (being the transfer of net funds from the PPS bank to a central account in the name of the Clearing House) (ii) has made such payments, and (iii) any time permitted by the relevant payment settlement system for the recall of any such payment has expired.

Where payments are due to an FCM Clearing Member, payments will be recognized as soon as payment instructions in respect of that payment have been given to a PPS bank. For this purpose, a payment instruction will only be recognized to the extent that the Clearing House has taken steps to transfer to the PPS bank any such sums as may be necessary to enable that payment instruction to be performed by the PPS bank.

(d) Intra-day PPS Calls

The intra-day margin call by the Clearing House is for intra-day Margin payments. Only USD can be used to cover Margin requirements intra-day. Between 14:30 and 16:00 hours (London time) only USD will be called in London.

Normally the Clearing House will call intra-day margin through UK PPS accounts. However, where the Clearing House wishes to make such an intra-day call after UK PPS closes (16:00 London time), such a call will be made upon the FCM Clearing Member's nominated US PPS account.

Only USD will be called by default during the hours of UK PPS for each mnemonic/sub-account. FCM Clearing Members may request a change to the default currency no later than 09:30 London time in

order for the change to be undertaken the following day. FCM Clearing Member's may submit a request to change their currency at the following link:

www.lch.com/risk_management/ltd/preferential_currency_for_intrada y_margin_calls_form.asp

The Clearing House has the ability to call US dollars in respect of an intra-day margin call up until 16:00 New York time (21:00 London time).

The Clearing House must receive confirmation of payment from the FCM Clearing Member's nominated PPS bank(s) within one hour of receipt of the intra-day call by the relevant bank branch.

Failure of a bank to confirm a PPS call within one hour may result in the FCM Clearing Member being declared in default. Late confirmation of PPS calls are reported to the regulators of the LCH Group.

(e) Auto repay

FCM Clearing Members may request that they are automatically repaid any excess USD cash balances that remain on their accounts at the end of each day. FCM Clearing Members must contact Treasury Operations in order to have auto-repay applied to their accounts. (LCHOperations-Treasury@lch.com or telephone +44 (0)20 7426 7505). In certain circumstances and following notification to one or more Regulatory Bodies, the Clearing House may disable the autorepay functionality for all FCM Clearing Members of a clearing service. The Clearing House will notify FCM Clearing Members via Clearing Member Circular in the event that the functionality is disabled. This Section 3.2.1(e) only applies to Proprietary Accounts.

(f) Value Date

Although confirmation from the banks that PPS payments will be made must be received within the deadlines set out in Sections 3.2.1(c) and 3.2.1(d), subject to Section 3.2.1(h), all currency transactions are processed by PPS with next business day value with the exception of the following currencies: CAD, EUR, GBP, MXN and USD, which are processed with value for the same business day.

(g) Foreign Bank Holidays

The Clearing House has made arrangements with UK PPS banks to operate the PPS on all UK banking days including foreign bank holidays.

In respect of currency holidays for EUR, GBP and USD ("Major Currencies"), FCM Clearing Members are required to be able to meet PPS calls in all of the three Major Currencies and therefore must have

an account with a PPS Bank in London in each of EUR, GBP and USD. If an FCM Clearing Member's preferred currency is available to be settled on a currency holiday, the Clearing House will call such preferred currency. In the event that such currency is not available to be settled on a particular day, the Clearing House will (i) firstly apply excess it may hold in respect of an FCM Clearing Member and then (ii) issue calls in the following order:

- (i) on a USD holiday, the Clearing House will issue a call in EUR;
- (ii) on a GBP, holiday the Clearing House will issue a call in USD;
- (iii) on an EUR holiday the Clearing House will issue a call in GBP;
- (iv) on a day which is both a USD holiday and a EUR holiday, the Clearing House will issue a call in GBP; and
- (v) on a day which is both a USD holiday and a GBP holiday the Clearing House will issue a call in EUR.

The Clearing House will observe an FCM Clearing Member's currency preferences on all days, other than currency holidays.

Confirmation that PPS payments will be made must be received within the deadlines set out in Sections 3.2.1(c) and 3.2.1(d). However, the value date for any PPS transactions made on a day which is a bank or public holiday in the country of that currency will be for the next business day on which both the foreign currency center and the Clearing House are open for business. This applies to GBP, CAD, EUR and USD.

Example: 20 August is a public holiday in the USA, but not in the UK. 21 August is a normal banking day in the USA.

On 20 August, the Clearing House will issue its normal USD instructions to PPS banks, and receive confirmation in response to the PPS call, for value on 21 August.

Please refer to FCM Clearing Member circulars for details of Clearing House opening days and currency holidays at the following link www.lch.com/member_notices/.

(h) UK Bank Holidays

The Clearing House does not give value to any currency on a UK bank holiday, if the Clearing House is closed for business on that bank holiday.

However, the Clearing House may sometimes be open for business on a UK bank holiday and in such circumstances PPS calls will be made as normal that day. Value will be given the same day provided that the relevant currency center is open for business.

(i) Use of UK PPS and US PPS

These FCM Procedures indicate which part of the PPS system will be used in the normal course of events for making PPS calls. Generally, UK PPS will be used for Morning PPS calls (including Contributions to the default fund), remitting surplus cash balances to an FCM Clearing Member, and for making intra-day margin calls up to 16:00 London time. However, FCM Clearing Members should be aware that the Clearing House reserves the right to direct a Morning PPS call or intra-day margin calls before 16:00 London time to an FCM Clearing Member's US PPS account in exceptional circumstances (an "Exceptional PPS Call"). The Clearing House will use all reasonable commercial efforts to notify the FCM Clearing Member in advance of issuing any such Exceptional PPS Call.

(j) Contingency Payment Arrangements

FCM Clearing Members are required to have contingency payment arrangements in place to ensure that they can continue to meet their margin, Variation Settlement, PAA and other obligations in the event of failure of their nominated PPS bank. During the application process, the Clearing House will require the applicant to provide evidence of these arrangements and will test these prior to the applicant becoming an FCM Clearing Member. The FCM Clearing Member will be required to provide evidence of their contingency payment arrangements on an ongoing basis at the Clearing House's request.

(k) Recovery from Insolvent PPS Banks

In the event that payment is not completed by the relevant PPS bank, due to insolvency rather than technical failure, and the affected FCM Clearing Member(s) make alternative payments, should the Clearing House make a recovery from the estate of the PPS bank, it will credit such recovery, net of costs, to the accounts of the affected FCM Clearing Members in proportion to the amount of the original missed payment.

3.3 Acceptable Forms of Cover

The Clearing House accepts certain types of securities and cash in the Clearing House's prescribed form as Collateral against liabilities of the relevant FCM Clearing Member.

Please refer to the following link for further details:

http://www.lch.com/risk management/ltd/acceptable collateral.asp

The Clearing House may vary, at its discretion, the standard requirements and valuation procedures set out in this Section, either generally or in a particular case, without giving prior written notice to FCM Clearing Members. Further, the Clearing

House may vary the types of collateral acceptable to it as Collateral, including but not limited to cash, performance bonds or securities.

3.3.1 *Cash*

In order not to fall within the scope of deposit-taking regulations applying to banks and similar institutions, the Clearing House can accept cash from FCM Clearing Members only in relation to current or anticipated obligations.

Cash cover need not be provided in the same currency as that of the liability. In such cases, currencies will be notionally converted with reference to quoted exchange rates determined at approximately 16:45 London time the previous business day.

FCM Clearing Members must give LCH Limited Treasury Operations no less than two business days' notice of their intention to request withdrawal of cash Collateral and its replacement by the lodgment of non-cash Collateral or the replacement of one currency for another. Where an FCM Clearing Member fails to give such notice, the Clearing House may decline to release such cash Collateral until the end of the required notice period. This paragraph applies only to the Proprietary Account of an FCM Clearing Member.

3.3.2 **Securities**

Please refer to the following pages on our website for both prevailing haircuts and notes on types of collateral acceptable to the Clearing House as Collateral:

http://www.lch.com/risk_management/ltd/acceptable_collateral.asp

3.3.3 Securities Value Notification

FCM Clearing Members may obtain details on the Margin value of securities on their account by viewing the relevant reports available on the Member Reporting Website.

3.3.4 Investment of FCM Client Funds

Pursuant to the application of FCM Regulation 7(n)(ii)(A), the investment of cash Collateral held on behalf of FCM Clients by the Clearing House in respect of clearing Swaps Products and Futures Products ("Swaps and Futures Cash Collateral") is limited to investment in U.S. Treasury securities (through outright purchases, repurchase or reverse repurchase transactions) and in Euro-denominated sovereign debt issued by the French Republic or the Federal Republic of Germany (through repurchase or reverse repurchase transactions), in each case, as permitted by and in accordance with Applicable Law.

(a) Each FCM Clearing Member shall instruct the Clearing House, in the form and manner specified by the Clearing House, whether or not to invest Swaps and Futures Cash Collateral that is held on behalf of FCM Clients of such FCM Clearing Member and is denominated in:

- (i) USD, in U.S. Treasury securities; and
- (ii) EUR, in Euro-denominated sovereign debt issued by the French Republic or the Federal Republic of Germany.

If an FCM Clearing Member fails to issue such instruction to the Clearing House in the form and manner specified by the Clearing House, then the FCM Clearing Member will be deemed to have instructed the Clearing House to invest all such Swaps and Futures Cash Collateral of such FCM Clearing Member in accordance with FCM Regulation 7(n) and this provision.

The Clearing House shall be entitled to charge a cash management fee to an FCM Clearing Member that instructs the Clearing House not to invest its Swaps and Futures Cash Collateral in accordance with FCM Regulation 7(n) and this provision, which cash management fee shall apply to the FCM Clearing Member's USD-denominated and Euro-denominated Swaps and Futures Cash Collateral. The Clearing House shall notify FCM Clearing Members of the details of such cash management fee via member circular.

(b) The Clearing House shall not invest Swaps and Futures Cash Collateral that is denominated in currencies other than USD and EUR and will hold such Swaps and Futures Cash Collateral in bank accounts maintained by the Clearing House. The Clearing House shall not charge a cash management fee to FCM Clearing Members, in respect of such Swaps and Futures Cash Collateral.

3.4 **Distribution of Collateral**

The following procedures are not in any way intended to restrict, vary, or alter the Clearing House's rights to apply Collateral held (including any described in LCH Limited reports/records as "unutilized" or "excess") to meet the FCM Clearing Member's liabilities/obligations to LCH Limited.

3.4.1 *Collateral Application*

In the absence of an FCM Clearing Member election, the Clearing House will apply an FCM Clearing Member's Collateral (in turn) to each liability in the following order:

- (a) same currency collateral in the same currency as the liability; then
- (b) different currency collateral in the following order:
 - (A) GBP;
 - (B) USD;
 - (C) CHF;
 - (D) EUR;
 - (E) JPY;

- (F) SEK;
- (G) CAD;
- (H) NOK; then
- (I) DKK,
- (c) cash in the same currency as the liability;
- (d) where nominated, cash in a different currency to the liability in the nominated currency preference order (see section 3.4.23.4.2).

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FCM Clearing Members may make the following choices:

- (A) whether to have cash Collateral applied before or after non-cash Collateral;
- (B) whether to apply collateral to liabilities in a different currency; and
- (C) whether to apply cash to liabilities in a different currency.

3.4.2 Cash currency preference

FCM Clearing Members may nominate the sequence of cash Collateral distribution.

In the absence of a nominated sequence of currency preferences, an FCM Clearing Member's liabilities will be covered by cash in the same currency as the liability. This means that a GBP liability will be covered in GBP cash, a EUR liability will be covered in EUR cash and so forth. Any further liabilities in the relevant currency will be covered by cash called via PPS.

FCM Clearing Members may define their own sequence of cash currency utilization for each mnemonic and each account type (i.e. House or Client). The sequence does not have to be on a like for like basis and an FCM Clearing Member may choose any eligible currency to cover its liability (for example, a GBP liability can be covered in EUR cash).

Any changes to an FCM Clearing Member's nominated currency sequence, or a request to excess cash currency balances in a particular currency, should be notified to the Clearing House by providing a minimum of two business days' notice.

3.4.3 Record of cover provided

Charges and interest shall be calculated in accordance with the information published on the website of the Clearing House.

3.4.4 Use of a Defaulter's cover

Post-default the Clearing House is entitled to realize and/or apply a Defaulter's cover in whatever order it deems appropriate.

3.5 Interest, PAA and Accommodation Charge Structure

3.5.1 Cash Balance Interest Rate

The Clearing House applies interest to FCM Clearing Member's cleared cash balances. The following rates are applied:

- (a) LDR London Deposit Rate the rate at which the Clearing House will pay or charge interest on credit cash balances (excluding Contributions). The LDR calculation methodology utilizes published market rates minus a spread. The current spread rates are published on the LCH website at the following link: http://www.lch.com/fees/ltd/custody_services.asp;
- (b) CDR Client Deposit Rate the rate at which the Clearing House will pay or charge interest on credit cash balances on Client financial accounts. The CDR calculation methodology utilizes published market rates minus a spread. The current spread rates are published on the LCH website at the following link: http://www.lch.com/fees/ltd/custody_services.asp; and

For the avoidance of doubt, the Clearing House may apply a different or separate LDR or CDR on FCM Clearing Member's cleared cash balances with respect to each Service. We

(c) Default Fund Rate.

Rates are available from the Member Reporting Website.

The Clearing House reserves the right to alter the basis of calculating each above listed interest rates. Any alteration will be effective on the date notified.

Where the Clearing House provides FCM Clearing Members with at least three days written notice (which may be way of member circular), the Clearing House may increase or decrease the LDR by up to 10bps. The foregoing shall not apply in the event of extreme market conditions, during which the Clearing House may freely and without notice increase or decrease the LDR for up to five consecutive Business Days.

Where the Clearing House provides FCM Clearing Members with two weeks' written notice (which may be way of member circular), the Clearing House may increase or decrease the CDR. In the event of extreme market conditions, the Clearing House may freely and without notice increase or decrease the CDR for up to five consecutive Business Days.

3.5.2 Price Alignment Amount (PAA) Rate

To minimize the impact of daily cash Variation Settlement payments on the pricing of interest rate swaps and inflation swaps, the Clearing House will charge or pay PAA in respect of these instruments.

The calculation of PAA shall use the PAA rates specified as below. The amount of PAA for each currency shall be calculated as:

The Cumulative Variation Settlement in such currency from the previous Business Day's close of business multiplied by:

- (a) The relevant PAA rate in effect for that day; divided by
- (b) 360; or in the case of AUD, CAD, GBP, HKD, JPY, NZD, PLN, SGD and ZAR, 365.

In the case of the currencies marked below with an asterisk, the Clearing House, as provided in FCM Regulation 36(b) (*Alteration of FCM Regulations and the FCM Procedures*), specifies that it will not change the PAA rate without the consent of all SwapClear Clearing Members and applicable FCM Clearing Members holding open contracts in such currencies.

