Chapter 7

Collateral

7.1 Acceptable Collateral

OTC Clear may, at its sole discretion, determine from time to time the types of assets which are acceptable as Collateral for purposes of Margin requirements and Rates and FX Contribution, and determine when any asset will cease to be acceptable as Collateral for such purposes. OTC Clear publishes the list of eligible Collateral on the HKEX website and updates it from time to time. OTC Clear reserves the right to change the list of eligible Collateral at its sole and absolute discretion. Assets previously posted to OTC Clear as Collateral but which no longer qualify as eligible Collateral will not be taken into account for the purposes of determining a Clearing Member's Margin Balance, Participating Margin Balance and CM Funded Contribution Amount and must be substituted with other eligible Collateral in order to meet a Clearing Member's Margin requirement and/or Rates and FX Liability. Assets previously posted to OTC Clear as Collateral but which no longer qualify as eligible Collateral will remain in each Clearing Member's relevant Collateral Account until they are withdrawn.

7.2 Cash Collateral

Pursuant to Clearing Rules 1213 and 1502, Collateral in the form of cash delivered by a Clearing Member for the purpose of satisfying its Margin requirements or its Rates and FX Liability will be transferred outright to OTC Clear.

7.3 Non-cash Collateral

OTC Clear currently accepts non-cash Collateral from Clearing Members only for the purposes of satisfying Margin (except Participating Margin) requirements. OTC Clear currently does not accept non-cash Collateral for the purpose of satisfying a Clearing Member's Rates and FX Liability.

OTC Clear currently accepts from Clearing Members (i) House Bond Connect Securities in respect of its House Position Account and (ii) Client Bond Connect Securities in respect of its Client Clearing Category 1 Position Account relating to that Client Clearing Category 1 Client.

OTC Clear will only accept Client Bond Connect Securities as Collateral in respect of a Client Clearing Category 1 Position Account if such Bond Connect Securities are delivered by the relevant Client Clearing Category 1 Client directly to OTC Clear.

OTC Clear currently does not accept Bond Connect Securities from Clearing Members in respect of a Client Clearing Category 2 Position Account.

Pursuant to Clearing Rule 1213, non-cash Collateral delivered by a Clearing Member to satisfy its Margin requirements will be transferred by way of security interest.

A Clearing Member who intends to post non-cash Collateral for the purposes of satisfying its Margin (except Participating Margin) requirements must:

(i) execute a valid Deed of Charge in OTC Clear's standard form*; and

^{*} The standard form Deed of Charge is available from OTC Clear upon request.

(ii) complete all perfection requirements in all relevant jurisdictions to the satisfaction of OTC Clear.

OTC Clear only accepts non-cash Collateral delivered to it at its account at its sub-custodian specified for the relevant type of eligible non-cash Collateral.

OTC Clear will not accept a Clearing Member's non-cash Collateral if the documents required by OTC Clear have not been duly executed and all necessary perfection requirements in all relevant jurisdictions have not been completed within the necessary timeframe. Non-cash Collateral credited to a Clearing Member's Collateral Account will not be allowed to be used except as provided for under the Clearing Rules or these Clearing Procedures, or transferred or withdrawn by the Clearing Member unless with the express permission of OTC Clear.

7.4 Collateral Concentration Limit

Pursuant to Clearing Rule 1214, OTC Clear may impose a limit on the aggregate value of any particular type of Collateral (each, a "**Collateral Concentration Limit**") delivered by a Clearing Member for purposes of satisfying its Margin requirements for, among others, the following reasons:

- to avoid undue concentration of Collateral in a particular asset class, type of security, obligor, etc. For example, OTC Clear may impose an upper limit on the aggregate value attributable by a particular type of Collateral to be no more than a specific percentage of the Margin Balance; or
- (ii) to restrict the maximum amount of non-cash Collateral a Clearing Member may provide to OTC Clear for its Margin requirements in respect of each of its Position Accounts.

OTC Clear will, from time to time, notify Clearing Member of the relevant Collateral Concentration Limit.

For the avoidance of doubt, application of sub-paragraph (i) above may extend to any Collateral delivered by a Clearing Member to OTC Clear. OTC Clear may impose a Collateral Concentration Limit to restrict the maximum amount of Collateral in a particular Eligible Currency or Collateral type that may be delivered by a Clearing Member for the purpose of satisfying the Margin requirements with respect to each of its Position Accounts.

