SECURITIES AND FUTURES COMMISSION
證券及期貨事務監察委員會

Consultation Paper on the OTC derivatives regime for Hong Kong – Proposed margin requirements for non-centrally cleared OTC derivative transactions

19 June 2018

Table of contents

Foreword

The Securities and Futures Commission (**SFC**) invites market participants and interested parties to submit written comments on the proposals discussed in this consultation paper or to comment on related matters that might have a significant impact upon the proposals by no later than 20 August 2018. Any person wishing to comment on the proposals on behalf of any organisation should provide details of the organisation whose views they represent.

Please note that the names of the respondents and the contents of their submissions may be published on the SFC's website and in other documents to be published by the SFC. In this connection, please read the Personal Information Collection Statement attached to this consultation paper.

You may not wish your name or submission to be published by the SFC. If this is the case, please state that you wish your name, submission or both to be withheld from publication when you make your submission.

Written comments may be sent as follows:

By mail to: Securities and Futures Commission
35/F Cheung Kong Center
2 Queen's Road Central
Hong Kong

Re: Consultation Paper on the OTC derivatives regime for Hong Kong – Proposed margin requirements for non-centrally cleared OTC derivative transactions

By fax to: (852) 2523 4598

By online submission: www.sfc.hk/edistributionWeb/gateway/EN/consultation/

By e-mail to: otcmargin_consultation@sfc.hk

All submissions received before expiry of the consultation period will be taken into account before the proposals are finalised and a consultation conclusions paper will be published in due course.

Securities and Futures Commission
Hong Kong

19 June 2018

Personal information collection statement

1. This Personal Information Collection Statement (**PICS**) is made in accordance with the guidelines issued by the Privacy Commissioner for Personal Data. The PICS sets out the purposes for which your Personal Data[1] will be used following collection, what you are agreeing to with respect to the SFC's use of your Personal Data and your rights under the Personal Data (Privacy) Ordinance (Cap. 486) (**PDPO**).

Purpose of collection

2. The personal data provided in your submission to the SFC in response to this consultation paper may be used by the SFC for one or more of the following purposes:

   (a) To administer the relevant provisions[2] and codes and guidelines published pursuant to the powers vested in the SFC.

   (b) In performing its statutory functions under the relevant provisions.

   (c) For research and statistical purposes.

   (d) For other purposes permitted by law.

Transfer of personal data

3. Personal data may be disclosed by the SFC to members of the public in Hong Kong and elsewhere as part of the public consultation on this consultation paper. The names of persons who submit comments on this consultation paper, together with the whole or any part of their submissions, may be disclosed to members of the public. This will be done by publishing this information on the SFC website and in documents to be published by the SFC during the consultation period or at its conclusion.

Access to data

4. You have the right to request access to and correction of your personal data in accordance with the provisions of the PDPO. Your right of access includes the right to obtain a copy of your personal data provided in your submission on this consultation paper. The SFC has the right to charge a reasonable fee for processing any data access request.

Retention

5. Personal data provided to the SFC in response to this consultation paper will be retained for such period as may be necessary for the proper discharge of the SFC's functions.

---

[1] Personal data means personal information as defined in the Personal Data (Privacy) Ordinance (Cap. 486).
[2] The term "relevant provisions" is defined in section 1 of Part 1 of Schedule 1 to the Securities and Futures Ordinance (Cap. 571) and refers to the provisions of that Ordinance together with certain provisions in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32), the Companies Ordinance (Cap. 622) and the Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance (Cap. 615).

Enquiries

6. Any enquiries regarding the personal data provided in your submission on this consultation paper, requests for access to personal data or correction of personal data should be addressed in writing to:

The Data Privacy Officer

The Securities and Futures Commission
35/F Cheung Kong Center
2 Queen's Road Central
Hong Kong

7. A copy of the Privacy Policy Statement adopted by the SFC is available upon request.

Abbreviations and acronyms

AI	Authorised institution
BCBS FX Supervisory Guidance	Supervisory Guidance for Managing Risks Associated with the Settlement of Foreign Exchange Transactions issued by BCBS
BCBS-IOSCO Margin Requirements	Margin requirements for non-centrally cleared derivatives
CCP	Central counterparty
ESA	European Supervisory Authorities
FRR	Securities and Futures (Financial Resources) Rules
FX	Foreign exchange
HKMA	Hong Kong Monetary Authority
IM	Initial margin
IRB	Internal Ratings Based
PDPO	Personal Data (Privacy) Ordinance (Cap. 486)
PICS	Personal Information Collection Statement
SFC	Securities and Futures Commission
SFO	Securities and Futures Ordinance
VM	Variation margin
WGMR	Working Group on Margining Requirements

I. Background

1. In September 2013, the SFC released consultation conclusions on the primary legislation for the regulation of OTC derivatives[3]. The Securities and Futures (Amendment) Ordinance 2014 was enacted in 2014.

2. In March 2015, the Working Group on Margining Requirements (**WGMR**), with participation by members of BCBS[4] and IOSCO[5], published the report *Margin requirements for non-centrally cleared derivatives* (**BCBS-IOSCO Margin Requirements**)[6]. This report sets out the standards for margin requirements for non-centrally cleared OTC derivatives.

3. The SFC is seeking comments from the public on proposals to implement margin requirements for non-centrally cleared OTC derivatives set out in the BCBS-IOSCO Margin Requirements.

4. The proposed variation margin (**VM**) requirements will apply to a licensed corporation which is a contracting party[7] to a non-centrally cleared OTC derivative transaction[8] entered into with a covered entity[9] (**covered entity**, described further in paragraph 8 below) when the licensed corporation itself or the group to which it belongs has an average aggregate notional amount[10] of non-centrally cleared OTC derivatives exceeding HK$15 billion[11]. These licensed corporations may also be subject to the proposed initial margin (**IM**) requirements if the average aggregate notional amount of non-centrally cleared OTC derivatives on a group basis exceeds HK$60 billion, as explained further in this consultation paper.

5. The proposed requirements would not apply to authorised institutions (**AI**), nor to approved money brokers (within the meaning of the Banking Ordinance). These entities would continue to be overseen and regulated by the HKMA.

---

[3] Joint Supplemental Consultation Conclusions on the OTC Derivatives Regime in Hong Kong – Proposed Scope of New/Expanded Regulated Activities and Regulatory Oversight of Systemically Important Participants (September 2013).

[4] Basel Committee on Banking Supervision.

[5] International Organization of Securities Commissions.

[6] Available at www.bis.org/bcbs/publ/d317.pdf.

[7] A contracting party refers to a party which enters into a non-centrally cleared OTC derivative transaction as principal, whether contracting directly or through an agent.