Currency	PAA Rate
USD*	The rate used shall be the Effective Federal Funds rate, the rate published by the Board of Governors of the Federal Reserve System as such rate appears on Reuters page "FEDFUNDS1" or Telerate 120 or on any successor page(s) thereto.
EUR*	The rate used shall be the EONIA rate, the rate published by the European Banking Federation and ACI – The Financial Market Association as such rate appears on Reuters page "EONIA" or Telerate 247 or on any successor page(s) thereto.
GBP*	The rate used shall be the SONIA rate, the rate published by the Bank of England as such rate appears on Reuters page "SONIA" or on any successor page(s) thereto.
JPY*	The rate used shall be the Mutan call rate, the rate published by the Bank of Japan as such rate appears on Reuters page "TONAR" or on any successor page(s) thereto.
CHF*	The rate used shall be the SARON rate, the rate published by SIX Swiss Exchange Ltd. as such rate appears on Reuters page "SARON.S" or any successor page(s) thereto.
AUD	The rate used shall be the "AONIA" rate, the rate published by the Reserve Bank of Australia – as such rate appears on Reuters page "RBA30" or any successor page(s) thereto.
CAD	The rate used shall be the "CORRA" rate, the rate published by the Bank of Canada website – as such rate appears on

Currency	PAA Rate
	Reuters page "CORRA" or any successor page(s) thereto.
DKK	The rate used shall be the "DKKOIS" rate, the rate published by the Danish Central Bank – as such rate appears on Reuters page "DKNA14" or any successor page(s) thereto.
HKD	The rate used shall be the "HONIX" rate, the rate published by the Hong Kong Brokers Association – as such rate appears on Reuters page "HONIX" or any successor page(s) thereto.
NZD	The rate used shall be the "NZIONA" rate, the rate published by the Reserve bank of New Zealand – as such rate appears on Reuters page "RBNZ02" or any successor page(s) thereto.
PLN	The rate used shall be the "POLONIA" rate, the rate published by the National Bank of Poland – as such rate appears on Reuters page "NBPS" or any successor page(s) thereto.
SEK	The rate used shall be the "SIOR" rate, the rate published by the OMX Exchange – as such rate appears on Reuters page "SIOR" or any successor page(s) thereto.
ZAR	The rate used shall be the SFX ZAR OND rate, the rate published by SAFEX JIBAR – as such rate appears on Reuters page "SFXROD" or any successor page(s) thereto.
CZK	The rate used shall be the "CZEONIA" rate, the rate published by the Czech National Bank – as such rate appears on Reuters page "CZEONIA" or any successor page(s) thereto.
HUF	The rate used shall be the "HUFONIA" rate, the rate published by the National Bank of Hungary – as such rate appears on Reuters page "HUFONIA" or any successor page(s) thereto.
SGD	The rate used shall be the "SONAR" rate, the rate published by the Association of Banks in Singapore – as such rate appears on Reuters page "ABSIRFIX01" or any successor page(s) thereto.
NOK	The rate used shall be the NOK sight deposit rate, the rate published by Norges Bank – as such rate appears on Reuters page "NOINTR=ECI" or any successor page(s) thereto

For currency NOK, PAA is calculated using an appropriate overnight deposit rate for the currency.

Notwithstanding the foregoing, in the event the interest rate source used for the calculation of PAA (i) is unavailable (including where such rate ceases, or will cease, to be provided by its administrator), (ii) is not sufficiently robust, (iii) is not fit for purpose or (iv) has materially changed, in each case as

determined in the Clearing House's sole discretion, the Clearing House may use an alternative interest rate without the consent of such SwapClear Clearing Members and/or FCM Clearing Members.

If the Clearing House chooses an alternative interest rate for purposes of calculating Price Alignment Amount pursuant to the immediately foregoing paragraph it shall notify all SwapClear Clearing Members and FCM Clearing Members in writing by delivering a Rate Change Notice.

3.5.3 Interest Structure

Application of Collateral

Type of Collateral

	Securities	Cash	Foreign Cash	Forward Cash
Initial margin after offset	Accommo dation Charge Payable	Pay relevant rate	pay relevant rate of Collateral currency	No charge or payment
Excess or Surplus	No charge or payment	Pay relevant rate	Pay relevant rate	No charge or payment

Note:

- 1 "Foreign Cash" means cash in a currency other than that of the liability.
- 2 "Forward Cash" means cash which has been credited to an account for later value (e.g., an amount called via PPS for next-day value).
- Applicable Accommodation Charges are available on the Clearing House's website.

3.5.4 Payment of Interest and Charges

Interest, PAA and accommodation charges are charged monthly, from the first calendar day to the last calendar day of the current month. Interest and accommodation charges are calculated on a daily basis and the resulting monthly total is posted to FCM Clearing Members' cover accounts for value at close of business on the second business day of the following month. A VAT invoice is also issued on the third business day of each month detailing, PAA the interest and accommodation charges applicable for the previous month. Separate invoices are issued for each currency which can be found on the Member Reporting Website.

VAT is charged where relevant, dependent on contract and accommodation charges, at current rates. On foreign currency amounts VAT is charged in sterling on the converted value of any relevant charges. The sterling Collateral account shows separate postings for sterling VAT amounts arising from foreign currency charges.

The net invoice value for each currency is posted to the relevant Collateral account for value on the second working day of the month succeeding the month in which the charges arose.

The invoice provides detail in respect of:

- (a) interest due to be credited or debited;
- (b) PAA; and
- (c) accommodation charges;

VAT on accommodation charges is subject to the standard rate, some markets may be excluded.

3.6 **Fees**

Details of fees and refunds pending are collated during the month.

An invoice or credit note is produced detailing the fees to be furnished with respect to a Proprietary Account to which Margin is attributed.

The invoice/credit note displays the type of fee, contract, future or options type, currency, fee rate, volume, fee amount, VAT amount, sub totals for each fee class and the overall total Collateral in the relevant account.

Monthly postings are processed via the relevant account to which Collateral is posted at the beginning of the following month, on the third working day. Other postings, such as various Market Maker Scheme rebates, are processed by the Clearing House following receipt of data from the relevant Exchange.

3.7 **SwapClear Contributions**

SwapClear Contributions will be called via PPS on the fourth Business Day of each month or otherwise pursuant to a determination of a SwapClear Contribution under the Default Rules.

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

Interest on SwapClear Contributions will be paid to FCM 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 "SwapClear Reset Day") and ends on (and includes) the calendar day immediately before the next SwapClear Reset Day. Notwithstanding anything else herein, if the rate of interest payable on SwapClear Contributions is negative, interest shall be payable by FCM Clearing Members to the Clearing House.

3.8 Quantifying SwapClear Contributions

For the purposes of calculating the SwapClear Non-Tolerance Weight of an FCM Clearing Member under Rule S1(f) of the Rates Service Default Fund Supplement,

the Uncovered Stress Loss (as defined in Rule S1(f)) of an FCM Clearing Member shall be determined by reference to the FCM SwapClear Contracts entered into (1) on behalf the relevant FCM Clearing and (2) with respect to the FCM Clients of such FCM Clearing Member.

3.9 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 FCM ForexClear Clearing Members following a ForexClear Determination Date will (subject to the Default Rules) be repaid to FCM ForexClear Clearing Members' PPS accounts on the fourth Business Day immediately following such ForexClear Determination Date.

Interest on ForexClear Contributions will be paid to FCM 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 anything else herein, if the rate of interest payable on ForexClear Contributions is negative, interest shall be payable by FCM ForexClear Clearing Members to the Clearing House.

3.10 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 Clearing Clients and FCM Clients of such FXCCM.

3.11 Listed Interest Rates Contributions

Listed Interest Rates Contributions will be called via PPS on the fourth Business Day of each month or otherwise pursuant to a determination of a Listed Interest Rates Contribution under the Default Rules.

Excess Listed Interest Rates Contribution amounts due to FCM Listed Interest Rates Clearing Members following a Listed Interest Rates Determination Date will (subject to the Default Rules) be repaid to FCM Listed Interest Rates Clearing Members' PPS accounts on the fourth Business Day immediately following such Listed Interest Rates Determination Date.

Interest on Listed Interest Rates Contributions will be paid to FCM Listed Interest Rates 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

"Listed Interest Rates Reset Day") and ends on (and includes) the calendar day immediately before the next Listed Interest Rates Reset Day. Notwithstanding anything else herein, if the rate of interest payable on Listed Interest Rates Contributions is negative, interest shall be payable by FCM Listed Interest Rates Clearing Members to the Clearing House.

3.12 Clearing House Reporting

The Clearing House (acting, where applicable, through the entity to which it has elected to delegate the relevant reporting obligation) shall report to one or more data or trade repository or similar body (including a swap data repository) the details of an FCM Contract and any modification or termination of such FCM Contract without duplication and no later than the working day following the conclusion, modification or termination of such FCM Contract, in line with the requirements of Applicable Law. In order to avoid any such duplication of reports, each FCM Clearing Member acknowledges and agrees that it will not report the details referred to in this paragraph to the bodies referred to in this paragraph, unless otherwise agreed with the Clearing House.

SCHEDULE 3A BANK PARTICIPANTS IN THE LONDON PROTECTED PAYMENTS SYSTEM

Bank of America, N.A.

Barclays Bank Plc

JP Morgan Chase Bank

Citibank NA

Deutsche Bank AG

HSBC Bank Plc

Lloyds TSB Bank Plc

National Westminster Bank Plc

The Royal Bank of Scotland plc

Skandinaviska Enskilda Banken AB

For more information on PPS banks please contact the Clearing House's Treasury Operations.

SCHEDULE 3B BANK PARTICIPANTS IN THE LONDON PROTECTED PAYMENTS SYSTEM

Name of Relationship Manager:	
Contact Details (telephone & email):	
Name of Bank:	
Address:	
LCH Limited MNEMONIC(S):	

LCH LIMITED

I/We authorize you, until further notice in writing, to debit my/our account(s) with unspecified amounts from time to time at the instance of LCH Limited without further reference to me/us.

In acting on this Mandate, you may rely, without qualification, upon the information provided to you by LCH Limited in whatsoever form this information is submitted to you.

	HOUSE A	CCOUNT		CLIENT AC	CCOUNT
Тіск√	CURRENCY AUD	ACCOUNT NUMBER	Тіск √	CURRENCY AUD	ACCOUNT NUMBER
	CAD			CAD	
	CHF			CHF	
	CZK			CZK	
	DKK			DKK	
	EUR			EUR	
	GBP			GBP	
	HKD			HKD	
	HUF			HUF	
	ISK			ISK	

HOUSE A	ACCOUNT		CLIENT AC	CCOUNT	
Tick√ Currency JPY	ACCOUNT NUMBER	Тіск√	CURRENCY JPY	ACCOUNT NUMBER	
NOK			NOK		
NZD			NZD		
PLN			PLN		
SEK			SEK		
USD			USD		
ZAR			ZAR		
For and on behalf of:					
Name of FCM Clearing Member:					
Signature of Director:					••••
Print Name:		Date			

When completed and signed, this form should be sent to your Relationship Manager at the above-mentioned Bank and a copy issued to: Treasury Operations, LCH Limited, 3rd Floor, Aldgate House, 33 Aldgate High Street, London EC3N 1EA. Email: lchoperations-treasury@lch.com Telephone: 020 7426 7505 Fax: 020 7426 7037.

SCHEDULE 3C BANK PARTICIPANTS IN THE US PROTECTED PAYMENTS SYSTEM

(In New York unless stated otherwise)

Bank of America, N.A.

J P Morgan Chase (New York or London)

Citibank NA

HSBC Bank USA

The Bank of New York

Harris Trust and Savings Bank (Chicago)

For more information on US PPS banks please contact the Clearing House's Treasury Operations at +44 (0)20 7426 7505.

SCHEDULE 3D MANDATE FOR LCH LIMITED: CLEARING OPERATIONS

Name of Relationship	Manager:			
Contact Details (telep	ohone & email):			
Name of Bank:				
Address:				
LCH Limited MNEM	MONIC(S):			
unspecified amounts reference to me/us.	from time to time	at the inst	ance of Lo	oit my/our account(s) with CH Limited without further
_	date, you may rely, w ed in whatsoever form	-	-	pon the information provided abmitted to you.
House A	ACCOUNT		C	CLIENT ACCOUNT
CURRENCY ACUSD	CCOUNT NUMBER	C	URRENCY	ACCOUNT NUMBER
USD			USD	
			•	n this information in making have no liability to the extent
For and on behalf of:				
Name of FCM Clearing Member:				
Signature of Director:				

Notes:

A separate Mandate must be completed and delivered to LCH Limited for each different PPS bank.

Twenty days' notice must be given to LCH Limited in writing in respect of any change of bank account name or bank account number and a fresh Mandate provided.

When completed and signed, this form should be sent to your Relationship Manager at the above-mentioned Bank and a copy issued to: Treasury Operations, LCH Limited, 3rd Floor, Aldgate House, 33 Aldgate High Street, London EC3N 1EA; E-mail: lchoperations-treasury@lch.com; Telephone: 020 7426 7505; Fax: 020 7426 7037.

4. **COLLATERAL**

4.1 General Information

4.1.1 Non-Cash Collateral

FCM Clearing Members wishing to lodge securities (of the type permitted by the Clearing House) with the Clearing House as Collateral may do so. Securities lodged will be subject to a security interest and held in an account with the Clearing House by the FCM Clearing Member (in respect of Collateral furnished on behalf of FCM Clients, the Clearing House shall hold such securities in the applicable LCH Client Segregated Depository Account).

Collateral provided in respect of an FCM Clearing Member's Client account will not be applied by the Clearing House to its liabilities on a house account (see FCM Regulation 14(j) (Margin and Collateral)).

FCM Clearing Members are warned that the transfer of Collateral and the grant of a security interest are complex legal matters. The FCM Rulebook and any communication with the Clearing House (whether of an oral or written nature) are not to be taken as legal or other advice. An FCM Clearing Member should seek its own independent professional advice.

4.1.2 General Information

LCH Security Arrangements

FCM Clearing Members wishing to lodge securities with the Clearing House may do so under the security arrangements set out in the FCM Clearing Membership Agreement and the FCM Regulations.

Collateral provided in respect of an FCM Clearing Member's Client account will not be applied by the Clearing House to its liabilities on a House account (see FCM Regulation 14(j) (Margin and Collateral)).

Unless stated otherwise in the FCM Rulebook, Collateral provided in respect of an FCM Clearing Member's House account may be applied by the FCM Clearing House towards the payment of any sum whatsoever due by the FCM Clearing Member to the Clearing House, **provided**, **that** no Collateral furnished in respect of an FCM Clearing Member's Client accounts shall be applied on or towards payment or satisfaction of any of the FCM Clearing Member's liabilities to the Clearing House on any of the FCM Clearing Member's House accounts.

As set out in FCM Regulation 14(c) (*Margin and Collateral*), where an FCM Clearing Member wishes to furnish Collateral on behalf of an FCM Client to the Clearing House, the FCM Clearing Member must, *inter alia*, ensure that at all times it remains expressly agreed with the FCM Client that the FCM Clearing Member may provide the Collateral to the Clearing House, on the Clearing House's terms and free of the FCM Client's interest to secure the FCM Clearing Member's obligations to the Clearing House. The Clearing

House gives no undertaking that, on the Default of an FCM Clearing Member, it will not utilize Collateral furnished on behalf of an FCM Client which has been passed to it by an FCM Clearing Member, before utilizing any other form of Collateral the Clearing House may hold.

4.1.3 Additional General Information

The Clearing House is, at its sole discretion, entitled to determine what will be acceptable to it as Collateral and to determine when a security will cease to be acceptable as Collateral.

If any cash, instrument or security lodged in accordance with any of the following FCM Procedures is in any way found to be unacceptable, it will immediately be given a zero value in the FCM Clearing Member's relevant account with the Clearing House. Replacement Collateral may be required immediately from the FCM Clearing Member.