The situations described in this section 7.4 are not exhaustive, and OTC Clear shall have the right to, after consultation with the Risk Management Committee, impose any new, or cancel any existing, Collateral Concentration Limit and will notify Clearing Members of any such change. OTC Clear does not intend to, and shall not be under any obligation to, consult with the Risk Management Committee in respect of any calibration changes to the existing Collateral Concentration Limits.

7.4A Collateral Concentration Limit for Participating Margin

OTC Clear may impose a limit to restrict the maximum amount of cash in each Eligible Inter-CCP Currency that may be delivered by a Clearing Member for the purposes of satisfying its Participating Margin requirement.

7.5 Collateral Valuation

7.5.1 Collateral Haircuts

When determining whether each Clearing Member's Margin Balance and Participating Margin Balance and Rates and FX Contribution are sufficient to cover its Margin requirement and its Rates and FX Liability, respectively, OTC Clear will value the assets in such Clearing Member's Collateral Accounts and GF Account at their market value less any applicable valuation discount or haircut stipulated by

OTC Clear ("Collateral Haircut"). OTC Clear publishes the relevant Collateral Haircut for each asset type on the HKEX website and updates it from time to time.

The Collateral Haircut applicable to each type of asset will be determined by OTC Clear based on the calibration result and wrong-way risk back testing referred to in section 7.5.2, and subject to change from time to time pursuant to Clearing Rule 1214. For the avoidance of doubt, Collateral Haircut may apply on both cash and non-cash Collateral, but does not apply for the purpose of determining the value of any Collateral to be redelivered to Clearing Members pursuant to these Clearing Rules. In respect of any Collateral, OTC Clear will review the applicable Collateral Haircut on a monthly basis and will notify Clearing Members of any change of in Collateral Haircut.

7.5.2 Wrong-way Risk

7.5.2.1 General Wrong-way risk

Wrong-way risk can be generally defined as the adverse effect that the inclusion of a particular transaction or asset might create on an existing portfolio. In this context, it refers to an aspect of risk that tends to increase the overall risk exposure of a portfolio or where collateral posted to mitigate the overall risk exposure of a portfolio does not decrease such risk on a dollar by dollar basis.

For example, wrong-way risk may arise in a situation where a Clearing Member who trades gold futures posts gold as collateral. Although OTC Clear currently does not provide clearing service for gold futures, the intention of the above example is to give some context as to how collateral may create wrong-way risk. OTC Clear will determine and measure any wrong-way risk by comparing the value-at-risk of the portfolio with and without the relevant Collateral. To manage any wrong-way risk concern for Collateral, OTC Clear may request additional and/or other form of Collateral from Clearing Members.

7.5.2.2 Specific Wrong-way risk

Specific wrong-way risk is the risk that Collateral would likely lose value in the event that a Clearing Member providing the Collateral defaults, OTC Clear will mitigate such risk through the imposition of, and/or adjustment to, Collateral Concentration Limit(s) and Collateral Haircut(s) as set out in sections 7.4 and 7.5.1, respectively.

7.5.3 Valuation

All Collateral will be valued or marked-to-market at least once a day using current market data and quotes, and any such valuation will take into account the application of Collateral Haircut referred to in section 7.5.1. At any given time:

- (i) any cash Collateral denominated in an Eligible Currency or Eligible Inter-CCP Currency other than the Base Currency will be valued at the Base Currency equivalent at such rate prevailing at the time of the conversion as OTC Clear shall reasonably select;
- (ii) any non-cash Collateral will be valued by OTC Clear by reference to the latest market prices available for such non-cash Collateral obtained from external market sources. Once OTC Clear is in receipt of the latest market prices for the non-cash Collateral, it will generate the mid or mean price for the purpose of valuing such non-cash Collateral. On any given day, if the latest market prices for any non-cash Collateral is not available from the external market sources, OTC Clear will determine the valuation of any such non-cash Collateral based on, among others, the following methodologies:
 - (a) the last available traded price of the relevant asset; and/or

- (b) the price performance of proxy instruments issued by the same issuer or its affiliates for the relevant asset; and
- (iii) in respect of any non-cash Collateral provided by a Clearing Member to OTC Clear as its Initial Margin or Additional Margin, subsequent to liquidation of any such non-cash Collateral during a Default Management Process, such non-cash Collateral will be given a value equal to the value obtained by OTC Clear during the liquidation process and attached to the Total Available Resources relating to such Default Management Process.