[8] Other than excluded transactions, see section III, Instruments subject to the proposed margin requirements below.

[9] See the terminology section of Appendix 1 for details.

[10] The average aggregate notional amount is calculated as the average of the total gross notional amount of month-end positions of non-centrally cleared OTC derivatives for the March, April and May preceding the 1 September starting date in the year when margin should start to be exchanged.

[11] Licensed corporations should also take note of the risk mitigation standards proposed in the SFC's consultation paper issued in December 2017 on (1) the OTC derivatives regime for Hong Kong – Proposed refinements to the scope of regulated activities, requirements in relation to OTC derivative risk mitigation, client clearing, record-keeping and licensing matters; and (2) Proposed conduct requirements to address risks posed by group affiliates.

II. Overview of proposed margin requirements

6. The BCBS-IOSCO Margin Requirements present standards for margining non-centrally cleared OTC derivative transactions. These standards can:

   (a) reduce contagion and spillover effects and therefore reduce systemic risk; and

   (b) promote central clearing by subjecting non-centrally cleared OTC derivative transactions to higher costs.

7. The exchange of margin is important to mitigate systemic risk as well as counterparty credit risk. To strike an appropriate balance between the benefits of the proposed margin requirements and their operational costs and liquidity impact on market participants, we believe that it is appropriate to require the exchange of margin where, on a group basis, both counterparties have large non-centrally cleared OTC derivative exposures. Accordingly, we propose that the margin requirements apply to a licensed corporation as contracting party to non-centrally cleared OTC derivative transactions entered into with a covered entity where the volume of such transactions exceeds the pre-defined thresholds referred to in paragraph 4 above, instead of confining the application of the requirements to firms licensed for Type 11 regulated activities.

8. We propose that covered entities include financial counterparties, significant non-financial counterparties and other entities designated by the SFC as financial counterparties or significant non-financial counterparties, but exclude sovereigns and central banks, the HKSAR, public sector entities, multilateral development banks and the Bank for International Settlements. This is generally in line with the BCBS-IOSCO Margin Requirements.

9. A financial counterparty refers to an entity (or the group to which it belongs) which has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$15 billion. A non-financial counterparty is regarded as significant if the entity itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$60 billion. The counterparties covered by the proposed margin requirements are listed in Appendix 1.

10. We consider that transactions with a non-financial counterparty which are not significant need not be subject to margin requirements, as they may be (a) regarded as posing little or no systemic risk, and (b) exempt from central clearing requirements under most national regimes.

11. We recognise that significant non-financial counterparties may actively engage in non-centrally cleared OTC derivatives transactions for hedging purposes, and that hedging serves a legitimate purpose in managing risks related to commercial business in the real economy. Consequently, we propose that a licensed corporation may choose not to exchange margin with a significant non-financial counterparty which uses non-centrally cleared OTC derivatives predominantly for hedging. Nevertheless, if in the future the cumulative volume of non-margined hedging by significant non-financial counterparties individually or collectively gives rise to systemic risk, this exemption may need to be reviewed.

12. We do not believe it is appropriate to extend this exemption to financial counterparties. By their nature, financial counterparties are more interconnected with other firms in the financial ecosystem and may therefore present more systemic risk.

13. We plan to set out the proposed margin requirements in Schedule 10 of the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. The proposed requirements are set out in Appendix 1 of this consultation paper.

> Q1. Do you have any comments on the proposed scope of licensed corporations subject to the requirements and the types of counterparties constituting the covered entities? Is it appropriate to exclude transactions with a significant non-financial counterparty which engages in OTC derivatives predominantly for hedging? Would such an exclusion pose systemic risk concerns?

III. Instruments subject to the proposed margin requirements

14. The proposed margin requirements do not apply to derivative transactions that are cleared by a clearing member on behalf of a non-member or a non-member's client as long as they (i) are subject to the margin requirements of the central counterparty (**CCP**); or (ii) provide margin consistent with the relevant corresponding CCP's margin requirements. The first limb covers situations where a non-member or its client directly clears transactions with a CCP with the support of a guarantee from a clearing member. The second limb corresponds to scenarios where the clearing member collects margin for the indirectly cleared derivatives in accordance with the CCP's margin requirements.

15. The proposed margin requirements will apply to all derivative transactions not cleared by a CCP, except for certain types of transactions which may merit exclusion from the margin requirements because of their characteristics. We propose that:

    (a) physically settled foreign exchange (FX) forwards and FX swaps, and the "FX transaction" embedded in cross-currency swaps associated with the exchange of principal, be exempt from IM requirements, and

    (b) these instruments also be exempt from VM requirements, except when the covered entity is an AI, a licensed corporation or an entity that carries on a business outside Hong Kong engaged in banking, securities, derivatives or asset management[12].

16. Requiring the exchange of VM is a sound prudential measure that mitigates licensed corporations' firm-specific risk and limits the build-up of systemic risk. The policy expectation under the BCBS-IOSCO Margin Requirements includes the need for VM exchange for physically settled FX forwards and FX swaps. BCBS and IOSCO recognised that exchanging VM for such derivatives is a common and established

[12] For the avoidance of doubt, this seeks to cover the asset manager, but not the funds managed by the manager.

practice among significant market participants. BCBS' *Supervisory Guidance for Managing Risks Associated with the Settlement of Foreign Exchange Transactions* (**BCBS FX Supervisory Guidance**) recommends that a bank employ prudent risk mitigation regimes to properly identify, measure, monitor and control replacement cost risk for FX transactions until settlement has been confirmed and reconciled[13]. The Financial Stability Board in its report on the Peer Review of Hong Kong[14] recommended that the regulatory authorities should consider applying VM requirements to physically-settled FX forwards and swaps. Our proposal is also consistent with the approach in the EU[15] and the US[16]. As we propose that the VM requirement be limited to transactions with AIs, licensed corporations or entities with similar business overseas, this should minimise the operational burden on end users.

17. We understand that it is common for market participants to enter into FX security conversion transactions to facilitate the purchase or sale of foreign securities. These transactions serve a very specific purpose and, but for the settlement cycle of the relevant securities transaction, would have essentially been FX spot contracts. FX security conversion transactions are excluded from mandatory reporting requirements and are defined as "excluded currency contracts" in Rule 2 of the Securities and Futures (OTC Derivative Transactions – Reporting and Record Keeping Obligations) Rules. Excluded currency contracts are defined with a T+7 day cap on the settlement period and are so short-dated that the systemic risk implications of not subjecting them to margin requirements would be limited. Further, there may be a large number of counterparties which need to enter into FX security conversion transactions for business purposes. We believe that for FX users, on balance, the operational burden of setting up the margining infrastructure outweighs the limited risk reduction benefits of collateralising such short-dated risks. Accordingly, we propose that excluded currency contracts should be excluded from all margin requirements.