4.1.4 *Instructions*

The Clearing House accepts instructions to lodge, release and transfer cash and securities via the CMS and/or any other operational process the Clearing House determines. If there is an outage of the CMS, an FCM Clearing Member may send certain instructions using the appropriate form in the Schedules of these FCM Procedures by fax and email to:

- (a) Email to collateral.ops.uk@lch.com
- (b) Fax: + 44 (0)20 7375 3518

Collateral Operations can be contacted on +44 (0)207 426 7593.

The Clearing House is entitled to act upon CMS instructions or communications appearing to have been issued by or on behalf of, or to have come from, an FCM Clearing Member. These will be accepted by the Clearing House as genuine, even if, for example, they are later found:

- (a) to be inaccurate, whether in whole or in part; or
- (b) not to have been given by the FCM Clearing Member or with the authority of the Clearing Member.

The Clearing House will only accept delivery of securities Collateral from an FCM Clearing Member in accordance with these FCM Procedures and will not sell or purchase cash or securities Collateral for FCM Clearing Members, except in so far as it is acting under its Default Rules and related provisions of the FCM Rulebook or in relation to Exchange Rules.

The Clearing House reserves the right to change the information required on instructions received via the CMS, whenever the Clearing House, at its sole discretion, considers that it would be appropriate to do so.

4.1.5 Excess Margin Maintained in Proprietary Accounts

In accordance with FCM Regulation 14(bb) (Margin and Collateral), FCM Clearing Members are permitted to maintain Excess Margin in their Proprietary Accounts (regardless of whether any such FCM Clearing Member has elected to have one or more of its FCM Omnibus Swaps Client Accounts with LCH subject to the With Excess Client Model), but subject to the right of the Clearing House, in its sole discretion, to return such Excess Margin to the FCM Clearing Member. Alternatively, the Clearing House may notify that FCM Clearing Member of the intention to levy a charge in respect of Excess Margin with effect from such date as is notified to the FCM Clearing Member. In the event that the FCM Clearing Member does not remove Excess Margin before the date so notified, the Clearing House may, in its discretion, charge the FCM Clearing Member at the rate of 1 basis point per day until Excess Margin is removed by the FCM Clearing Member. Payment of this charge shall be collected on a monthly basis through that FCM Clearing Member's PPS sterling account. This charge applies only to Margin lodged with respect to FCM Contracts registered to the FCM Clearing Member's Proprietary Account.

The Clearing House shall have absolute discretion to decide whether and to what extent it is holding Excess Margin at any time.

The ability of FCM Clearing Members to maintain Excess Margin in its FCM Omnibus Futures Client Accounts with LCH is governed by the provisions of the FCM Rulebook, including FCM Regulation 14(aa)(ii) (Margin and Collateral).

The ability of FCM Clearing Members to maintain Excess Margin in its FCM Client Sub-Accounts is governed by the provisions of the FCM Rulebook, including FCM Regulation 15 (*Margining of Swap Product Client Accounts*).

4.1.6 Return and Provision of Cash Excess Margin

Requests for the return of USD cash Excess Margin must be received by the Clearing House before 09:30 hours (New York time) on a U.S. Business Day. In respect of any such request received by the Clearing House after 09:30 hours (New York time) on a U.S. Business Day, the Clearing House shall have sole discretion as to whether or not to return the relevant USD cash Excess Margin to the requesting FCM Clearing Member except with the consent of the Clearing House. Additionally, if the Clearing House does not repay the relevant excess USD cash requested by an FCM Clearing Member after 09:30 hours (New York time) on a U.S. Business Day, such request shall be deemed void.

The Clearing House will not accept deposits of USD cash Collateral as Excess Margin on any date that is not a U.S. Business Day or at any time after 14:00 hours (New York time) on a U.S. Business Day.

4.1.7 Lodgment of Collateral as Replacement for Cash Cover for Margin

This Section 4.1.7 applies only to Proprietary Accounts of FCM Clearing Members. FCM Clearing Members should note that they must give Collateral Operations no less than two (2) Business Days' notice of their intention to lodge Collateral with a value of £50 million sterling or more, and which is reasonably likely to have the effect that cash to a similar value is repayable by the Clearing House to that FCM Clearing Member as a result of such lodgment. In the event that an FCM Clearing Member seeks to withdraw such cash Collateral without giving such notice, the Clearing House will decline to release such cash Collateral until the end of the required notice period. The Clearing House may extend the required notice or vary the minimum Collateral value by written notice to FCM Clearing Members.

4.1.8 Force Majeure

The Clearing House will not be liable for any failure, hindrance or delay in the performance (in whole or in part) of any of its obligations to FCM Clearing Members with regard to Collateral where such failure, hindrance or delay arises from causes beyond the control of the Clearing House, such as (but not limited to) the failure (whether partial or total), interruption or suspension of any Depository that the Clearing House is using, the termination or suspension of the Clearing House's membership or use of any Depository or any variation of a Depository's operational timetable, whether or not occasioned by action of the Depository operator or any other party, any embargo, unavailability or restriction of bank transfer systems or wires, malfunction or overload of the Depository, or any other emergency. This provision is without prejudice to the force majeure provisions of FCM Clearing Members' agreements with the Clearing House.

4.1.9 Regulatory and Supervisory Information

In every case, the Clearing House will be entitled to supply a Depository with all the information it requires for any purposes relating to an FCM Clearing Member or relating to Collateral received by the Clearing House from an FCM Clearing Member which is, or may at any time have been, held by the Depository. Securities Collateral will be lodged and held within such Depository as the Clearing House may select or allow, subject to the conditions of such Depository and to any Applicable Law and subordinate rules relating thereto, as well as to the terms of the FCM Rulebook and these FCM Procedures.

4.1.10 *Coupons*

The Clearing House will record coupons that arise in respect of non-cash Collateral of an FCM Clearing Member, taking into account any withheld tax, ("Coupons") to such FCM Clearing Member's relevant FCM Omnibus Swaps Client Account with LCH, FCM Omnibus Futures Client Account with LCH or Proprietary Account and to the non-cover ledger within such account (see Section 3.1.3(a)(i) of these FCM Procedures) on the appropriate payment date, and such Coupons will be cash Collateral.

The Clearing House will promptly on or after the appropriate payment date take such steps as are necessary to transfer Coupons to the relevant FCM Clearing Member (except Coupons which are automatically transferred to such FCM Clearing Member by operation of a triparty transaction), provided that the Clearing House shall only be obliged to take such steps pursuant to this Section 4.1.10:

- (a) to the extent that they constitute Excess Margin;
- (b) if the FCM Clearing Member is not a Defaulter;
- (c) to the extent the Clearing House is permitted to take such steps and make such transfer under Applicable Law and the contractual provisions of any relevant Depository;
- (d) if the Clearing House considers it is not necessary or desirable to retain such Coupons in order to effect (or seek to effect) a transfer of FCM Contracts and Collateral from an account of an FCM Clearing Member to another account of an FCM Clearing Member or Non-FCM Clearing Member in accordance with the FCM Rulebook, the FCM Procedures, the UK General Regulations and/or UK General Procedures; and
- (e) if there is no overnight margin and/or cash call (including an EOD Margin Run call) in respect of the relevant FCM Clearing Member which remains outstanding.

4.1.11 Record Date

The Clearing House may restrict the lodgement, release and/or transfer of non-cash Collateral on a record date for the payment of a Coupon applicable to such non-cash Collateral where the Clearing House considers this necessary in order to correctly pay such Coupon to the relevant FCM Clearing Member on the Coupon payment date.

4.2 **Securities**

4.2.1 General Information

Securities must be lodged in the Clearing House's relevant settlement accounts (see Schedule 4DSchedule 4D).

4.2.2 Settlement procedures – Securities

All transactions to deposit or withdraw securities Collateral with or from the Clearing House will be executed free of payment.

4.3 Instructions via the CMS

The Clearing House will action instructions relating to Collateral that have been input and authorized via the CMS in accordance with, and subject to, this Section 4 of the FCM Procedures. The details input on the CMS will form the basis of the matching

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instruction sent to the relevant Depository. FCM Clearing Members must ensure that the details are input correctly in order to avoid unmatched transactions

It is the responsibility of the FCM Clearing Member to input a cancellation request of any incorrectly input instruction and to subsequently input the correct details in a new instruction. Please note that it may not be possible to cancel an instruction (please refer to Section 4.4.7 below for further details).

The Clearing House will update the status of the instruction in the CMS to reflect the status of the corresponding instruction at the relevant Depository. On settlement of the transaction at the relevant Depository, the Clearing House will reflect the balance of the securities on the relevant account of the FCM Clearing Member and take them into account for the purposes of calculating the value of the FCM Clearing Member's Margin.

The relevant account details that an FCM Clearing Member should use for matching transactions at a Depository are located at https://www.lch.com/documents/731485/762486/lch-custodian-settlement-accounts-for-margin-collateral-ltd-2809.pdf/6857526e-1d18-4b86-9e4a-bc1b7e2a4234.

The Clearing House will not be liable for any losses to FCM Clearing Members or third parties caused by non-settlement or by a delay in settlement as a result of the actions or omissions of a Depository or the FCM Clearing Member (save for any liability which may not be excluded by Applicable Law).

4.4 Settlement Procedures – Securities

All transactions to transfer securities Collateral to or from the Clearing House will be executed free of payment.

4.4.1 Instruction Deadlines

FCM Clearing Members may input security instructions via the CMS at any time. Instructions will only be actioned by the Clearing House during operational hours.

Collateral Operations' operational hours are Monday to Friday 07:00 to 21:00 UK time.

Instruction deadlines for same day settlement:

Depository	Deadline for instructions		
Euroclear UK/IE (CREST)	14:00 (UK time)		
Euroclear internal	17:00 (UK time)		
Citi and BNYMellon	19:00 (UK time)		
Austraclear	15:30 (AEST)		

The Clearing House will (subject to Section 4.1.11) input matching instructions to the relevant Depository for same day settlement when the instructions are received prior to the deadlines above.

4.4.2 Deliveries to and from Local Markets

The Clearing House is bound by the settlement deadlines of the relevant Depository. FCM Clearing Members should refer to the relevant Depository for these deadlines. Note that for transactions from local markets the settlement deadline may be earlier than the Clearing House hours of operation and should therefore be instructed the day before the settlement date (*i.e.* on S-1). Instructions to the Clearing House must be provided at least one hour before the market deadline for same day settlement.

For example:

Deliveries from Local Market	Depository Deadline (UK time)	Deadline to Clearing House (UK time)	
Japan	07:55	17:00 on S-1	
Belgium	14:50	13:50 on S	
Italy	15:00	14:00 on S	

4.4.3 Transfer of Securities Collateral from an FCM Clearing Member to the Clearing House

Instructions for the transfer of securities from a Clearing Member to the Clearing House that are input via the CMS prior to the deadlines above for same day settlement will (subject to Section 4.1.11) be actioned and settled transactions will be taken into account for the purposes of calculating the value of the FCM Clearing Member's Margin.

Transfer instructions for future settlement dates will (subject to Section 4.1.11) be instructed same day if received prior to the deadlines. Instructions received after the deadlines will (subject to Section 4.1.11) be instructed the following day.

4.4.4 Transfer of Securities Collateral from the Clearing House to an FCM Clearing Member

(a) Release where Sufficient Cover is Available

Instructions to release existing securities Collateral of an FCM Clearing Member that are input via the CMS prior to the deadlines above for same day settlement will (subject to Section 4.1.11) be actioned and the securities Collateral specified in those instructions will (subject to Section 4.1.11) no longer be included when calculating

the value of the FCM Clearing Member's Margin on confirmation of those instructions by the Clearing House.

(b) Release where Sufficient Cover is Unavailable

Instructions to release existing securities Collateral of an FCM Clearing Member must be input via the CMS before 09:30 UK time. The FCM Clearing Member will then be requested to transfer additional cash Collateral. Following confirmation of the transfer of such cash Collateral, the settlement instruction will (subject to Section 4.1.11) be sent to the Depository by the Clearing House and the securities Collateral specified in those instructions will (subject to Section 4.1.11) no longer be included when calculating the value of the FCM Clearing Member's Margin.

4.4.5 **Substitutions**

Substitution instructions may be input via the CMS and will (subject to Section 4.1.11) confirmation of those instructions by the Clearing House, be carried out on the same day if input prior to the deadlines above.

FCM Clearing Members must first input the relevant lodge instruction(s) and then link the associated release instruction(s) to the lodge instruction(s).

4.4.6 *Transfers*

Transfer instructions may be input via the CMS and will (subject to Section 4.1.11) be carried out same day during operational hours.

Note: transfers are only permitted between mnemonics of the same FCM Clearing Member and are subject to client segregation rules.

4.4.7 **Settlement Cancellations**

FCM Clearing Members may request the cancellation of an instruction via the CMS. The Clearing House will cancel any instruction that has not yet been processed. The Clearing House will seek, using its best efforts, to cancel any settlement instructions already sent to the relevant Depository, but cannot guarantee that the transaction will not settle.

4.4.8 Instruction Status

The status of an instruction can be monitored via the CMS. Statuses reflect the status of the instruction at the Clearing House and not at the relevant Depository. Please refer to the CMS user guide for status definitions.

4.5 Triparty Service with Euroclear and Clearstream

4.5.1 General Information

In order for an FCM Clearing Member to transfer securities to the Clearing House using a triparty arrangement, such FCM Clearing Member, the relevant

triparty agent and the Clearing House must have completed and signed the relevant documentation. Please contact the Clearing House on +44 (0)207 426 7237 for more information.

FCM Clearing Members may execute a triparty transaction to cover Initial Margin requirements at the Clearing House. Triparty instructions must be provided to the Clearing House via the CMS. Instructions may be input for future settlement dates.

If an FCM Clearing Member is unable to make triparty instructions via the CMS, it will be possible to instruct using the relevant triparty contingency forms found in the Schedules of these FCM Procedures.

Triparty transactions must be a minimum of one million GBP, EUR or USD.

Note: In these procedures, "S" refers to the settlement day, "S-1" to the working day before settlement day.

4.5.2 Lodgment and Increase Procedure

Last instruction deadline to the Clearing House for (UK Time):			
	Euroclear Bank	Clearstream	
Same day settlement	17.00	18.00	
Next day settlement	17.00 (S-1)	18.00 (S-1)	

4.5.3 **Decrease and Closing Procedure**

Last instruction deadline to the Clearing House for (UK Time):			
	Euroclear Bank	Clearstream	
Same day settlement	17.00	18.00	
Next day settlement	17.00 (S-1)	18.00 (S-1)	

Sufficient Collateral

Where the Clearing House determines that the FCM Clearing Member has sufficient Collateral available, closure of a triparty transaction or the decrease of the transaction amount of a triparty transaction will be processed on the same day and the resulting reduction of Collateral will be taken into account

for the purposes of calculating the value of the FCM Clearing Member's Margin.

Insufficient Collateral

Where the FCM Clearing Member has insufficient Collateral to close a triparty transaction or to decrease the transaction amount of a triparty transaction, the Clearing Member's Margin will be deemed to be decreased overnight and, the following morning, the Clearing House will only close the triparty transaction or decrease the transaction amount of the triparty transaction after 09.00 (UK time) when any PPS cash calls have been confirmed.