Pursuant to section 4.5.2 of these Clearing Procedures, a Clearing Member may be required to transfer additional Collateral to OTC Clear if the Margin Balance or Participating Margin Balance or the Rates and FX Contribution Balance, as applicable, decreases due to either market movement affecting the value of such Collateral or change in the applicable Collateral Haircut. OTC Clear may also require Clearing Members to post additional Collateral types due to wrong-way risk concerns.

7.6 Treatment of Collateral

7.6.1 Cash Collateral

7.6.1.1 Margin

OTC Clear may invest with a conservative policy in respect of any Initial Margin, Routine Intra-day Variation Margin, Ad Hoc Intra-day Variation Margin, Additional Margin, or Participating Margin delivered in the form of cash by Clearing Members. OTC Clear may utilise some or all the cash Collateral transferred outright to it as Participating Margin to satisfy its obligations to post Inter-CCP OTCC Margin Amount to the Special Clearing House Participant.

OTC Clear will, on a monthly basis, pay a return calculated on a daily basis to Clearing Members in respect of any Initial Margin, Routine Intra-day Variation Margin, Ad Hoc Intra-day Variation Margin or Additional Margin delivered in the form of cash and comprising the Margin Balance as at the end of each OTC Clear Clearing Day at a prevailing bank savings rate*.

OTC Clear will, on a quarterly basis, pay a return calculated on a daily basis to Clearing Members in respect of Participating Margin delivered in the form of cash and comprising the Participating Margin Balance as at each Northbound Clearing Day at a rate determined by OTC Clear from time to time. OTC Clear reserves the right to deduct any administrative costs from any interest to be paid.

For the avoidance of doubt, in the event that the average of such rates in respect of a particular Eligible Currency or Eligible Inter-CCP Currency is a negative rate, Clearing Members shall be required to pay to OTC Clear an amount equal to the absolute value of such rate multiplied by the portion of their Margin Balance or Participating Margin Balance that comprises cash Collateral in such Eligible Currency or Eligible Inter-CCP Currency. Any loss arising from the investment activities is for OTC Clear. The obligation of OTC Clear to redeliver Margin in cash will not be affected by the investment performance.

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For the purposes of 7.6.1.1, prevailing bank savings rate is the average prevailing savings rate of the three note issuing banks. The prevailing savings rate of each note issuing bank will be determined by OTC Clear with reference to the savings rates published or the savings rates notified to depositors via other means by such note issuing bank as well as any costs or charges imposed by such note issuing bank with respect to the relevant Eligible Currency.

7.6.1.2 Guarantee Fund

OTC Clear may invest with a conservative policy in respect of any Rates and FX Contribution delivered in the form of cash by Clearing Members. Any positive returns from such investment will form part of OTC Clear Contribution pursuant to section 6.4 of these Clearing Procedures. For the avoidance of doubt, any loss arising from the investment activities is for OTC Clear except for any losses incurred due to charges, costs or negative interest rates. The obligation of OTC Clear to redeliver Rates and FX Contribution in cash will not be affected by the investment performance.

7.6.2 Non-Cash Collateral*

Non-cash Collateral delivered to OTC Clear by a Clearing Member for purposes of satisfying its Margin requirements except Participating Margin will be transferred to OTC Clear by way of security interest with no right of rehypothecation pursuant to Clearing Rule 1213.

Each Clearing Member will bear the risk for any loss and gain on the value of the non-cash Collateral, taking into account the deduction required to reflect any accommodation charges, administration costs or commitment fees for credit lines incurred by OTC Clear in respect of such non-cash Collateral. Each of such fees will be set out in Appendix I to the Clearing Procedures.

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OTC Clear currently accepts non-cash Collateral from Clearing Members only for the purposes of satisfying Margin requirements except Participating Margin requirements. OTC Clear currently does not accept non-cash Collateral for the purpose of satisfying a Clearing Member's Participating Margin requirements and Rates and FX Liability.