18. We note that physically-settled commodity forwards are exempt from the margin requirements of other regimes, including the US, Japan and Singapore. Given that the volume of physically-settled commodity forwards traded by licensed corporations is not significant and that they tend to be used for hedging needs in the real economy, we propose that such derivatives be exempt from the margin requirements.

19. We also propose that the margin requirements for non-centrally cleared single-stock options, equity basket options and equity index options be applied from 1 March 2020. This implementation timetable is aligned with HKMA's timeline.

---

[13] Available at: www.bis.org/publ/bcbs241.htm. Guideline 3 recommends that banks should use legally enforceable collateral arrangements and should have an explicit policy on margin, eligible collateral and haircuts to reduce replacement cost risk. Banks should exchange the full amount of VM necessary to fully collateralise the mark-to-market exposure to physically settled FX swaps and forwards with counterparties that are financial institutions and systemically important non-financial entities.

[14] Issued on 28 February 2018 and available at: www.fsb.org/wp-content/uploads/P280218-1.pdf.

[15] On 19 December 2017, the European Supervisory Authorities (**ESA**) published draft Regulatory Technical Standards amending the framework of the European Market Infrastructure Regulation with regard to physically settled FX forwards (www.eba.europa.eu/documents/10180/2065831/Joint+Draft+RTS+on+margin+requirements+for+non-centrally+cleared+OTC+derivatives+%28JC-2017-79%29.pdf). The ESA proposal exempts physically settled FX forwards from VM requirements, other than transactions between 'institutions' (i.e. credit institutions or investment firms).

[16] On 23 December 2013, the US Federal Reserve issued a letter SR 13-24 (www.federalreserve.gov/supervisionreg/srletters/sr1324.htm) stating that the large financial institutions should apply the seven guidelines published in the BCBS FX Supervisory Guidance to their foreign exchange activities.

Q2. Do you have any comments on the instruments excluded from the proposed margin requirements, or the application of the requirements to single-stock options, equity basket options and equity index options starting only from 1 March 2020?

IV. Proposed margin requirements

Initial margin (IM) requirements

20. IM protects a party to non-centrally cleared OTC derivative transactions from the potential future exposure which could arise from future changes in the mark-to-market value of the contract during the time it takes to close out and replace the positon if its counterparty defaults. The exchange of IM on a net basis may not be sufficient to protect two market participants with large gross derivative exposures to each other should one default or become insolvent, thereby undermining the purpose of the proposed margin requirements. Therefore, we propose that a licensed corporation should exchange (ie, post and collect) IM on a gross basis with a covered entity to the non-centrally cleared OTC derivative transactions.

21. In certain situations, a licensed corporation may not face any counterparty risk. For example, an option seller receiving full payment of the premium upfront does not have any potential future exposure to the counterparty, and therefore should be able to choose not to collect IM for these types of OTC derivatives as long as the option seller is not exposed to any counterparty credit risk.

Calculating IM

22. The methodologies for calculating IM should reflect the potential future exposure associated with non-centrally cleared OTC derivatives in the same netting set and fully cover all counterparty risk exposures with a high degree of confidence. A netting set is defined as a group of transactions with a single counterparty which is subject to a legally enforceable bilateral netting agreement[17].

23. Robust quantitative portfolio margin models which have been appropriately calibrated, tested, reviewed and validated can provide a more risk-sensitive means to quantify the

[17] A bilateral netting agreement means an agreement between the licensed corporation and the counterparty with whom it maintains positions in non-centrally cleared OTC derivative transactions under which each party has a single obligation to the other in respect of all such transactions covered by the agreement and which provides that, in the event that the counterparty fails to comply with its obligation under the agreement, the licensed corporation will have (a) a single claim to receive only the net amount of the aggregate positive mark-to-market value of any transaction covered by the agreement, calculated by deducting from the aggregate positive mark-to-market value of any transaction covered by the agreement the aggregate negative mark-to-market value of any other transaction covered by the agreement; or (b) a single obligation to pay only the net amount of the aggregate negative mark-to-market value of any transaction covered by the agreement, calculated by deducting from the aggregate negative mark-to-market value of any transaction covered by the agreement the aggregate positive mark-to-market value of any other transaction covered by the agreement.

potential future exposure and thus calculate IM. However, there may be instances where a simpler, less risk-sensitive approach to calculating IM is warranted. For example, some market participants may lack the necessary skills and expertise to develop and maintain their own quantitative portfolio margin model and may not wish to rely on their counterparty's model. Other market participants may simply prefer having a straightforward and transparent approach to calculating IM that is easy to operate. To cater for this, we propose that the required amount of IM may be calculated by reference to either (a) a standardised margin schedule (**standardised approach**); or (b) a quantitative portfolio margin model (**model approach**).

24. A licensed corporation may opt for either approach for calculating IM for each asset class. However, the choice of which approach to use to calculate IM should be made consistently over time for all transactions within the same asset class. This does not preclude a licensed corporation from changing its approach for legitimate reasons. However, a licensed corporation should not switch between the two approaches to obtain the most favourable IM calculations.

25. The proposed standardised approach is largely in line with the BCBS-IOSCO Margin Requirements and is set out in Annex A of the proposed requirements in Appendix 1.

26. If a licensed corporation chooses to adopt the model approach then it needs to obtain approval in writing from the SFC before it can use an internally-developed or third-party IM model. This is because even when a licensed corporation adopts an industry-developed modelling methodology, each user may (a) calculate risk factor sensitivities differently using its own system, model library, curves, volatility surfaces or market data sets; or (b) have different risk mappings for the same trade. The licensed firm should also consider whether there are liquidity or concentration risks in its OTC derivatives portfolio which are not fully addressed in the industry-developed modelling methodology or third-party model.

27. We propose that the IM model should calculate an estimate of the change in potential future exposure of the non-centrally cleared OTC derivatives to a one-tailed 99% confidence interval over a 10-day horizon, calibrated using three to five years of historical data, with at least 25% of this data from a period of significant financial stress[18]. Calibration using historical data which reflects a period of significant financial stress is critical to ensure that the amount of IM available is not procyclical and is sized appropriately, ie, that there is sufficient margin when it is needed most.

28. Whilst we recognise that derivatives portfolios can be subject to offsetting risks, modelling and quantifying the benefits derived from diversification, hedging and risk offsets can be challenging and may even become unreliable, particularly when interrelationships and correlations break down across different asset classes in times of market stress. Accordingly, we propose that an IM model may account for the benefits derived from the diversification, hedging and risk offsets of non-centrally cleared OTC derivatives within the same asset class (covered by the same legally enforceable netting agreement), but not across different asset classes.