Triparty Deficits

In the event that the Clearing House determines that a shortfall exists under a triparty arrangement, whether because of a decrease in the value of securities furnished or otherwise, and such shortfall has not been made good by the inclusion of additional securities, the Clearing House shall be entitled to make one or more PPS cash calls in respect of such shortfall. Cash calls in relation to shortfalls will be called in accordance with Section 3.2 of these FCM Procedures. Such cash shall either be credited to the FCM Clearing Member upon the FCM Clearing Member making good the deficit pursuant to the triparty arrangement or retained as Collateral if the FCM Clearing Member does not make good the deficit.

4.6 Withholding Taxes

4.6.1 US Withholding Taxes

For tax reasons, the Clearing House is required to segregate foreign (i.e., non-US) owners' securities from US owners' securities. FCM Clearing Members must deliver securities to the correct account. The Clearing House operates accounts with Citibank N.A. and Bank of New York Mellon.

In order to reduce or to eliminate US withholding tax, the correct tax documentation must have been provided in respect of each owner. To this end, FCM Clearing Members will be expected to provide one of the forms noted below to the Clearing House. A current form will be required for each FCM Clearing Member.

The relevant forms will normally be one of:

- (a) "W-9 (Request for Taxpayer Identification Number and Certification)", which applies to a US corporation including a foreign branch of a US corporation and is valid indefinitely; or
- (b) "W-8BEN (Certificate of Foreign Status)", which applies to non-resident alien individuals, foreign corporations, partnerships and estates and is valid for three calendar years.

FCM Clearing Members may obtain originals of forms W-8BEN and W-9 from Collateral Operations.

Note: The Clearing House's arrangements with its Depositories only allow for securities holdings of US corporations or foreign (i.e., non-US) entities or individuals. FCM Clearing Members who wish to discuss the possibility of lodging securities belonging to owners excluded from this arrangement should contact Collateral Operations.

Unless the Clearing House has already received the appropriate tax form, lodgments into A/c numbers 735136, 735138, 206203 and 090401 must be accompanied by form W-9.

Unless the Clearing House has already received the appropriate tax form, lodgments into A/c numbers 735137, 735139, 207887 and 090372 must be accompanied by form W-8.

The Clearing House's acceptance of US securities does not indicate any responsibility for the adequacy or otherwise of tax documentation. Any queries in relation to these tax forms should be referred to your company accountant or professional advisers.

Completed tax forms should be returned to Collateral Operations for onward transmission to the relevant Depository.

4.6.2 Italian Securities

For tax purposes the Clearing House operates an account with Euroclear Bank specifically for deliveries of Italian securities – account 91737.

This account is operated by the Clearing House in accordance with "Euroclear Procedures to Obtain Exemption from Italian Withholding Tax on Italian Domestic Debt Securities".

Beneficial owners are entitled to exemption at source from Italian Withholding Tax on Italian securities if they are:

- (a) resident in a country that has entered into a double taxation agreement with Italy (except black list countries/countries that do not have a tax treaty with Italy); or
- (b) a corporation resident in Italy; or
- (c) a supranational organization recognized by Italian Law.

Beneficial owners are required to supply duly completed and executed official forms as proof of eligibility to the exemption and where applicable supply additional documentation, before a delivery can be made into this account.

Official forms are available on request from Collateral Operations.

Original forms are to be received by the Clearing House before Italian securities can be accepted within the gross account 91737.

The effective date depends on the type and terms of the security:

Coupon Debt securities (BTPs, CCTs and CTOs)

The new regime applies to Coupons that arise on these securities on or after 1 January 1997, regardless of the issue date.

Zero Coupon debt securities with a maturity of less than one year (BOTs)

The regime applies to all securities issued on or after 1 January 1997.

Clearing Members should consult their own tax advisers before lodging Collateral with the Clearing House or submitting any tax documentation.

4.6.3 Withholding tax – Depositories

A Depository may offer a recovery service for overseas taxes on government bonds. The Clearing House will assist in the recovery process and remit to FCM Clearing Members any relevant recovery in withholding tax credited to the Clearing House's account by the relevant Depository.

In certain cases, the Clearing House or the relevant Depository will withhold tax on a Coupon if the correct documentation is not lodged with the Clearing House or such Depository.

4.7 **References**

These FCM Procedures should be read in conjunction with the relevant contractual provisions, user guides and/or manuals of the relevant Depository. Please also refer to each relevant Depository for the relevant settlement deadlines in particular those for deliveries from local markets to Clearing House accounts.

4.8 **Contingency Arrangements**

In the event of an outage of the CMS, the Clearing House will notify FCM Clearing Members via member circular and FCM Clearing Members may send certain instructions, using the appropriate form in the Schedules of these FCM Procedures, to the Clearing House by fax and email (see Section 4.1.4 of these FCM Procedures).

Normal service hours and deadlines will apply to such instructions.

The Clearing House will notify FCM Clearing Members via a member circular when the CMS is available again.

4.9 Treatment of Unallocated Excess and Return of FCM Buffer

4.9.1 Return and Reapplication of Unallocated Excess and Return of FCM Buffer

Upon the request of an FCM Clearing Member, the form of which shall be prescribed by the Clearing House from time to time, the Clearing House shall return all or a portion of such FCM Clearing Member's available Unallocated Excess or FCM Buffer (as requested) to such FCM Clearing Member; provided, that (i) FCM Clearing Members are not entitled to request the return of Encumbered FCM Buffer, (ii) the Clearing House shall not be required to return FCM Buffer if the FCM Clearing Member is a Defaulter, and (iii) the return of non-cash Collateral is subject to the restriction under The FCM Clearing Member's request must contain the Section 4.1.11. specific details of the amount of Collateral requested and whether such FCM Clearing Member is requesting the return of FCM Buffer or Unallocated Excess, and any other information reasonably requested by the Clearing House. The end of day report delivered to the FCM Clearing Member by the Clearing House shall constitute conclusive evidence of the amount of any FCM Buffer or Unallocated Excess returned to such FCM Clearing Member during that day, unless the Clearing House determines such report contained an error and subsequently delivers an amended report or other notice to the FCM Clearing Member in respect of such amounts.

FCM Regulation 15 (*Margining of Swap Product Client Accounts*) contains additional provisions relating to FCM Buffer, Encumbered FCM Buffer and Unallocated Excess.

Upon request from an FCM Clearing Member, the form of which shall be prescribed by the Clearing House from time to time, the Clearing House will apply Margin attributable to (A) an FCM Clearing Member's Unallocated Excess Sub-Account and/or (B) all of an FCM Clearing Member's FCM Client Sub-Accounts to its FCM Buffer Sub-Account. In requesting such transfer, the FCM Clearing Member shall be deemed to represent and warrant that such reapplication of Margin: (1) is in accordance with applicable law and regulation; and (2) has been requested by an individual that is appropriately authorized to make the request. Any request from an FCM Clearing Member to reapply Margin must: (i) in the case of a request for reapplication pursuant to sub-clause (A) above, contain the specific details of the amount of Margin to be reapplied; (ii) only request the reapplication where such reapplication reflects the true characterization of the Margin held by the Clearing House (in particular, the reapplication of Margin pursuant to this paragraph should only be requested where the relevant Margin is the property of the FCM Clearing Member); (iii) in the case of a request for reapplication of Margin pursuant to sub-clause (B) above, request the reapplication of Margin attributed to all of the relevant FCM Clearing Member's FCM Client Sub-Accounts since the start of that given Business Day; and (iv) include such other information that the Clearing House may require. The reapplication of Margin shall be effected by the Clearing House in its sole and absolute discretion and in accordance with predefined parameters, and shall become effective from such time that the reapplication is reflected in the Clearing House's books and records.

4.9.2 Use of FCM Buffer as Variation Settlement

Notwithstanding anything to the contrary herein, an FCM Clearing Member may elect to have Eligible FCM Buffer that the Clearing House holds at the

end of each Business Day applied to its obligation to pay USD denominated Settlement Payment obligations only with respect to its C account. In the event of such election in accordance with this Section 4.9.2, the Clearing House may apply on each Business Day the full amount of Eligible FCM Buffer to the relevant FCM Clearing Member's obligation to pay such amounts. Any Settlement Payment that remains owing following such application shall remain payable by the FCM Clearing Member in accordance with the FCM Rulebook. Upon the application by the Clearing Member of Eligible FCM Buffer in accordance with this Section 4.9.2, the relevant FCM Clearing Member shall be deemed to acknowledge that Eligible FCM Buffer so applied by the Clearing House no longer constitutes FCM Buffer and the Clearing House shall be deemed to acknowledge that any USD denominated Settlement Payment due to it with respect to the relevant FCM Clearing Member's C account shall be deemed to be reduced by an amount equal to Eligible FCM Buffer so applied.

An FCM Clearing Member that wishes to make an election to have Eligible FCM Buffer applied in accordance with this Section 4.9.2 or to cancel a previous election to do so should contact the Clearing House's Client Services team (ratesclientservices@lch.com) and provide any other information reasonably requested by the Clearing House. Elections and cancellations in accordance with this Section 4.9.2 become effective upon the FCM Clearing Member receiving confirmation in writing of the election or cancellation from the Clearing House. Elections and cancellations received by the Clearing House (a) prior to 16:00 London time on a Business Day are typically processed that Business Day and (b) after 16:00 London time on a Business Day are typically processed the following Business Day.

Through making an election or cancellation in accordance with this Section 4.9.2, an FCM Clearing Member is deemed to represent and warrant that (a) it is not a Defaulter and (b) the individual making the request on behalf of the relevant FCM Clearing Member is appropriately authorized to do so.

For the purposes of this Section 4.9.2 and with respect to an FCM Clearing Member, "**Eligible FCM Buffer**" means, on the relevant Business Day, the lesser of: (i) its FCM Buffer that is not Encumbered FCM Buffer at the end of such Business Day; and (ii) the total USD cash held by the Clearing House in the LCH Swaps Client Segregated Depository Account at the end of such Business Day.

For the purposes of this Section 4.9, references to FCM Clearing Member shall mean an FCM Clearing Member who provides FCM SwapClear Clearing Services.

4.10 Collateral Value Reports

In accordance with FCM Regulation 15(d) (*Margining of Swap Product Client Accounts*), an FCM Clearing Member that has elected to adopt the LSOC With Excess Model is required to provide the Clearing House with an eligible CVR (Collateral Value Report as defined in the FCM Regulations) at least once per Business Day.

4.10.1 Contents of the Collateral Value Report

The CVR should contain details of the following:

(a) **FCM Client Sub-Account Balance**: The value of Margin delivered for and on behalf of each FCM Client and its respective FCM Client Sub-Account.

(b) **FCM Buffer**: The value of FCM Buffer lodged in the FCM Buffer Sub-Account.

All values provided in a CVR must be the post haircut value in USD (or such other currency as agreed in writing by the Clearing House).

Where the CVR does not contain information for all of the FCM Clients of an FCM Clearing Member, the Clearing House will assume that the FCM Client Sub-Account Balance for those FCM Clients that are not included have not changed from that which is reflected in its books and records (either through delivery of a previous CVR or as a result of an Assumed Allocation).

Unallocated Excess may be allocated to an FCM Client Sub-Account or to an FCM Buffer Sub-Account through the submission of a CVR. Any Margin that is furnished to the Clearing House but which is not allocated in a CVR will be treated as Unallocated Excess.

4.10.2 Eligibility of the Collateral Value Report

The CVR constitutes a notification to the Clearing House of the allocation of Margin that has been furnished by an FCM Clearing Member to one of its FCM Omnibus Swaps Client Accounts with LCH. Therefore, a CVR will be considered ineligible where the CVR details the aggregate value of the Margin lodged in each applicable FCM Client Sub-Account to exceed the total Margin currently available in respect of such FCM Omnibus Swaps Client Account with LCH.

Following determination of the value of Margin allocated to each FCM Client Sub-Account, the Clearing House will then assess whether the amount of FCM Buffer detailed in the CVR is correct based on the residual amount of Margin that it has received. In the event that the amount of FCM Buffer detailed in the CVR is greater than the amount of Margin (not including all Margin which has been allocated to the relevant FCM Client Sub-Account Balances, as set out in the CVR) delivered to that FCM Clearing Member's FCM Omnibus Swaps Client Account with LCH, the Clearing House will not reject the CVR but will reduce, in its books and records, the value of FCM Buffer held for that FCM Clearing Member. In such a case, the Clearing House will thereafter notify the FCM Clearing Member that such a modification to the balance of the FCM Buffer Sub-Account has been applied.

Any CVR that would generate, or is submitted in order to avoid, a margin call will be ineligible and will be rejected by the Clearing House. Where a CVR details an FCM Client Sub-Account Balance which is lower than the amount of Required Margin applicable to such FCM Client Sub-Account, the Clearing House will assume that the shortfall is covered by FCM Buffer (provided that

sufficient FCM Buffer is available to be so applied) and will modify the applicable accounts appropriately. In such a case, the Clearing House will thereafter notify the FCM Clearing Member of the application of the relevant modifications.

CVRs will only be accepted by the Clearing House during the time when the relevant FCM Clearing Service is open. Any CVRs submitted when an FCM Clearing Service is closed will be rejected and will have to be re-submitted in order to be accepted by the Clearing House.

Ineligible CVRs will be rejected by the Clearing House. In the event that a CVR is deemed ineligible by the Clearing House, the Clearing House will notify the relevant FCM Clearing Member so that a replacement CVR can be delivered.

4.10.3 Election of With Client Excess Model or Without Client Excess Model

As described in FCM Regulation 15(c) (*Margining of Swap Product Client Accounts*), the Without Client Excess Model is the default model that applies to each FCM Omnibus Swaps Client Account with LCH.

In the event that an FCM Clearing Member wishes to adopt the With Client Excess Model with respect to one or more of its FCM Omnibus Swaps Client Accounts with LCH, it must notify the Clearing House's Client Services (swapclear.clientservices@lch.com). Following receipt of such notification the Clearing House will notify the FCM Clearing Member that such election has been accepted and such acceptance shall become effective from the time that the FCM Clearing Member delivers an eligible CVR.

In the event that an FCM Clearing Member no longer wishes to operate under the With Client Excess Model it must provide the Clearing House with written notice of its intention to use the Without Client Excess Model. On the morning of the third Business Day following receipt of the FCM Clearing Member's notice, the Clearing House will transfer any Excess Margin in the FCM Clearing Member's FCM Client Sub-Accounts to the Unallocated Excess Sub-Account. FCM Buffer will remain in the FCM Buffer Sub-Account. Once all Excess Margin has been transferred to the Unallocated Excess Sub-Account, the Without Client Excess Model will be put into effect with respect to the relevant FCM Omnibus Swaps Client Account with LCH, and the FCM Clearing Member will no longer be able to post or maintain Excess Margin in the FCM Client Sub-Accounts therein.

SCHEDULE 4A FCM CLIENT ACCOUNT LODGMENT FORM

LC	LCH The Markets' CONTINGENCY FCM - LODGMEN'							
To: LCH L	imited ("the (Clearing Hous	Version 1: December 2 buse") LCH Limited Ref No:					
From: Clearing Member (full name):								
Client Acco	unt			Mnem	onic:			
We hereby transfer the securities described below to the Clearing House under the terms of FCM Regulations 14(1) and 14(m) (<i>Margin and Collateral</i>) of the FCM Regulations. We acknowledge that these securities may be held by any custodian in any depository, securities clearing or settlement system (in the United Kingdom or elsewhere) which may for the time being be customarily used in connection with securities of similar kinds on a fungible basis and subject to the rules of the relative system and the terms and conditions of its operator, and the Clearing House has no responsibility for the performance of any such custodian, system or operator. We hereby confirm that the securities detailed below are customer funds subject to segregation pursuant to the U.S. Commodity Exchange Act and the regulations of the Commodity Futures Trading Commission promulgated thereunder.								
Security Numb	· ·	Settlement Date	e Tra	de Date	Amount/Nom Value	inal D	escription of Security	
Delivery fro	m: Deposito	ory/Agent _						
US Securitie	es, Broker Co	ode _						
Account Ho	lder:	_						
Account Nu	mber:	-						
Beneficial C	Owner Italian	Tax ID:						
Delivery to:		-						
BONY (US Owners)	BONY (Non-US Owners)	BONY (Global)	Citibank (US Owners)	Citibank (Non-US Owners)	Citibank (Global)	Euroclear (EUR Securities)	Euroclear (Italian)	
735138	735139	874067	206203	207887	T613085309	15211	25910	
Signatories Clearing M		pehalf of The						

(Signature)

(Signature)

Date:

(Print Name)

(Print Name)

1.

2.

(Position)

(Position)

SCHEDULE 4B CONTINGENCY FCM HOUSE ACCOUNT LODGMENT FORM

1	`	The Markets'
-	<i>-</i> —	Partner

			P	ROPRIETA	RY - COLLAT			MENT FORM December 2011	
To: LCH Lir	nited ("the (Clearing H	ouse")						
	`	C	ĺ				LCH	Limited Ref No:	
From: Cleari	ng Member	(full name):						
In respect of	Proprietary 1	Business		Mn	emonic:				
We are entitled to the entire beneficial interest in these securities.									
We acknowledge that these securities may be held by any custodian in any depository, securities clearing or settlement system (in the United Kingdom or elsewhere) which may for the time being be customarily used in connection with securities of similar kinds on a fungible basis and subject to the rules of the relative system and the terms and conditions of its operator, and the Clearing House has no responsibility for the performance of any such custodian, system or operator and in particular we consent, where applicable, to the securities being held in the Euroclear clearance system subject to the fungibility regime organized by the Belgian Royal Decree No. 62 of 10 November 1967 promoting the circulation of securities as amended from time to time. We hereby confirm that the securities detailed below are NOT customer funds subject to segregation requirements pursuant to the US Commodity Exchange Act and the regulations of the Commodity Futures Trading Commission promulgated thereunder.									
Security		Settlen		Trade	Amount/Nom	ninal	De	escription of	
Numl		Date		Date	Value			Security	
D.P C.	D								
Delivery from US Securities	-		-						
Account Hole		ue							
Account Nun									
Beneficial Ov		Tav ID:							
Delivery to:	wher Italian	Tax ID.							
Denvery to.								-	
BONY (US Owners)	BONY (Non-US Owners)		J S	Citibank (Non-US Owners)	Euroclear Bank (Global)	Euroo Bai (Itali	nk	Euroclear UK & Ireland (CrestCo)	
735136	735137	090	401	090372	91205	917	37	5165	
Signatories for the Cleari			(Signa	ture)	(Print Name)	(Pos	sition)		
		2.	(Signar	ture)	(Print Name)	(Pos	sition)		

SCHEDULE 4C CONTINGENCY COLLATERAL RELEASE FORM

LC	The Mar Partner	COLLATERAL RELEASE FORM				
					V	Version 1: June 2011
To:	LCH Limited ("the	e Clearing Ho	ouse")			2011
From:	Clearing Member	(full name):				
	House/Client Acco	ount* 1	Mnemor	nic:	* P	Please delete as appropriate
We hereby	request you to releas	se the securitie	s descr	ribed below.		
	Code Number (e.g. ISI N)	Delivery I	Date	Trade Date	Amount/Nominal Value(Issue - Cou pon - Maturity)	Description of Security
		 		Τ		
Delivery to:					(from lodgment	oform)
Signatories : Clearing Me	s for and on behalf of lember:	the	1			
Jan J			•	(Signature)	(Print Name)	(Position)
		,	2			
İ				(Signature)	(Print Name)	(Position)
			Date			
The release	ABOVE-NAMED CI e of the above-mention behalf of LCH					_
		Date:		Time:		ŀ
(Authorized	d Signatory):					

Registered in England No. 25932 Registered Office: Aldgate House, 33 Aldgate High Street, London EC3N 1EA Recognised as a Clearing House under the Financial Services and Markets Act 2000. LCH LIMITED COPY

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SCHEDULE 4D SETTLEMENT ACCOUNTS

SETTLEMENT ACCOUNTS – SWAP PRODUCTS

		Margin Collateral-FCM Client							
		Bank of New York			Citibank			Eurockar Bank	
	735138	735139	874067	206203	207887	TBC	15211	25910	
Australia			Х			X			
Austria			Х			Х	Х		
Belgium			Х			X	Х		
Canada			Х			Х			
Denmark			Х			X			
EUR Agencies			Х			Х	Х		
Finland			Х			X	Х		
France			Х			Х	Х		
Germany			Х			Х	Х		
Italy			Х			X		X	
Japan			Х			Х			
Luxembourg			X			Х	Х		
Netherlands			Х			Х	Х		
Norway			Х			Х			
Spain			Х			Х	Х		
Sweden			Х			Х			
United Kingdom			X			X			
United States	X	Х		X	X				
US Agencies	X	х		X	X				
				Τ					

Margin Collateral-FCM House								
Bank of New York		Citibank		Euroclear Bank		Eurockar UK & Ireland		
735136	735137	090401	090372	91205	91737	5165		
				Х				
				x x x x x x x				
				X				
				X				
				X				
				X				
				X				
				Х				
				X				
					X			
				X				
				X				
				X X X				
				X Y				
				X				
				^		х		
X	Х	Х	Х					
Х	Х	Х	Х					

SETTLEMENT ACCOUNTS – FUTURES PRODUCTS

Australia
Austria
Belgium
Canada
Denmark
EUR Agencies
Finland
France
Germany
Italy
Japan
Luxembourg
Netherlands
Norway
Spain
Sweden
United Kingdom
United States
US Agencies

	Bank of New York		Citibank			
484341	484342	484343	212107	212108	613510247	
		X			X	
		Х			X	
		X X X X			X	
		Х			Х	
		Х			Х	
		X X X X			Х	
		Х			Х	
		Х			Х	
		X			X	
		Х			Х	
					X	
		Х			X X X X X X X X X X	
		Х			Х	
		X X			X	
		Х			X X X	
		X X X			X	
		Х			X	
Х	X		Х	X		
Х	Х		Х	Х		

SCHEDULE 4E CONTINGENCY MEMBER TRIPARTY LODGEMENT FORM

LC	Н	The Markets' Partner			SE TRIPARTY EMENT FORM			
					Euroclear Version 1: Mar 2014			
To: LCH Limited ("the Clearing House")								
From:		g Member (full name):		I	LCH Limited Ref No:			
	House		Mnemonic:					
We are entit	led to the	e entire beneficial intere	est in these securities.					
settlement sy kinds on a f operator, and operator and fungibility r circulation of We hereby requirements	ystem who ungible to the Cle in particular of securition confirm so pursuar	t these securities may nich may for the time beasis and subject to the aring House has no recular we consent to the reganised by the Belgites as amended from tine that the securities don't to the US Commodispromulgated thereund	being be customarily use rules of the relative sponsibility for the persecurities being held it ian Royal Decree Nome to time. etailed below are NC ity Exchange Act and	sed in connection with system and the terms formance of any such n the Euroclear clearar .62 of 10 November	n securities of similar and conditions of its custodian, system or nce system subject to 1967 promoting the			
				Collateral Giver	Collateral Taker			
Execution	Date	Currency	Nominal Amount	Account Number	Account Number			
Signatories f Clearing Me		n behalf of the	1					
			(Signature)	(Print Name)	(Position)			
			2					

Date

(Signature)

(Print Name)

(Position)

SCHEDULE 4F CONTINGENCY MEMBER TRIPARTY AMENDMENT FORM

LC	The Part	Markets'			_	HOUSE TR IENDMEN				
						Ve	Euroclear ersion 1: Mar 2014			
To:										
From:	Clearing Mer House	nber (full nam	e): Mnemonic	:						
We are entitl	led to the entir	e beneficial in	terest in these	securities.						
settlement sy kinds on a fro operator, and operator and fungibility r circulation o We hereby requirements	edge that these vistem which mungible basis at the Clearing in particular vegime organist securities as confirm that a pursuant to the terminal or the companion of the confirm that a pursuant to the confirm that a pursuant to the confirm or the c	hay for the time and subject to House has no we consent to seed by the Beamended from the securities he US Comm	the rules of tresponsibility the securities legian Royal time to time. detailed beloodity Exchange	stomarily used he relative system. for the perform being held in the Decree No.62	d in connection stem and the termance of any the Euroclear of 2 of 10 Nove	n with securitierms and concurred such custodia elearance systember 1967 prods subject to of the Commo	ies of similar ditions of its in, system or em subject to comoting the segregation odity Futures			
Execution Date	CMS Reference	Increase/ Decrease	Amount of Increase/ Decrease	Currency	New Nominal Amount	Collateral Giver Account Number	Collateral Taker Account Number			

1

2

Date

Signatories for and on behalf of the Clearing Member:

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(Signature)

(Signature)

(Print Name)

(Print Name)

(Position)

(Position)

SCHEDULE 4G CONTINGENCY MEMBER TRIPARTY CLOSING FORM

LC	:	The Markets' Partner	CLO	SING FORM		
						Euroclear Version 1: Mar 2014
To:	LCF	H Limited ("the Cle	aring House")			
From:	Clea Ho	aring Member (full use	name): Mnemor			
CMS Reference	e	Closing Date & Execution Date	Currency	Nominal Amount	Collateral Giver Account Number	Collateral Taker Account Number
Signatories to Clearing Me		d on behalf of the	1			
				(Signature)	(Print Name)	(Position)
			2			
				(Signature)	(Print Name)	(Position)
			Date			

SCHEDULE 4H CONTINGENCY MEMBER TRIPARTY LODGEMENT FORM

LC	Н	The Markets' Partner			SE TRIPARTY EMENT FORM
					Clearstream
					Version 1: Mar 2014
To:	LCH Li	mited ("the Clearing I	House")		
				I	LCH Limited Ref No:
From:	Clearing	g Member (full name):			
	House		Mnemonic:		
We are entit	led to the	e entire beneficial inter	est in these securities.		
settlement s kinds on a f operator, an operator and to the fungil and other fin We hereby requirement	ystem when the Cle of	basis and subject to the aring House has no recular we consent to the time organised by the Lastruments as amended that the securities defined the securities described the	peing be customarily use rules of the relative sponsibility for the per securities being held in the cuxembourg Law of 1 and from time to time. The establishment of the per securities being held in the cuxembourg Law of 1 and from time to time.	ian in any depository, sed in connection with system and the terms formance of any such in the Clearstream clea August 2001 on the circustomer funds su the regulations of the	a securities of similar and conditions of its custodian, system or trance system subject culation of securities bject to segregation
Execution	D-4-	C	NT	Collateral Giver Account Number	Collateral Taker Account Number
Execution	Date	Currency	Nominal Amount	Account Number	Account Number
Signatories to Clearing Me		behalf of the	(Signature)	(Print Name)	(Position)
				(1 mit ivallie)	(1 osidoli)
			2		

(Signature)

(Print Name)

(Position)

Date

SCHEDULE 4I CONTINGENCY MEMBER TRIPARTY AMENDMENT FORM

LC	The Part	Markets'				HOUSE TR IENDMEN	
То:	I CH I imited	("the Clearin	og House'')				Clearstream rsion 1: Mar 2014
From:	LCH Limited ("the Clearing House") Clearing Member (full name): House Mnemonic:			:			
We acknowledge that these securities may be held by any custodian in any depository, securities clearing or settlement system which may for the time being be customarily used in connection with securities of similar kinds on a fungible basis and subject to the rules of the relative system and the terms and conditions of its operator, and the Clearing House has no responsibility for the performance of any such custodian, system or operator and in particular we consent to the securities being held in the Clearstream clearance system subject to the fungibility regime organised by the Luxembourg Law of 1 August 2001 on the circulation of securities and other financial instruments as amended from time to time. We hereby confirm that the securities detailed below are NOT customer funds subject to segregation requirements pursuant to the US Commodity Exchange Act and the regulations of the Commodity Futures							
Execution Date	CMS Reference	Increase/ Decrease	Amount of Increase/ Decrease	Currency	New Nominal Amount	Collateral Giver Account Number	Collateral Taker Account Number
Signatories f Clearing Me	or and on beha	lf of the	1				

(Signature)

(Signature)

2

Date

(Print Name)

(Print Name)

(Position)

(Position)

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SCHEDULE 4J CONTINGENCY MEMBER TRIPARTY CLOSING FORM

LC	:	The Markets'	s .		FCM HOUSE CLOS	TRIPARTY SING FORM
						Clearstream Version 1: Mar 2014
То:	LCF	H Limited ("the Cle	aring House")			2014
From: Clearing Member (full) House		name): Mnemo				
					Collateral	Collateral
CMS Referenc	e	Closing Date & Execution Date	Currency	Nominal Amount	Giver Account Number	Taker Account Number
Signatories for and on behalf of the 1 Clearing Member:						
				(Signature)	(Print Name)	(Position)
			2	(Signature)	(Print Name)	(Position)
			Date			

5. **BUSINESS CONTINUITY**

5.1 **Recovery situations**

The FCM Procedures set out in this Section are intended to provide FCM Clearing Members with a guide to the changes in working practices which would follow the invocation of the Clearing House's business continuity or disaster recovery plans ("Business Continuity Plans").

Due to the uncertain nature of the events which would lead to the need for business recovery the Clearing House reserves the right to depart from these FCM Procedures to meet the characteristics of specific business recovery situations.

These FCM Procedures provide for the evacuation or decommissioning of its principal office. The FCM Procedures detail the alterations to the Clearing House's operations and also the action to be taken on invocation of the Business Continuity Plans.

5.2 Recovery situations affecting FCM Members' Ability to Perform Clearing Activities

5.2.1 **During office hours**

FCM Clearing Members that are unable to gain access to perform clearing activities and as a result require the Clearing House assistance should contact their usual contact as the Clearing House or the Help Desk on +44 (0)20 7426 7200.

5.2.2 Outside office hours

FCM Clearing Members should telephone the Clearing House on +44 (0)20 7426 7545, leaving the following information:

Name:

Company Name:

Contact Telephone Number:

Brief Details of the Nature of the Problem:

A member of the Clearing House operational staff will then make contact regarding any assistance that can be given.

5.3 **Principal Office evacuation**

5.3.1 Communicating with FCM Clearing Members

Should the Clearing House be forced to evacuate its principal office it will need to inform its FCM Clearing Members as soon as practicable. The following Sections detail a number of different messages that the Clearing House may wish to communicate. However, in all cases the means by which information will be disseminated is the same. Information will be communicated to FCM Clearing Members by the following methods:

- (a) posting messages on the Member Information Line toll free number 0800 1 69 69 09 (primary method);
- (b) via Clearing House messaging, where applicable;
- (c) posting messages on www.lch.com.

Some of the above communication methods can only be used to disseminate very short messages. However the toll free number is capable of recording a message of up to ten minutes duration, and handling unlimited concurrent connections. It is therefore likely to be the main method used for providing FCM Clearing Members with progress reports following an initial broadcast message.