29. Details of the proposed model requirements, including the model parameters, calculations and governance are set out in Annex B of the proposed requirements in Appendix 1. These proposed requirements seek to ensure the IM amounts are

[18] There are similar model calibration data requirements in the EU and HKMA's regimes.

calculated in an appropriately risk-sensitive manner using a sound methodology and that the model itself is well designed and correctly implemented.

30. Non-centrally cleared OTC derivatives transactions conducted in today's global market may well be subject to the margin requirements of multiple regimes. There may also be differences in the types of instruments that are subject to margin requirements across jurisdictions. To address the impact of such differences and to facilitate efficient risk management and risk monitoring, we propose that a licensed corporation may agree with its counterparty to include non-centrally cleared OTC derivatives that are otherwise out of scope (from the margin requirements to which the licensed corporation is subject) in the same netting set as the in-scope portfolio when calculating IM, as long as this is done consistently and on an ongoing basis. This proposal also applies to the calculation of VM.

IM threshold

31. To minimise the operational burden, we propose that a licensed corporation may agree with the counterparty not to exchange IM if the amount due is equal to or lower than HK$375 million (**IM threshold**), which is applied at the level of the consolidated group to which the licensed corporation and the counterparty belong and is based on all non-centrally cleared OTC derivatives outstanding between the two consolidated groups. Applying the IM threshold on a consolidated group basis is an anti-avoidance measure which prevents market participants from circumventing the proposed margin requirements simply by establishing and effecting non-centrally cleared OTC derivative transactions through affiliates or other legal entities within the group. A licensed corporation, its counterparty and their respective groups may agree on how the group IM threshold is allocated at the entity level[19].

32. The licensed corporation should have adequate and appropriate systems and controls in place to ensure that any allocated IM threshold is not exceeded.

Treatment of IM collected

Safekeeping

33. If the posting counterparty defaults, how IM is held by the collecting party may determine how effectively IM protects the collecting party from loss. Hence, to ensure IM collected by the licensed corporation is protected against the risk of default or insolvency of the counterparty, we propose that a licensed corporation as the collecting party should:

(a) ensure that appropriate collateral arrangements, including credit support arrangements, are in place and are legally effective in the event that the posting party defaults or becomes insolvent; and

(b) ensure that IM collected is held in such a way that it is available in a timely manner to the licensed corporation in case the posting party defaults or becomes insolvent.

[19] To be clear, application of the IM threshold on a consolidated group basis applies to both the licensed corporation and its counterparty.

34. To ensure IM posted by a licensed corporation is properly segregated and protected against the risk of insolvency of the collecting counterparty, we also propose that a licensed corporation as a posting party should ensure that IM posted:

(a) is subject to arrangements that protect the licensed corporation to the extent possible under applicable law in the event that the collecting party defaults or becomes insolvent; and

(b) is segregated from the collecting party's proprietary assets by either placing the IM with a third-party custodian or through other legally effective arrangements to protect the IM from the default or insolvency of the collecting party.

35. In order to provide a similar level of protection to a counterparty which posts IM to a licensed corporation, we propose that a licensed corporation as the collecting party should provide the posting party with the option to have the IM that it posts segregated from the IM posted by other counterparties.

36. If a third-party custodian is used, we propose that the licensed corporation should ensure that:

(a) the custodian is not a group member of the collecting or posting party; and

(b) the financial condition and credit standing of the custodian is regularly monitored.

Rehypothecation, repledging and reuse of IM

37. Rehypothecating, repledging or reusing collected IM may result in the IM being commingled with the assets of other third parties. It may also grant third parties beneficial or legal title over the IM. This could lead to legal complications which may delay or prevent the return of rehypothecated assets to the posting party in the event that the collecting party defaults or become insolvent.

38. We recognise that the existing business models of some licensed corporations may involve the rehypothecation or repledging of collateral to facilitate the extension of credit to clients. To limit the risk arising from the rehypothecation of IM, we propose that IM collected from a counterparty may be rehypothecated, repledged or reused with a third party only for the purpose of hedging the licensed corporation's derivative positions arising out of transactions with the counterparty for which IM was collected, and must be subject to the conditions set out in paragraph 26 of Appendix 1 to this consultation paper.

Q3. Do you have any comments or concerns on the proposed IM requirements, including the IM modelling standards, the IM threshold and the treatment of IM collected?

Variation margin (VM) requirements

39. VM protects a counterparty to the non-centrally cleared OTC derivative transaction from the current exposure that has already been incurred by the counterparty arising from

changes in the mark-to-market value of the contract after the transaction has been executed.

40. We propose that a licensed corporation should exchange VM with a covered entity for a non-centrally cleared OTC derivative transaction when the licensed corporation itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$15 billion. This seeks to balance the systemic risk reduction benefits versus the operational costs of implementing the margin requirements, particularly for smaller, less sophisticated counterparties who may have limited non-centrally cleared OTC derivative exposures, by defining a threshold for the exchange of VM.

41. The VM amount exchanged should fully collateralise the current exposure of the transaction. To reduce adverse liquidity shocks and to mitigate counterparty credit risk, VM should be calculated and exchanged for those transactions subject to a single, legally enforceable netting agreement.

42. As explained in paragraph 30 above, a licensed corporation may agree with its counterparty to include non-centrally cleared OTC derivatives which are otherwise out of scope (from the margin requirements to which the licensed corporation is subject) within the in-scope portfolio for the purpose of calculating VM, as long as this is done consistently and on an ongoing basis, to account for cross-border effects and different jurisdictions' definitions of what constitutes in-scope non-centrally cleared OTC derivatives.

43. As discussed in paragraph 11 above, a licensed corporation may elect not to exchange VM with a significant non-financial counterparty if the latter predominantly uses non-centrally cleared OTC derivatives for hedging purposes.

Q4. Do you have any comments or concerns about the proposed VM requirements?

Minimum transfer amount

44. To minimise the operational burden of transferring small amounts of margin, we propose that a licensed corporation may agree with its counterparty not to exchange margin if the amount of margin due is equal to or lower than a specified minimum transfer amount not exceeding HK$3.75 million.

Timing of the exchange of margin

45. To ensure counterparty exposures are adequately covered, margin should be calculated and exchanged frequently and in a timely manner. However, we are cognisant of the operational burden of exchanging margin on a daily basis, particularly for smaller, less sophisticated market participants and for cross-border transactions involving counterparties located in different time zones. Accordingly, to account for differences in the scale and complexity of licensed corporations' non-centrally cleared OTC derivative activities as well as cross-border effects, we have not proposed highly prescriptive requirements for the timing of margin collection.