5.3.2 Invoking of Business Continuity Plans

The Clearing House is contracted with specialist providers for dedicated and syndicated work area recovery facilities. The agreement between the Clearing House and the providers stipulates that dedicated work area recovery positions will be available immediately.

Depending on the severity of an incident a full or partial invocation of the service may be required.

In the event of a metropolitan incident, critical clearing services will be handed over to another region in order to meet regulatory deadlines.

5.3.3 Limited invocation

If the Clearing House's assessment of the incident suggests that reoccupation of its principal office will be possible within two hours, then it is likely that only the mission critical activities (MCA) will be recovered to the recovery site. All other activities will cease until its principal office becomes available.

The following message will be posted in accordance with section 5.3.1:

"The Clearing House has invoked Business Continuity Plans for its MCA's. Please refer to the Clearing House's Procedures Business Continuity for further information."

Additional messages may be provided to FCM Clearing Members of particular FCM Clearing Services.

5.3.4 Full invocation

Once a decision has been taken to proceed with full invocation of Business Continuity Plans FCM Clearing Members will be informed at the earliest opportunity. This will be achieved by disseminating the following message using the methods described in Section 5.3.1 (Communicating with FCM Clearing Members) above.

"The Clearing House has invoked all Business Continuity Plans. Please refer to the Clearing House's Procedures Business Continuity for further information."

Additional messages may be provided to FCM Clearing Members of particular FCM Clearing Services.

It is anticipated that a maximum period of two hours will elapse between the invocation of full Business Continuity Plans and the relocation of recovery teams. During this time most of the activities normally carried out at its principal office will cease.

Please note that the Clearing House's primary data center is not located at its principal office and so an evacuation of the site will not affect FCM Clearing Members' ability to access IT applications. If the two main data centres are impacted by an incident, a failover will occur to the third (recovery) data centre.

5.3.5 Imminent expiry of options

Clearing Members are reminded that the responsibility for exercising options prior to their expiry deadline lies solely with them and that any assistance given by the Clearing House is purely on a 'reasonably efforts' basis. If an evacuation of its principal office coincides with an option expiry, this assistance may cease.

If the Clearing House's invocation of Business Continuity Plans coincides with an option expiry, the notification of Clearing Members' option allocations and the deadline for the entry of option exercises may be delayed.

5.3.6 Arrangements for cover

In order to simplify the Treasury process, it is likely that a number of routine Treasury Procedures may be amended or suspended. The Clearing House will advise FCM Clearing Members of these changes through available reporting channels, as necessary. These may include but are not limited to:

- (a) the acceptance/release of securities and guarantees;
- (b) the conversion of currencies; and
- (c) the ability to cover liabilities using collateral denominated in other currencies.

5.3.7 **Registration of Contracts**

The Clearing House will register new business in accordance with the relevant FCM Procedures. However, the Clearing House reserves the right, at its discretion, to amend the timing of registration as it deems necessary in accordance with the Business Continuity Plans. In the event that registration

is to be delayed the Clearing House will notify FCM Clearing Members as soon as practically possible.

5.3.8 New address for document delivery

Following invocation of the Business Continuity Plans the Clearing House will provide new address details for document delivery. The Clearing House will arrange to have its mail forwarded to its office recovery site.

5.3.9 **Permanent change of address**

The Clearing House is able to occupy the recovery site for a maximum of 180 consecutive days. If the incident is so serious that the Clearing House is unable to reoccupy its principal office, within this time period, FCM Clearing Members will be informed of the proposed new office location and contact numbers prior to occupation of the premises. This information will be communicated via the methods described in Section 5.3.1 (Communicating with FCM Clearing Members) above.

FCM Clearing Members will be informed of the date when the new arrangements will take effect.

5.3.10 Return to normal

When the Clearing House is able to resume a normal service a message will be disseminated using the methods described in Section 5.3.1 (Communicating with FCM Clearing Members) above. Assuming that it has been possible to return to its principal office the following message will be broadcast.

"The Clearing House has returned to its principal office. Please revert to normal contact telephone numbers and procedures."

If normal working is being resumed at a site other than Its principal office FCM Clearing Members will already have been informed of the new office location and contact numbers (see Section 5.3.8 (New address for document delivery) above). The following message will be broadcast.

"The Clearing House is resuming normal service at <insert location name>. Please use the new contact numbers previously supplied."

Additional messages may be provided to FCM Clearing Members of particular FCM Clearing Services.

5.4 Clearing House data center

5.4.1 Failure of LCH's data center

If the Clearing House's primary data center fails during business hours, those Clearing House IT systems that are used by FCM Clearing Members will be temporarily unavailable while processing is transferred to the secondary data center.

5.4.2 Failure of LCH's secondary data center

If following a failure of the primary data center, the Clearing House's secondary data center fails during business hours, those Clearing House IT systems that are used by the FCM Clearing Members will be temporarily unavailable while processing is transferred to the tertiary data center.

5.5 Compliance with Business Continuity Testing

FCM Clearing Members are required to participate in the Clearing House's Business Continuity Planning (BCP) coordination and testing programs, as required by CFTC Regulation 39.18. The Clearing House will notify FCM Clearing Members when it intends to carry out any such test via an FCM Clearing Member circular and via a posting on www.lch.com at least 90 days in advance. The Clearing House will, prior to the date of any such test, provide FCM Clearing Members with further details of the steps that will be required under the relevant program.

6. APPEAL PROCEDURES

6.1 **Introduction**

These FCM Procedures describe how an FCM Clearing Member may appeal against a decision of the Clearing House.

It should be noted that no appeal may be lodged to the Clearing House in respect of any decision of any other member company of the LCH Group Holdings Limited (including LCH SA).

6.2 Decisions in respect of which an appeal may be lodged

- 6.2.1 An FCM Clearing Member may appeal against any of the following decisions made by the Clearing House:
 - (a) that the FCM Clearing Member does not meet the criteria for extension of its clearing relationship with the Clearing House;
 - (b) a decision by the Clearing House to rescind that FCM Clearing Member's eligibility to have contracts of a certain category or categories registered in its name;
 - a decision by the Clearing House to terminate that FCM Clearing Member's FCM Clearing Membership Agreement other than when such decision occurs in connection with the operation by the Clearing House of its Default Rules and these FCM Procedures;
 - (d) a Decision Notice issued under the Clearing House's Disciplinary Procedures.
- 6.2.2 An undertaking which is not an FCM Clearing Member may appeal to an Appeal Committee against the decision made by the Clearing House declining to grant FCM Clearing Member status to that person.
- 6.2.3 From time to time the Clearing House may amend the lists in this Section 6.2 of decisions in respect of which appeals may be lodged.

6.3 **Initiating an appeal**

- 6.3.1 An appeal to an Appeal Committee under this Section 6 shall be commenced by sending a copy of the Appeal Form in the form set out in <u>Schedule 6ASchedule 6A</u> of these FCM Procedures to the Company Secretary of LCH Limited ("the Company Secretary") at the registered office of the Clearing House.
- 6.3.2 The Appeal Form must be fully completed in all material respects by the person lodging the appeal ("the appellant") and must set out the grounds of the appeal and a brief statement of all matters relied upon by the appellant.

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- 6.3.3 The appellant must enclose with its Appeal Form payment of £500 which payment shall be returned if the appeal is subsequently upheld by the Appeal Committee or by the Appeal Tribunal (as described in these FCM Procedures).
- 6.3.4 An appeal may only be commenced under these FCM Procedures within 28 days of the date upon which the decision to which it relates was notified to the appellant. The Chief Executive of the Clearing House has a discretion to waive this time limit if the appellant provides a satisfactory explanation for the delay and no prejudice would be caused to any person by proceeding with the appeal in the circumstances.
- 6.3.5 The Company Secretary shall acknowledge receipt of the Appeal Form no later than 7 days after receipt.
- 6.3.6 The Company Secretary may request further information or clarification relating to the subject matter or grounds of the appeal.

6.4 The first tier appeal

- 6.4.1 No later than 28 days from receipt of any Appeal Form the Company Secretary shall:
 - (a) refer the appeal to an Appeal Committee comprising:
 - (A) the Chief Executive of the Clearing House; and
 - (B) two directors of the Clearing House, nominated by the Chairman of the Clearing House; and
 - (b) notify the appellant in writing of the identity of the persons constituting the Appeal Committee; and
 - (c) provide to the appellant copies of such documents and written representations as the Clearing House intends to place before the Appeal Committee for its consideration.
- 6.4.2 Following notification to the appellant in accordance with Section 6.4.1 above, the appellant shall then have a period of 14 days to submit to the Appeal Committee such written representations and other documentation for the consideration of the Appeal Committee. All representations and documentation shall be submitted in sufficient copies so that each member of the Appeal Committee shall have one copy.
- 6.4.3 The Appeal Committee shall decide upon its own procedure for considering and determining the appeal. This will normally be done without an oral hearing but on the basis of the written representations and documents submitted by the appellant and such other information and documentation as the Appeal Committee considers appropriate. The Appeal Committee may extend the time for any act under this Section.
- 6.4.4 The Appeal Committee may request further or other documentation and information from the appellant.

6.4.5 No later than 21 days from the date upon which the appellant is notified of the composition of the Appeal Committee, or 21 days from the receipt by the Appeal Committee of any further or other documentation or pursuant to 6.4.4 above, whichever is the later, the Appeal Committee shall consider and determine the appeal before it.

6.4.6 An Appeal Committee constituted pursuant to this Section 6.4 shall promptly, and in any event, no later than 7 days after coming to its determination, give notice of its reasoned determination to an appellant in writing.

6.5 The second tier appeal

- 6.5.1 If an appellant, having received notice of a determination of an appeal pursuant to Section 6.4.6 (*The first tier appeal*) above, is not satisfied by such determination, it may appeal lodge a second tier appeal to an Appeal Tribunal.
- 6.5.2 A second tier appeal may be commenced under this Section 6.5 by the submission of a Notice of Further Appeal in the form set out in <u>Schedule 6BSchedule 6B</u> hereto to the Company Secretary at its registered office, setting out the grounds of the appeal and a brief statement of all matters relied upon by the appellant. Such Notice of Further Appeal must be received by the Company Secretary no later than 14 days from the date upon which the notice of determination of the Appeal Committee was given to the appellant.
- 6.5.3 An appeal under this Section 6.5 shall be heard by an Appeal Tribunal within 3 months of the Notice of Appeal being received by the Company Secretary, or such longer time as the Chairman of the Appeal Tribunal (the "Chairman") shall determine in order to provide a full and fair determination of the appeal.
- 6.5.4 An Appeal Tribunal constituted under this Section 6.5 shall consist of 2 persons ("**Tribunal Members**"), with relevant knowledge and experience in the industry of the matters in issue in the appeal, and a legally qualified Chairman. The appellant and the Clearing House may each select a Tribunal Member from a list of no less than 4 persons appropriately qualified persons nominated by the Centre for Dispute Resolution (CEDR), London. The Chairman shall be nominated by CEDR. In the event that either the Clearing House or an appellant fails to nominate a Tribunal Member before a date 2 weeks prior to the date fixed by the Chairman for the hearing of the appeal, then the Chairman shall nominate such Tribunal Member from the list referred to above. No person who served on the Appeal Committee which considered the appellant's first tier appeal shall be eligible to serve in an Appeal Tribunal constituted in respect of that appellant's second tier appeal.
- 6.5.5 The Chairman of an Appeal Tribunal shall fix a date for the hearing of the appeal and shall give no less than 28 days' notice in writing to the appellant and the Company Secretary of the time and place in London where such appeal shall be heard.
- 6.5.6 The appellant shall provide the Appeal Tribunal, with a copy to the Company Secretary, no less than 14 days before the date fixed for the hearing of the appeal, with written submissions setting out such representations as it wishes

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- to put forward in support of its appeal, together with copies of all documentation and other material upon which it wishes to rely.
- 6.5.7 The Clearing House will submit written submissions, documentation and information with regard to the matters and issues relevant to the decision which is the subject of the appeal and provide a copy thereof to the appellant.
- 6.5.8 An Appeal Tribunal may invite any person (including the Clearing House) to provide written information or a written opinion with regard to any matter which forms the subject matter of an appeal.
- 6.5.9 An Appeal Tribunal shall determine its own procedure for the hearing of an appeal and shall not be bound by the rules of evidence. It may adjourn a hearing to another date or dates if it so wishes. If prior to or at such hearing an appellant notifies the Appeal Tribunal that it wishes to make oral submissions an opportunity shall be given to the appellant to do so. A representative of the appellant (and the appellant himself, if the appellant is an individual) and a representative of the Clearing House may attend the hearing and the Appeal Tribunal may in its discretion invite further or other persons to attend the hearing.
- At the hearing an appellant may conduct its case itself through an employee, officer or other agent, or be represented by legal counsel **provided that** if in any particular case an Appeal Tribunal is satisfied that there are good and sufficient reasons for doing so, it may refuse to permit a particular individual to represent an appellant at the hearing.
- 6.5.11 Neither the Clearing House nor an appellant shall have the right to call any witness or cross examine any person who shall have provided any information to an Appeal Tribunal, **provided that** an Appeal Tribunal may permit any such cross examination on such terms as it may determine, if it decides that it is appropriate in the particular circumstances of that appeal so to do.
- 6.5.12 An Appeal Tribunal may have regard to such further or other documents and information and matters as it considers fair and reasonable in the circumstances.
- 6.5.13 In considering an appeal, an Appeal Tribunal shall act fairly and impartially and shall take into consideration, *inter alia*, the following:
 - (a) the FCM Regulations, other specific Regulations, Default Rules and FCM Procedures of the Clearing House; and
 - (b) the Notice of Further Appeal; and
 - (c) all documentation and information placed before it by an appellant or by the Clearing House; and
 - (d) the role and concomitant obligations of the Clearing House as a Recognised Clearing House under the Financial Services and Markets Act 2000.

- 6.5.14 An Appeal Tribunal may in its absolute discretion decline to entertain an appeal and shall dismiss such appeal where it considers the appeal to be frivolous or vexatious.
- 6.5.15 An appellant shall pay its own costs and expenses in relation to an appeal. The Clearing House shall meet its own costs, those of the Tribunal Members and those related to the hearing other than costs and expenses incurred by the appellant.
- 6.5.16 An Appeal Tribunal shall determine an appeal by majority vote although the voting of an Appeal Tribunal shall remain confidential and the result shall be presented as a unanimous view by that Appeal Tribunal. An Appeal Tribunal may:
 - (a) dismiss the appeal; or
 - (b) uphold the appeal in whole or in part.
- 6.5.17 An Appeal Tribunal shall deliver a written statement of its decision together with its reasons to an appellant and the Clearing House within 28 days of the date of the hearing. Except in so far as an Appeal Tribunal may direct, information about proceedings before the Appeal Tribunal and the names of persons concerned in the proceedings shall not be made public. The Clearing House may decide to publish the decision of the Appeal Tribunal on such terms as if considers fit.
- 6.5.18 In the event that an Appeal Tribunal determines to uphold the appeal in whole or in part then the Clearing House shall within 28 days of the receipt of the written decision, review and reconsider the decision upon which the appeal was based in the light of the conclusions of the Appeal Tribunal. The Clearing House agrees to be guided in reviewing its decision by the conclusions of the Appeal Tribunal.

6.6 **Requests for review**

- 6.6.1 A Member who is aggrieved by any action taken by the Clearing House or decision of the Clearing House (other than any decision set out in Section 6.2 (*Decisions in respect of which an appeal may be lodged*) above or any decision taken under Regulation 16 (*Market Disorders, Impossibility of Performance, Trade Emergency*) in, under or in connection with the Clearing House's powers under the Default Rules and Procedures) may, no later than 14 days after the date of the decision or action, request a review of such action or decision by the Chief Executive of the Clearing House.
- 6.6.2 A Request for Review under this Section <u>6.66.6</u> shall be made in writing, shall be addressed to the Chief Executive of the Clearing House at the registered office and shall set out details of the relevant decision or action, the reasons why the Member is aggrieved and details of such reasonable remedial or other action or monetary payment as that Member requests to be carried out in the circumstances.

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6.6.3 The Chief Executive of the Clearing House shall consider the Member's Request for Review and such further or other documents and information as he considers reasonably relevant and shall notify the Member in writing of the outcome of his review within a period of 28 days from receipt by him of the Request for Review. Where it is not possible to complete such review within such period of 28 days, the Chief Executive of the Clearing House shall notify the Member accordingly and shall nominate a further period for the review, such period not to be longer than 3 months from the date of such notification to the Member.

6.7 Market disorders etc. and default

For the avoidance of doubt, the Clearing House shall be under no obligation to consider any request for review under Section 6.6 (*Requests for review*) above or otherwise, or comply with the provisions of this Section 0, and no appeal or request for review may be lodged under this Section 0 or otherwise, in respect of any decision or action taken by the Clearing House under the provisions of Regulation 16 (*Market Disorders, Impossibility of Performance, Trade Emergency*) or in respect of any decision, action or other matter arising out of or in connection with the operation of the Default Rules and Default Procedures and the Clearing House's powers thereunder.

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SCHEDULE 6A APPEAL FORM

The Clearing House Appeal Procedures

Full Name of firm/company etc. lodging the appeal ("the appellant "):				
Registered office address:				
Contact address and telephone number and email (if different from the above):				
Contact name:				
Position:				
Description of decision appealed against (see Section <u>6.26.2</u> (<i>Decisions in respect of which an appeal may be lodged</i>) of the FCM Procedures):				
Date decision notified to appellant:				
Set out here the grounds for appeal and a brief statement of all facts and matters relied upon by the appellant (if there is not enough space, please use additional sheets and staple to this form):				
What action or remedy are you seeking?				
Pursuant to Section 6.3 (<i>Initiating an appeal</i>) of the FCM Procedures, we request that this appeal against the above mentioned decision of the Clearing House be referred to an Appeal Committee.				
Signed for and on behalf of the appellant				
(print name)				
Notes:				
Please enclose a check payable to LCH Limit sterling. If your appeal is successful this sum v	ed drawn on a UK branch, in the sum of £500 will be refunded to you.			
If there are any written representations, any documentation or further material which you				

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would like the Appeal Committee to consider when determining your appeal, you may send it

with this Appeal Form if you wish. Alternatively you may send it in later. However, please note that the FCM Procedures put a time limit on the submission of such material. See Section 6.4.2 (*The first tier appeal*) of the FCM Procedures.

For any inquiries or further information please contact the Company Secretary, LCH Limited on +44 (0)20 7426 7000.

SCHEDULE 6B NOTICE OF FURTHER APPEAL

The Clearing House Appeal Procedures

Note: This form should only be used if you have had a determination of an Appeal Committee and you are now commencing a Second Tier Appeal under Section 6.5 (*The second tier appeal*) of the FCM Procedures.

Full Name of firm/company etc. lodging the appeal ("the appellant"):				
Registered office address:				
Contact address and telephone number and email (if different from the above):				
Contact name:				
Position:				
Details of determination of Appeal Committee appealed against (see Section <u>6.56.5</u> (<i>The second tier appeal</i>) of the FCM Procedures):				
Please attach a copy of the Determination:				
Date of determination of the Appeal Committee:				
Set out here the grounds for appeal and a brief statement of all facts and matters relied upon by the appellant (if there is not enough space, please use additional sheets and staple to this form):				
What action or remedy are you seeking?				
Pursuant to Section 6.5 (<i>The second tier appeal</i>) of the Clearing House Procedures, we request that an Appeal Tribunal be constituted to determine this appeal against the above mentioned determination of the Appeal Committee.				
Signed for and on behalf of the appellant				
(print name)				

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Notes:

If there are any written representations, any documentation or further material which you would like the Appeal Tribunal to consider when determining your appeal, you may send it with this Notice of Further Appeal Form if you wish. Alternatively you may send it in later. However, please note that the FCM Procedures put a time limit on the submission of such material. See Section 6.5.6 (*The second tier appeal*) of the FCM Procedures.

For any inquiries or further information please contact the Company Secretary, LCH Limited on +44 (0)20 7426 7000.

7. **COMPLAINTS**

7.1 **Introduction**

- 7.1.1 These FCM Procedures describe how a person (the "Complainant") who:
 - (a) has a complaint about the conduct or behavior or other actions of an FCM Clearing Member with regard to that FCM Clearing Member's clearing activities with the Clearing House;
 - (b) has a complaint arising in connection with the performance of, or the failure to perform, any of the Clearing House's regulatory functions; or
 - (c) has substantive opposing views or comments to a proposed or recently introduced change to the Rulebook or FCM Rulebook (each, a "Complaint")

may make a formal complaint, and how that complaint will be investigated and resolved.

7.2 **How to make a complaint**

7.2.1 A Complaint:

- (a) must be made in writing, dated and addressed to the Chief Compliance Officer LCH Limited at Aldgate House, 33 Aldgate High Street, London EC3N 1EA, U.K.;
- (b) with respect to a Complaint described in Section 7.1.1(a) or (b), should set out, as far as possible, details of the conduct, behavior or other actions complained of, date(s) and place(s) these occurred, the names of the person involved, the outcome sought, and any other relevant details;
- (c) with respect to a Complaint described in Section 7.1.1(c), should describe, in detail, the proposed or recently enacted rule change and relevant section or clause and all substantive opposing views and comments
- (d) must be made no later than three months after the conduct, behavior, notification of the proposed rule change or other actions complained of, or, if the conduct, behavior or other actions complained of consists of a series of events, no later than three months after the end of the last such event; and
- (e) must contain the full name and address of the Complainant and, wherever possible the details of a contact telephone number and email address.
- 7.2.2 In submitting a Complaint in accordance with these FCM Procedures the Complainant may submit such further and other documentation and material which he/she believes may be relevant.

7.2.3 Upon receipt of a written Complaint, the Chief Compliance Officer of the Clearing House shall acknowledge in writing to the address shown in the letter of complaint, receipt of the complaint. Such acknowledgment shall be made within 14 days of receipt of the Complaint. After receipt of a Complaint in accordance with the procedure set out in this Section, the Clearing House shall conduct an internal investigation or review such Complaint in accordance with the procedures set out in Section 7.3 (*Internal investigation and review by the Clearing House*) below.

7.3 Internal Investigation and Review by the Clearing House

- 7.3.1 No later than 14 days from receipt of a Complaint, the Chief Compliance Officer of the Clearing House shall refer the Complaint, together with any supporting material provided by the Complainant, to an Investigation Committee.
- 7.3.2 An Investigation Committee shall consist of at least three of the following persons:
 - (a) the Chief Compliance Officer;
 - (b) the Head of Legal;
 - (c) the Head of Business Risk of the relevant business or Service
 - (d) the Head of Operations of the relevant business or Service;
 - (e) any Clearing House employee holding the position of Director or Managing Director at the Clearing House.

provided always that an Investigation Committee must include at least the Chief Compliance Officer or the Head of Legal.

- 7.3.3 The Investigation Committee shall conduct an investigation into the subject matter of the Complaint and shall deliver its report to the Complainant and to the Chief Executive of the Clearing House within a period of three months from the referral to it of the Complaint. The Investigation Committee may make such recommendations as it deems fit for resolving the subject matter of the complaint. The committee may, if it so decides, make no recommendations if it considers such course of action to be appropriate in the circumstances. The report shall contain reasons for the Investigation Committee's decision.
- 7.3.4 The costs of the internal investigation and review shall be borne by the Clearing House.
- 7.3.5 Where the Chief Executive Officer of the Clearing House receives a written complaint which is not a complaint regarding the conduct, behavior or other actions of an FCM Clearing Member in respect of its clearing activities with the Clearing House or that is not a complaint arising in connection with the performance of, or the failure to perform, any of the Clearing House's regulatory functions but is nevertheless a complaint regarding an FCM

Clearing Member or regarding the conduct, behavior or actions of an officer or employee or other staff member of the Clearing House, then such complaint shall be referred to the Chief Executive of the Clearing House to be dealt with in accordance with the Requests for Review procedure set out in Section 6.6 (*Requests for review*) of these FCM Procedures.

7.4 Referral to an independent investigator

- 7.4.1 Solely with respect to a Complaint described in Section 7.1.1(a) or (b) above, in the event that the Complainant is dissatisfied with the outcome of the Internal Investigation and Review, or in the event that the Complainant does not receive the report of the Investigation Committee within three months of the receipt of a Complaint (and provided that the subject matter of the Complaint (or substantially the same matters) shall not have already been referred to an independent investigator as a result of a Complaint from that same Complainant) the Complainant may ask for the Complaint to be referred to an Independent Investigator nominated in accordance with the procedure set out in Section 7.5 (*Procedure for dealing with the complaint*) below.
- 7.4.2 A request for referral to an Independent Investigator shall be made in writing to the Chief Compliance Officer of the Clearing House and must be made no later than two weeks following notification to the Complainant of the report of the Investigation Committee or four months from the receipt of the original Complaint to the Clearing House in accordance with Section 7.2 (*How to make a complaint*).
- 7.4.3 Within 14 days of receipt of a written request, in accordance with Section 7.4.2 above, the Chief Compliance Officer of the Clearing House shall refer the Complaint to an Independent Investigator (as described below).
- 7.4.4 An Independent Investigator shall be nominated for this purpose by The Centre for Dispute Resolution (CEDR), London. Such investigator shall be a person:
 - (a) independent of the Clearing House (for these purposes "independent" shall mean that such person is not and has not been an officer, director or employee of the Clearing House); and
 - (b) with appropriate knowledge of how clearing is carried out by the Clearing House and of the FCM Rulebook (including the FCM Procedures) and other relevant documentation and Applicable Law; and
 - (c) with appropriate experience of the market activities in respect of which the complaint relates.
- 7.4.5 The Clearing House shall be responsible for the payment of the fees and expenses of the Independent Investigator although this shall not give rise to any employment or other relationship between the Independent Investigator and the Clearing House, and shall not give rise to any duty between the Independent Investigator and the Clearing House other than that the

- Independent Investigator shall act as an independent complaints investigator in accordance with the terms of these FCM Procedures.
- 7.4.6 In the event, that for reasons beyond the reasonable control of the Clearing House, referral to an Independent Investigator is not made within the 2 week day period referred to in 7.4.3 above, then the Chief Compliance Officer of the Clearing House shall notify the complainant in writing of the reasons for the delay.

7.5 **Procedure for Dealing with the Complaint**

- 7.5.1 Upon appointment, an Independent Investigator nominated in accordance with these FCM Procedures, shall forthwith notify the Complainant and the Clearing House in writing of his appointment and shall invite the Complainant and the Clearing House to make such submissions and submit such documentation as each may wish within such timescale as the Independent Investigator may determine.
- 7.5.2 The Independent Investigator shall determine his or her own procedure for considering the Complaint referred to him, shall be guided by the requirements of fairness and, and may, *inter alia*, do any one or more of the following:
 - (a) interview the Complainant;
 - (b) interview a representative of the Clearing House;
 - (c) seek further or other information from the Clearing House and/or the Complainant; or
 - (d) make such further or other reasonable inquiries as he/she deems fit in order properly and fully to investigate the complaint.

7.6 **Outcomes**

- 7.6.1 The Independent Investigator shall, wherever reasonably possible, conclude his or her investigation of a Complaint within a period of two months from the date of his or her nomination. Where it is not reasonably possible to do so due to the nature or complexity of the matter referred to him or her or for other good reason, then the Independent Investigator shall notify the Complainant and the Clearing House in writing of this fact and provide a further date for the completion of the investigation.
- 7.6.2 The Independent Investigator shall, at the end of his or her investigation, produce a written report setting out his or her findings, conclusions, and reasons for such conclusions. Such report shall be provided to the Complainant and to the Clearing House but it shall not be made public unless the Complaint is upheld in whole or in part and the Complainant so requests. In the event of such request, the report shall be made public by being published on the Clearing House's public website. Where only part of the Complaint is upheld, then only the part of the report relating to that part of the Complaint shall be so published.

- 7.6.3 In his written report the Independent Investigator may:
 - (a) dismiss the Complaint;
 - (b) uphold the Complaint in its totality;
 - (c) uphold part of the Complaint and dismiss part of the Complaint; or
 - (d) make such recommendations as he or she deems fit in the circumstances including a recommendation that the Clearing House make a compensatory payment and/or takes such action as may be reasonably practicable to remedy the cause of the Complaint.

8. **DISCIPLINARY PROCEEDINGS**

8.1 **Scope of this procedure**

- 8.1.1 All FCM Clearing Members are subject to Disciplinary Proceedings pursuant to Section 7.1 of these FCM Procedures (the "**Disciplinary Proceedings**").
- 8.1.2 Any alleged breach by an FCM Clearing Member of an obligation set out in the FCM Rulebook (the "Alleged Breach") may be dealt with in accordance with the provisions of this Section.
- 8.1.3 The disciplinary procedures contained in this Section are without prejudice to:
 - (a) any action and/or measures that may be taken by the Clearing House based on any other procedure set out in the FCM Rulebook including, without limitation, the right of the Clearing House to issue a Default Notice under the Default Rules;
 - (b) the Clearing House's right to take no action where it considers that taking action would be disproportionate or otherwise, in its discretion; and
 - (c) any provision of Applicable Law concerning enforcement by a Regulatory Body.