46. We propose that IM should be called at the earliest time possible after either execution of a transaction or upon changes in measured potential future exposure. The IM amount for a given counterparty has to be recalculated at least every ten business days. Examples of events that may result in changes in measured potential future exposure include:

(a) the relevant netting set changes (eg, new transactions are conducted, existing transactions are terminated or expire);

(b) for licensed corporations using the model approach, changes to the IM model are made which affect IM amounts; or

(c) for licensed corporations using the standardised approach, changes are made to the classification of an existing contract to a specific asset category outlined in Annex A to Appendix 1 of the consultation paper.

47. We propose that VM should be calculated at least on a daily basis and be called at the earliest time possible after the trade date and from time to time thereafter.

48. We propose that IM and VM should be collected as soon as practicable within the standard settlement cycle for the relevant collateral type.

Assets eligible as margin

49. It is critical that assets collected as IM or VM by a licensed corporation hold their value. This is especially important in times of financial stress, when the counterparty may be at increased risk of default or insolvency and the licensed corporation may need to realise the value of the assets held as margin. Therefore, assets collected as margin should be highly liquid and should maintain their value in times of financial stress, even after applying appropriate haircuts. However, the benefits of protecting a licensed corporation from further losses against a counterparty's default or insolvency by requiring the exchange of liquid assets for margin need to be balanced against the liquidity strain that such a requirement will place on the wider financial system. Accordingly, restricting the assets eligible as margin to only the most liquid, high-quality assets such as cash or highly-rated sovereign bonds, may not be entirely appropriate.

50. We propose that the following collateral instruments be eligible as margin for both IM and VM, subject to appropriate haircuts in order to address their potential volatility:

(a) Cash in any currency;

(b) Marketable debt securities issued or fully guaranteed by a sovereign or a relevant international organisation;

(c) Marketable debt securities issued or fully guaranteed by a multilateral development bank;

(d) Marketable debt securities issued or fully guaranteed by a public sector entity;

(e) Other marketable debt securities;

(f) Gold; and

(g) Listed shares which are subject to a haircut percentage of 15% under Schedule 2 to the Securities and Futures (Financial Resources) Rules (**FRR**)[20], including:

   (i) Shares which are listed on a recognized stock market: being a constituent of the Hang Seng Index;

   (ii) Shares which are listed on a specified exchange in the United Kingdom other than shares which are listed on London Stock Exchange plc – SEAQ: being a constituent of the FTSE 100 Index;

   (iii) Shares which are listed on a specified exchange in the United States of America other than shares which are listed on the NASDAQ Stock Market LLC – NASDAQ Global Market or the NASDAQ Stock Market LLC – NASDAQ Global Select Market: being a constituent of the S&P 500 Index;

   (iv) Shares which are listed on a specified exchange in Japan other than shares which are listed on the Tokyo Stock Exchange, Inc. – JASDAQ: being a constituent of the Nikkei Stock Average;

   (v) Shares which are listed on a specified exchange[21], other than an exchange in the United Kingdom, the United States of America or Japan: being a constituent of the Euro Stoxx 50 Index.

51. To avoid exposure to excessive credit risk, we propose that the assets referred to in paragraph 50(b), (c), (d), (e) only be eligible as margin if they are associated with a credit quality of investment grade. A licensed corporation is expected to have appropriate policies and procedures in place for cases where the credit quality of the collected collateral subsequently falls below investment grade. Additionally, certain securities are not eligible, as set out in paragraph 40 of Appendix 1 to this consultation paper, in view of potential liquidity or price volatility risks.

52. To address wrong-way risk, we propose that when a licensed corporation collects IM or VM, it should ensure that the value of the collateral does not significantly correlate with the creditworthiness of the counterparty or the value of the underlying non-centrally cleared OTC derivatives portfolio in such a way that would undermine the effectiveness of the protection offered by the margin.

53. Licensed corporations are expected to have appropriate policies and procedures in place to monitor and manage concentration risk to ensure that the collateral collected as IM and VM is not overly concentrated in an individual issuer, issuer type and asset type.

Haircuts

54. The market value of eligible collateral is subject to market, foreign exchange and other risks. To address these risks and the volatility of collateral market values under both normal and stressed market conditions, as well as to avoid procyclicality, haircuts should be applied to the market value of eligible collateral for margin purposes.

---

[20] Proposed amendments to Schedule 2 were set out in the Consultation Conclusions and Further Consultation on Proposed Changes to the Securities and Futures (Financial Resources) Rules issued on 24 July 2017. The proposal will be subject to negative vetting by the Legislative Council.

[21] As specified in Schedule 3 to the FRR.

55. Whilst the BCBS-IOSCO Margin Requirements allow for the use of quantitative model-based haircuts, we note that this is not widely adopted in other jurisdictions. We have also decided against the use of an Internal Ratings Based (**IRB**) approach for assessing the credit quality grade of collateral. Where an external credit rating does not exist, a licensed corporation either has to develop its own IRB rating or refer to its counterparty's IRB rating. A counterparty's IRB rating may not be as transparent as a credit rating from an external credit rating agency (where such a rating exists) and this increases complexity and risk for the licensed corporation. From a practical standpoint, major dealers are unlikely to accept the use of counterparty IRB ratings when assessing collateral credit quality.

56. We believe that it is possible to establish appropriately risk-sensitive haircuts via a standardised haircut schedule which is more transparent and simpler to implement. Accordingly, we propose that a licensed corporation should apply the haircuts set out in Annex C of Appendix 1 to this consultation paper.

57. Eligible collateral can be denominated in any currency. For the purpose of exchanging IM, each party may designate only one currency in the trading relationship documentation (such as a master agreement or credit support arrangement). Whenever the eligible collateral posted (as either IM or VM) is denominated in a currency other than the designated currency, we propose to apply an additive haircut of 8% (**FX haircut**) to the market value of any IM collateral (cash and non-cash) and non-cash VM collateral to address the currency mismatch. The FX haircut does not apply to the market value of cash VM collateral, given its shorter liquidity horizon.

Q5. Do you have any comments on the proposed requirements for minimum transfer amounts, timing of the exchange of margin, assets eligible as margin or haircuts? Should any other assets be excluded from collateral eligibility? Since an external credit rating of a debt instrument is not a measure of the instrument's price volatility or liquidity during market stress, are the proposed haircuts for debt securities determined by reference to credit quality grades appropriately calibrated?

Q6. In relation to the proposed requirements for the FX haircut, should onshore renminbi (CNY) and offshore renminbi (CNH) be considered as different currencies for the purpose of determining a currency mismatch between the contract currency and the collateral currency? If so, how should the FX haircut be calibrated? Is there any reason for not treating this as a currency mismatch for the purpose of the FX haircut?

V. Scope of applicability

Netting

58. The SFC recognises that there are jurisdictions where netting laws are unclear and this may give rise to legal uncertainty around collateral arrangements. To avoid such risk, we propose that a licensed corporation need not exchange (a) IM and VM in circumstances where there is reasonable doubt as to the enforceability of the netting agreement upon default or insolvency of the counterparty; or (b) IM in circumstances where

arrangements for the protection of posted collateral are questionable or not legally enforceable upon the default or insolvency of the counterparty. However, this does not negate the need for a licensed corporation to prudently manage the risks arising from such non-centrally cleared OTC derivative transactions, such as imposing credit and country limits.

59. Additionally, to benefit from this exemption, the licensed corporation is expected to have undertaken an assessment of the enforceability of the netting agreement or the collateral arrangements, which should be supported by an external legal opinion in writing. Jurisdictional opinions obtained from external independent legal counsels by an industry association of which the licensed corporation (or its group) is a member are acceptable. All legal opinions should be updated regularly as appropriate, in particular where there are developments in the relevant law or practice. A licensed corporation which has made this election for a given non-netting jurisdiction should account for all transactions covered by such election on a gross basis instead of a net basis in its regulatory capital for counterparty risk exposure.

Intragroup transactions

60. Non-centrally cleared OTC derivative transactions between a licensed corporation and a covered entity in the consolidated group to which the licensed corporation also belongs (ie, an affiliate) give rise to risks within the same group. Nevertheless, intragroup transactions may facilitate more effective risk management. Aggregating trades across group companies and managing the risks on a portfolio basis can create scale efficiencies and netting benefits. We do not wish to discourage licensed corporations and their affiliates from effectively and efficiently managing their risk exposures arising from non-centrally cleared OTC derivative transactions. The exchange of margin for intragroup transactions is not a universal requirement in other jurisdictions.

61. Having considered the benefits of requiring margin for intragroup transactions against the increased liquidity demand on the licensed corporation and the wider financial system, we propose that such transactions be exempt from the proposed margin requirements, subject to the conditions that:

(a) the licensed corporation and the affiliates are accounted for on a full basis in the group consolidated financial statements; and

(b) the risk evaluation, measurement and control procedures applicable to the licensed corporation and the affiliates are centrally overseen and managed within the group of companies to which they belong.

Q7. Do you have any comments on the proposed exemptions for non-netting jurisdictions or intragroup transactions?

Comparability assessment

62. Given that the non-centrally cleared OTC derivatives market is global, it is likely that a transaction could be subject to the margin requirements of two or more regulators or jurisdictions. To avoid applying duplicative or conflicting margin requirements to the same non-centrally cleared OTC derivative transactions, we propose to allow substituted compliance for those transactions which are subject to the margin requirements of another regime:

(a) for which the SFC or HKMA has issued a comparability determination; or

(b) which is deemed comparable, ie, where a licensed corporation notifies the SFC of its intention to comply with the margin requirements of a WGMR jurisdiction[22], such requirements are deemed as comparable from the day they enter into force until when the SFC or HKMA completes a comparability assessment.

63. We plan to adopt an outcome-based approach to the determination of comparability. Comparability determinations may be subject to conditions. The SFC considers the HKMA's current margin requirements to be comparable to the SFC's proposed requirements, except that margin collected by licensed corporations should be subject to the asset eligibility requirements and collateral haircuts set by the SFC.

Q8. Should substituted compliance be available? Do you have any comments on the proposed substituted compliance regime?

VI. When will the proposed requirements come into effect?

64. We propose that the effective date of the IM requirements should be phased in starting from 1 September 2019, and that the VM requirements take effect from 1 September 2019.

65. The SFC recognises that the proposed IM requirements may require significant operational and system enhancements as well as significant amounts of collateral for which liquidity planning may be required. As such, it is important to manage these changes effectively to avoid unduly large transition costs and unintended market disruption, while mitigating systemic risk in the market. We propose to phase in the IM requirements as follows:

[22] The WGMR member jurisdictions are Australia, Canada, the European Union, India, Japan, Republic of Korea, Mexico, Russia, Singapore, Switzerland and the United States.

	Period	Threshold
Phase-in	1 September 2019 to 31 August 2020	HK$6 trillion
Permanent	On a permanent basis from 1 September 2020 for each subsequent 12-month period	HK$60 billion

(a) from 1 September 2019 to 31 August 2020, the exchange of IM by a licensed corporation is required in a one-year period where both the licensed corporation and the covered entity have an average aggregate notional amount[23] of non-centrally cleared OTC derivatives exceeding HK$6 trillion on a group basis;

(b) on a permanent basis from 1 September 2020 for each subsequent 12-month period, the exchange of IM by a licensed corporation is required in a one-year period where both the licensed corporation and the covered entity have an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$60 billion on a group basis.

In each case, the average aggregate notional amount is the average month-end aggregate notional amount of non-centrally cleared OTC derivatives for the months of March, April and May preceding the 1 September starting date in a given year.

66. We propose that IM and VM provisions will apply to all new contracts entered into during the period described above once the relevant thresholds are exceeded[24]. IM and VM need not be exchanged for legacy derivative contracts (ie, those entered before the relevant effective date), nor for new contracts resulting from portfolio compression or post-trade risk reduction exercises as long as the portfolio on which such exercise is performed consists exclusively of legacy contracts.

67. The BCBS-IOSCO Margin Requirements provide that genuine amendments to existing contracts do not qualify as a new contract. Some market participants queried whether implementing the recommendations in FSB's report titled *Reforming Major Interest Rate Benchmarks*[25] and amending IBOR (or a widely-used interest rate benchmark) referenced in an OTC derivative contract to an alternative nearly risk-free reference rate would have the effect of bringing the amended contract into the scope of the proposed margin requirements.

68. We consider that an amendment to an existing contract in response to the global reforms on interest rate benchmarks solely to change the interest rate benchmark to a

[23] The calculation of the average aggregate notional amount is set out in paragraph 4 of the proposed requirements in Appendix 1.

[24] Once a relevant threshold is exceeded, should the licensed corporation or its counterparty subsequently fall below this threshold during the one-year period from 1 September of a year to 31 August of the following year, the margin requirements will continue to be applicable to the non-centrally cleared OTC derivative transactions for that one-year period.

[25] Issued on 22 July 2014 and available at: www.fsb.org/wp-content/uploads/r_140722.pdf.

risk-free reference rate for the purpose of increasing contract robustness, would not, in itself, subject the amended contract to the proposed margin requirements[26].