8.2 **Investigation procedure**

- 8.2.1 Subject to the provisions of Section 8.3 (*Immediate measure*), the investigation of an Alleged Breach pursuant to these Disciplinary Proceedings shall be handled in accordance with this Section 8.2.
 - (a) Opening of the investigation procedure

When the Clearing House commences proceedings to investigate an Alleged Breach:

- (A) the Clearing House shall send a written notice to the FCM Clearing Member, setting out the details of the Alleged Breach, including a summary of the facts relied on in sufficient detail for a reasonable person in the FCM Clearing Member's position to be able to properly understand and to respond to the allegations made against it;
- (B) the Clearing House shall identify a suitably senior representative of any entity of the LCH Group that shall lead the investigation procedure on behalf of the Clearing House and shall inform the FCM Clearing Member as to who this representative will be in the written notice which is sent in accordance with sub-paragraph (i) above;
- (C) Following receipt of the written notice sent in accordance with sub-paragraph (i) above, the FCM Clearing Member shall be

permitted to (x) raise objections in writing to the Alleged Breach of which it has been notified and/or (y) raise objections to the identity of the representative that is to lead the investigation procedure, on grounds of conflicts of interest, within 48 hours. Where an objection is raised, either the Chief Executive Officer of the Clearing House or the Chief Compliance Officer of the Clearing House shall discuss the perceived conflict of interest with the FCM Clearing Member within 24 hours and shall make a decision on whether an alternative representative needs to be identified for the purposes of sub-paragraph (ii) above;

- (D) the FCM Clearing Member shall be required to provide any information, copies or records and documents that may be reasonably requested, in connection with the examination of the Alleged Breach, to the Clearing House, save that the FCM Clearing Member shall not be compelled to disclose any information which it is prohibited from disclosing by virtue of Applicable Law or regulation, as a result of agreements signed with third parties or as a result of legal professional privilege (in which case the FCM Clearing Member shall provide the Clearing House with proof of such prohibition). The FCM Clearing Member is permitted to request that the Clearing House provides to it copies of the documentation it relies on during the investigation, provided that the Clearing House shall not be required to reveal any information which it deems to be confidential;
- (E) the Clearing House may send a representative (being either the representative identified as leading the investigation procedure on behalf of the Clearing House or another representative) to the FCM Clearing Member's offices at any time during normal business hours, having provided reasonable notice (proportionate to the seriousness of the Alleged Breach) to the FCM Clearing Member as part of the investigation procedure. The FCM Clearing Member shall only be entitled to refuse access to such representative in the event of a substantiated conflict of interest. The FCM Clearing Member shall make available all information, records, and documents kept by the FCM Clearing Member that may be reasonably required for the examination of the Alleged Breach, to the Clearing House's representative; and
- (F) the FCM Clearing Member shall exercise best efforts to procure the attendance of any of its directors, officers, employees, agents and representatives, as may be reasonably requested, at a specified time on reasonable notice (at either the offices of the Clearing House or at those of the FCM Clearing Member) in order to answer questions or to provide

explanations that may be relevant for the examination of the Alleged Breach.

(b) Report

Following the conclusion of the investigation procedure, the Clearing House shall notify the FCM Clearing Member and produce a written report (the "Report") in relation to the Alleged Breach and provide it to the FCM Clearing Member, within no more than 14 days from the notification by the Clearing House of the conclusion of the investigation procedure.

The Report shall contain the findings of the investigation, reference the provision of the FCM Rulebook allegedly breached by the relevant FCM Clearing Member and indicate the Clearing House's intended course of action in relation to the Alleged Breach, being either:

- (A) to proceed with Disciplinary Proceedings, in accordance with this Section, if the Clearing House believes that there is *prima facie* evidence of the Alleged Breach having been committed;
- (B) to discontinue these Disciplinary Proceedings and refer the matter to the Chief Executive Officer of the Clearing House to take action in accordance with the provisions of the FCM Rulebook if the Clearing House believes that there is *prima facie* evidence of the Alleged Breach having been committed but the sanctions set out in Section 8.4 (*Sanctions*) of this Section are, in the Clearing House's reasonable opinion, inadequate; or
- (C) to take no further action.

(c) Disciplinary Committee formation

Where the Clearing House determines that it wishes to proceed with Disciplinary Proceedings in accordance with paragraph 8.2.1(b)(A) of this Section (*Investigation Procedure*) above, it will convene a "**Disciplinary Committee**" consisting of:

- (A) The Chairman of the Risk Committee of the Clearing House, or his representative;
- (B) The Chief Compliance Officer of the Clearing House, or his representative;
- (C) The Chief Risk Officer of the Clearing House, or his representative, and
- (D) Two members of the Executive Committee of LCH Group.

Details of the precise composition of the Disciplinary Committee shall be provided to the FCM Clearing Member as part of the Report, as appropriate.

(d) FCM Clearing Member response

The FCM Clearing Member shall respond to the Disciplinary Committee, within 14 days of receiving a Report which indicates that the Clearing House intends to proceed with Disciplinary Proceedings, providing a statement of defense responding to the allegations.

If no response has been received by the Disciplinary Committee within 14 days or such extended period as has been agreed between the FCM Clearing Member and the Disciplinary Committee, the Clearing House shall be relieved of its obligations to follow the remaining steps of the investigation procedure (as set out in paragraph 8.2.1(e) (*Investigation procedure*) of this Section (*Investigation procedure*)) and the Disciplinary Committee may instead make a determination in respect of the Alleged Breach and issue its Recommendation to the Clearing House as provided for in paragraphs 8.2.1(g) and 8.2.1(h) (*Investigation procedure*) of this Section.

(e) Exploratory meetings

Once the FCM Clearing Member has responded to the Report, either the FCM Clearing Member or the Disciplinary Committee can, within 7 days, request a meeting with the other party to ask further questions and discuss the Alleged Breach (the "**Meeting**").

Unless otherwise agreed between the FCM Clearing Member and the Disciplinary Committee, the Meeting will be held at the Clearing House's offices in London, **provided that**, if appropriate, the Meeting may take place at the Clearing House's offices in New York, within 14 days from the request for a Meeting.

The Disciplinary Committee and the relevant FCM Clearing Member are each entitled to bring to the Meeting any person relevant to the Disciplinary Proceedings which includes but is not limited to the following:

- (A) relevant experts;
- (B) legal advisors; and
- (C) accounting advisors.

The Clearing House and/or the FCM Clearing Member shall only be entitled to object to the attendance by any of the above if there is a substantiated conflict of interest.

The Disciplinary Committee shall, in addition, invite the Clearing House representative that led the investigation procedure to attend the Meeting.

The Disciplinary Committee shall, subject to the provisions of these Disciplinary Proceedings, decide upon its own procedure for conducting the Meeting and considering and determining the matters to be discussed in the course of the Meeting, on the basis of the Report, the FCM Clearing Member's response to the Report, and such other information and documentation as the Disciplinary Committee considers appropriate. A secretary will be appointed to keep minutes of the Meeting.

The Disciplinary Committee may reasonably request further or other documentation and information from the FCM Clearing Member, save that the FCM Clearing Member shall not be compelled to disclose any information which it is prohibited from disclosing by virtue of Applicable Law or regulation, as a result of agreements signed with third parties or as a result of legal professional privilege (in which case the FCM Clearing Member shall provide the Clearing House with proof of such prohibition).

The matters discussed at the Meeting are confidential. The Disciplinary Committee and the FCM Clearing Member must ensure that any persons attending the Meeting are subject to a confidentiality agreement.

To ensure the efficiency of the Meeting, neither the Disciplinary Committee nor the FCM Clearing Member shall bring more than six representatives, unless otherwise agreed.

(f) Determination

Having considered the Report, the FCM Clearing Member's response to the Report, any other information and documentation provided to the Disciplinary Committee in accordance with paragraph (e) of Section 8.2.1 (*Investigation procedure*) and having conducted the Meeting, the Disciplinary Committee must determine whether, in its view, the Alleged Breach has been committed.

The Disciplinary Committee shall make its determination, in accordance with this Section 8.2.1(f) (*Investigation procedure*), by a majority of the attendees, **provided that** no determination shall be made without a quorum of three (3) Disciplinary Committee members being in attendance.

In the event of a tie, the Chairman shall have a casting vote.

For the avoidance of doubt, the Disciplinary Committee shall not be bound to comply with any rule of Applicable Law or court procedure in respect of the admissibility of evidence and may, in its discretion, accept, any finding of fact by:

- (A) a relevant Regulatory Body;
- (B) a Governmental Authority; or
- (C) the courts of England and Wales, the State of New York or the United States, in connection with a dispute.

(g) Recommendation

Within 7 days of the later of:

- (A) the FCM Clearing Member's response to the Report; and
- (B) the date of the Meeting, if applicable,

the Disciplinary Committee shall communicate its determination, made in accordance with Section 8.2.1(f) (*Investigation procedure*), to the Clearing House (the "**Recommendation**").

The Disciplinary Committee shall set out in its Recommendation the grounds on which the Disciplinary Committee has determined that the Alleged Breach has or has not been committed and its proposal as to the sanctions, if any, that should be imposed by the Clearing House upon the FCM Clearing Member pursuant to Section 8.4 (*Sanctions*).

This paragraph (g) is without prejudice to the rights of the Disciplinary Committee to recommend that these Disciplinary Proceedings be discontinued and refer the matter to the Chief Executive Officer of the Clearing House to take action in accordance with the provisions of the FCM Rulebook if the Disciplinary Committee has determined that the Alleged Breach has been committed but the sanctions set out in Section 8.4 (*Sanctions*) are, in the Disciplinary Committee's reasonable opinion, inadequate.

(h) Decision Notice

Following receipt of a Recommendation, pursuant to paragraph (g) above, the Clearing House must decide whether or not to sanction the FCM Clearing Member in accordance with Section 8.4 (*Sanctions*) or otherwise in accordance with the provisions of the FCM Rulebook.

For the avoidance of doubt, the Clearing House shall not be bound by the terms of the Recommendation of the Disciplinary Committee.

A decision by the Clearing House in accordance with this Section 8.2.1(h) (*Investigation procedure*) will be made by the Chief Executive Officer of the Clearing House or another suitably senior executive of the Clearing House.

Within 14 days of receiving a Recommendation, the Clearing House must notify the FCM Clearing Member of its decision by registered mail to the address notified to the Clearing House in its admission application (the "**Decision Notice**").

A Decision Notice shall include details of the grounds on which the Clearing House has come to its decision and the sanction(s), if any, to be imposed against the FCM Clearing Member by the Clearing House pursuant to Section 8.4 (*Sanctions*) below or otherwise in accordance with the provisions of the FCM Rulebook.

(i) Action

Notwithstanding any decision by the Clearing House to convene a Disciplinary Committee and to proceed with Disciplinary Proceedings in accordance with Sections 8.2.1(c) to (h) (*Investigation Procedure*) above, the Clearing House may at any time choose to:

- (A) discontinue the Disciplinary Proceedings;
- (B) determine that, in light of the relevant facts and circumstances, no sanction should be imposed upon the relevant FCM Clearing Member pursuant to Section 8.4 (*Sanctions*) below or otherwise in accordance with the provisions of the FCM Rulebook;
- (C) take alternative action in accordance with the provisions of the FCM Rulebook (including, without limitation, suspension or termination of the FCM Clearing Member's membership of the Clearing House pursuant to the FCM Rulebook and/or the issuance of a Default Notice in respect of such FCM Clearing Member in respect of the FCM Clearing Member pursuant to the Default Rules), in which case the Clearing House shall be deemed to have instituted Disciplinary Proceedings in respect of the Alleged Breach; or
- (D) amend the scope of matters being considered by the Disciplinary Committee by amending the Report to add, delete or alter any detail of the Alleged Breach or to add detail of an additional Alleged Breach. For the avoidance of doubt, where the Report is amended in this way, the provisions of this Section 8.2 (*Investigation procedure*) will apply (and, unless otherwise agreed between the FCM Clearing Member and the Disciplinary Committee, any timing specified in this Section 8.2 (*Investigation procedure*) will restart) in respect of the amended Report.

8.3 **Immediate measure**

- 8.3.1 Where the Alleged Breach comprises of a breach of:
 - (a) any of an FCM Clearing Member's obligations set out in the FCM Rulebook when such breach constitutes a threat to the integrity or safety of the Clearing House or increases the risk exposure of the Clearing House or other FCM Clearing Members;
 - (b) an FCM Clearing Member's obligation to satisfy the relevant membership criteria pursuant to Section 1 (FCM Clearing Member status) of these FCM Procedures;
 - (c) an FCM Clearing Member's obligation to provide information and reporting to the Clearing House pursuant to Section 1 (FCM Clearing Member status) of these FCM Procedures;
 - (d) an FCM Clearing Member's obligations to submit its clearing activity to audits and inspections pursuant to Section 1 (FCM Clearing Member status) of these FCM Procedures;
 - (e) an FCM Clearing Member's obligations to satisfy its record keeping requirements pursuant to Section 1 (FCM Clearing Member status) of these FCM Procedures;
 - (f) an FCM Clearing Member's obligation to furnish the Clearing House with margin by the required time in accordance with FCM Regulation 14 (*Margin and Collateral*) and Section 3 (*Financial Transactions*) of these FCM Procedures,

the Chief Executive Officer of the Clearing House or the Chief Compliance Officer of the Clearing House shall be entitled at their sole discretion to, (a) issue a letter to the relevant FCM Clearing Member, reminding such member of their obligations under the FCM Rulebook or (b) impose a fine on the FCM Clearing Member in accordance with Section 8.4 (Sanctions) without being required to follow the procedure set out in Section 8.2 (Investigation procedure) above. In such circumstances the Clearing House must notify the FCM Clearing Member of its decision and the sanction that is to be imposed by way of a Decision Notice.

8.4 **Sanctions**

- 8.4.1 The Clearing House shall be entitled, in its absolute discretion, to impose the following sanctions against an FCM Clearing Member, pursuant to this Section, **provided that** any such sanction is proportionate and commensurate with the seriousness of the Alleged Breach:
 - (a) to impose a fine or require the FCM Clearing Member to make any other form of payment in an amount which it considers appropriate;

- (b) public censure, by way of publishing all or part of the decision taken by the Clearing House pursuant to Disciplinary Proceedings on the website of the Clearing House;
- (c) suspension for a fixed period, as determined by the Clearing House in its sole discretion of one or all of the clearing services offered by the Clearing House;
- (d) issuance of a private warning or reprimand;
- (e) termination of the FCM Clearing Membership Agreement; and/or
- (f) any combination of the above.

8.5 **Disputing a decision**

Where an FCM Clearing Member wishes to dispute the Clearing House's decision to impose sanctions listed in Section 8.3 (*Immediate measure*) or 8.4 (*Sanctions*), an FCM Clearing Member may, within 28 days (or such longer period as the Chief Executive Officer of the Clearing House or the Chief Compliance Officer of the Clearing House may, at their discretion, direct) of receiving the Decision Notice in accordance with Section 8.2.1(h) (*Investigation procedure*) or 8.3 (*Immediate measure*), file an Appeal in accordance with Section 6 of these FCM Procedures. In the event that the FCM Clearing Member does not lodge an appeal within the relevant timeframe, the decision rendered by the Clearing House in connection with the Alleged Breach shall be final and binding. In the event that the FCM Clearing Member does lodge an appeal, the results of the appeal process shall be final and binding.

8.6 **Reporting and publication**

- 8.6.1 The Clearing House shall:
 - (a) report on its monitoring procedures in respect of the FCM Rulebook compliance and breaches of the FCM Rulebook to its Regulatory Body pursuant to Applicable Law and/or on the basis of any arrangements between the Clearing House and any Regulatory Body;
 - (b) immediately notify the Regulatory Body of a decision to suspend or terminate an FCM Clearing Member's membership rights or to issue a Default Notice in respect of an FCM Clearing Member (in each case in accordance with the FCM Rulebook);
 - (c) prepare and publish a general report on the application of these Disciplinary Proceedings, from time to time but at least once a year, **provided however that** only the details of those FCM Clearing Members who have defaulted or whose membership rights have been suspended or terminated by the Clearing House shall be disclosed; and
 - (d) be entitled to publish (i) breaches by its FCM Clearing Members of the criteria for FCM Clearing Member status pursuant to the FCM Clearing Membership Agreement, as prescribed for in the FCM

Rulebook; and (ii) breaches by its FCM Clearing Members for not disclosing the prices and fees of each of the FCM Clearing Services separately (including any applicable discounts and rebates and the conditions to benefit from them).

8.7 **Infringement of Applicable Law**

If the Clearing House finds, in the course of the investigation procedure, or otherwise, serious indications of a possible infringement of Applicable Law, it shall report the matter to the relevant Regulatory Body as soon as possible.