69. At the same time, licensed corporations need to have in place proper contingency plans for the cessation of or material changes to a benchmark, including having sufficiently robust fallback provisions in their financial contracts and instruments. As noted in IOSCO's recommendations[27], the fallback provisions would need to be robust enough to prevent potentially serious disruption to markets and market participants and to safeguard the continuity of contracts, as a result of the discontinuation of a benchmark. Licensed corporations are expected to take into account market initiatives to develop contingency plans and put in place appropriate fallback provisions in their OTC derivative contracts to safeguard contract continuity as soon as practicable.

70. We plan to adopt a similar approach with respect to contract amendments required as a result of the global financial reforms for the effective resolution of failing financial institutions. New statutory regimes developed as part of the implementation of the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions*[28] generally provide for the temporary stay or permanent override of the exercise of certain contractual acceleration rights, early termination rights or other default or cross-default rights (collectively **termination rights**). A resolution or insolvency regime may also require a within-scope financial institution to ensure that the terms and conditions of certain classes of contracts, including OTC derivative contracts, entered into by such financial institution contain provisions to the effect that all its counterparties agree to be bound by any temporary suspension or permanent override of termination rights.

71. To comply with these requirements, the relevant financial institution may need to amend its OTC derivative contracts, either directly or through adherence to a protocol such as the International Swaps and Derivatives Association 2015 Resolution Stay Protocol. We consider that an amendment to an existing contract solely to conform to the requirements of a resolution or insolvency regime applicable to either contracting party would not, in itself, subject the amended contract to the proposed margin requirements.

Q9. Do you have any comments on the proposed IM phase-in schedule or the effective date of the VM requirements?

[26] Any necessary consequential changes to the contract attributable solely to the difference in the transaction's fair value due to such change of benchmark would also be considered a genuine amendment and would not, in itself, subject the amended contract to the proposed margin requirements.

[27] *Statement on Matters to Consider in the Use of Financial Benchmarks*, IOSCO Board, 5 January 2018, www.iosco.org/library/pubdocs/pdf/IOSCOPD589.pdf.

[28] Issued on 15 October 2014 and available at: www.fsb.org/wp-content/uploads/r_141015.pdf.

Appendix 1

Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission – Schedule 10 Part II

Schedule 10 Risk mitigation and margin requirements for non-centrally cleared OTC derivative transactions; Requirements for licensed persons providing client clearing services for OTC derivative transactions

Part II Margin requirements

The margin requirements described in Part II of this Schedule apply to all licensed persons which are contracting parties to non-centrally cleared OTC derivative transactions entered into with a covered entity, subject to the relevant thresholds as set out below.

Terminology

Covered Entity

1. Covered entity means a financial counterparty, a significant non-financial counterparty or another entity designated by the SFC[1], but excludes a sovereign[2], public sector entity[3], multilateral development bank[4], and the Bank for International Settlements. Any reference to "counterparty" below means covered entity, unless stated otherwise.

Financial Counterparty

2. Financial counterparty refers to any entity, with respect to a one-year period from 1 September each year to 31 August of the following year, if the entity itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$15 billion and means:

   (a) an authorised institution as defined in section 2(1) of the Banking Ordinance (Cap 155);

[1] The SFC may designate an entity as a covered entity if the SFC considers it reasonably necessary in order to ensure that the objectives of this Schedule are fulfilled or that its requirements are not circumvented, or the SFC is otherwise satisfied that it is appropriate to do so.

[2] Sovereign means (a) HKSAR; (b) the central government of a country; or (c) the central bank of a country.

[3] Public sector entity means any agency of HKSAR or of a central government that is incorporated or established for non-commercial purposes.

[4] As specified by the HKMA in Banking (Specification of Multilateral Development Bank) Notice (Cap. 155N) www.elegislation.gov.hk/hk/cap155N!en.pdf

(b) a licensed corporation;

(c) a mandatory provident fund scheme registered under the Mandatory Provident Fund Schemes Ordinance (Cap 485);

(d) an occupational retirement scheme registered under the Occupational Retirement Schemes Ordinance (Cap 426);

(e) a company authorised by the Insurance Authority to carry on any class of insurance business under the Insurance Companies Ordinance (Cap 41);

(f) a money service operator (i.e. remittance agents and money changers) licensed by the Commissioner of Customs & Excise under the Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance (Cap 615);

(g) a money lender licensed under the Money Lenders Ordinance (Cap 163);

(h) a special purpose vehicle or a securitisation vehicle, except where and to the extent that the special purpose vehicle enters into non-centrally cleared OTC derivative transactions for the sole purpose of hedging;

(i) a collective investment scheme as defined in section 1, Part 1 of Schedule 1 of the SFO[5];

(j) an entity that carries on a business outside Hong Kong and is engaged predominantly in any one or more of the following activities:

(i) Banking;

(ii) Securities or derivatives business;

(iii) Asset management;

(iv) Insurance business;

(v) Operation of a remittance or money changing service;

(vi) Lending;

(vii) Activities that are ancillary to the conduct of these activities.

Significant Non-financial Counterparty

3. Significant non-financial counterparty refers to any entity other than a financial counterparty, with respect to a one-year period from 1 September each year to 31 August of the following year, if the entity itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$60 billion.

[5] For the avoidance of doubt, this would include (but is not limited to) hedge funds, mutual funds and pension funds.

Average Aggregate Notional Amount

4. The average aggregate notional amount:

(a) is calculated as the average of the total gross notional amount of month-end positions of non-centrally cleared OTC derivatives for March, April and May preceding the 1 September starting date in a relevant year. Month-end positions should be converted into Hong Kong Dollar using corresponding month-end spot rates, before calculating the average position;

(b) includes the gross notional amount of all non-centrally cleared OTC derivatives, including non-centrally cleared OTC derivatives mentioned in paragraph 7(b), (c), (d) and (e) below;

(c) is calculated on a group level by including all non-centrally cleared OTC derivatives of all entities within the group of companies[6]; and

(d) includes all the non-centrally cleared OTC derivatives that entities within the group have entered into with each other, counting each of them once.

Group of Companies

5. Group of companies means a group of entities for which consolidated financial statements are prepared (consolidated group).

Netting Set

6. Netting set means a group of transactions between two counterparties that are subject to a legally enforceable bilateral netting agreement.

Instruments subject to the requirements

7. The margin requirements apply to all non-centrally cleared OTC derivatives except the following:

(a) derivative transactions that are cleared by a clearing member on behalf of a non-member or a non-member's client where

(i) the non-member and its client (as appropriate) are subject to the margin requirements of the central counterparty; or

(ii) the non-member and its client (as appropriate) provide margin consistent with the relevant corresponding central counterparty's margin requirements.

(b) physically settled FX forwards and FX swaps, and the "FX transactions" embedded in cross-currency swaps associated with the exchange of principal[7], subject to paragraph 8;

---

[6] To avoid doubt, non-centrally cleared OTC derivatives (i) for which a licensed person faces no counterparty risk; or (ii) that are entered into with a sovereign, public sector entity, multilateral development bank or the Bank for International Settlements should be included.

(c) excluded currency contracts within the meaning of section 2 of Securities and Futures (OTC Derivative Transactions – Reporting and Record Keeping Obligations) Rules;

(d) physically settled commodity forwards; and

(e) on or before 29 February 2020, non-centrally cleared single-stock options, equity basket options and equity index options.

8. The instruments listed in paragraph 7(b) above are only subject to the variation margin requirements if:

(a) they are entered into by a licensed person with any of the following entities:

(i) an authorised institution as defined in section 2(1) of the Banking Ordinance (Cap 155);

(ii) a licensed corporation; or

(iii) an entity that carries on a business outside Hong Kong and is engaged predominantly in any one or more of the following activities:

- Banking;
- Securities or derivatives business; and
- Asset management;

(b) In relation to both counterparties referred in (a) above, with respect to a one-year period from 1 September each year to 31 August of the following year, the entity itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$15 billion.

Margin requirements

Initial margin (IM) requirements

9. A licensed person should exchange (i.e. post and collect) IM[8] on a gross basis with a covered entity to non-centrally cleared OTC derivative transactions where both the licensed person and the covered entity have an average aggregate notional amount of

[7] To avoid doubt, all other payments or cash flows that occur during the life of the cross-currency swap must be considered in the initial margin calculation, i.e. the only payments that may be excluded from the calculation of initial margin are the fixed physically settled FX transactions associated with the exchange of principal.

[8] IM means the collateral that protects the parties to non-centrally cleared OTC derivatives from the potential future exposure that could arise from future changes in the mark-to-market value of the derivatives during the time it takes to close out and replace the position in the event of a counterparty default. The amount of initial margin reflects the size of the potential future exposure.

non-centrally cleared OTC derivatives, calculated according to paragraph 4, exceeding HK$60 billion[9].

10. The methodologies for calculating IM that serve as the baseline for margin collected from a counterparty should (i) reflect the potential future exposure associated with the relevant portfolio of non-centrally cleared OTC derivatives and (ii) ensure that all counterparty risk exposures are covered fully with a high degree of confidence.

11. No IM has to be collected in relation to non-centrally cleared OTC derivatives for which a licensed person faces no (i.e. zero) counterparty risk and these may be excluded from the IM calculation[10].

12. The required amount of IM may be calculated by reference to either (i) a standardised margin schedule ("standardised approach"); or (ii) a quantitative portfolio margin model ("model approach"). A licensed person may use the standardised approach to calculate IM for one asset class while using the model approach for another asset class.

13. The choice between the standardised approach and the model approach should be made consistently over time for non-centrally cleared OTC derivatives.

14. A licensed person should follow the steps set out in Annex A to calculate IM amounts under the standardised approach.

15. A licensed person should follow the steps set out in Annex B to calculate IM amounts under the model approach.

16. A licensed person may agree with its counterparty to include non-centrally cleared OTC derivatives that are otherwise out of scope (from the margin requirements to which the licensed person is subject) within the in-scope portfolio for the purpose of calculating IM, as long as this is done consistently and on an ongoing basis.

17. A licensed person may elect not to exchange IM with a significant non-financial counterparty provided that the licensed person has obtained a declaration from the significant non-financial counterparty that it predominantly uses the non-centrally cleared OTC derivatives for hedging purposes.

---

[9] IM requirements are phased in according to the schedule detailed in paragraph 65 of the Consultation Paper on the OTC derivatives regime for Hong Kong – Proposed margin requirements for non-centrally cleared OTC derivative transactions, June 2018.

[10] As an example, consider a European call option on a single stock. Suppose that a licensed person agrees to sell a fixed number of shares to another party, the option buyer, at a predetermined price at some specific future date (the contract's expiry) if the option buyer wishes to do so. Suppose further that the option buyer makes a payment to the licensed person at the outset of the transaction that fully compensates the licensed person for the possibility that it will have to sell shares at contract expiry at the predetermined price. In this case, the licensed person faces zero counterparty risk while the option buyer faces counterparty risk. The licensed person has received the full value of the option at the outset of the transaction. The option buyer, on the other hand, faces counterparty risk since the licensed person may not be willing or able to sell shares to the option buyer at the predetermined price at the expiry of the contract. In this case, the licensed person would not be obliged to collect any IM from the option buyer and the call option could be excluded from the IM calculation. Since the option buyer faces counterparty risk, the option buyer needs to collect IM from the licensed person in a manner consistent with the standards herein.

IM threshold

18. A licensed person may agree with the counterparty not to exchange IM if the amount due is equal to or lower than HK$375 million ("IM threshold").

19. The IM threshold is applied at the level of the consolidated groups to which the licensed person and the counterparty belong and is based on all non-centrally cleared OTC derivatives outstanding between the two consolidated groups[11]. A licensed person may agree with its counterparty on allocating the IM threshold at entity level.

20. If the total IM amount exceeds the IM threshold, the two consolidated groups need to exchange at least the difference between the total IM amount and the IM threshold.

21. A licensed person should have adequate and appropriate systems and controls in place to ensure that any allocated IM threshold is not exceeded.

Treatment of IM collected

22. When a licensed person is the collecting party of IM, appropriate collateral arrangements, including credit support arrangements, should be in place which are legally effective in the event that the posting party defaults or becomes insolvent.

23. A licensed person as the collecting party should:

(a) ensure IM collected is held in such a way that it is available in a timely manner to the licensed person in case the posting party defaults or becomes insolvent; and

(b) provide the posting party with the option to have the IM that it posts segregated from the IM posted to the licensed person by other counterparties.

24. A licensed person as the posting party should ensure IM posted:

(a) is subject to arrangements that protect the licensed person to the extent possible under applicable law in the event that the collecting party defaults or becomes insolvent; and

(b) is segregated from the collecting party's proprietary assets by either placing the IM with a third party custodian or through other legally effective arrangements to protect the IM from the default or insolvency of the collecting party.

25. If a third-party custodian is used, the licensed person should ensure that:

(a) the custodian is not a group member of the collecting or posting party; and

(b) the financial condition and credit standing of the custodian is regularly monitored.

[11] An investment fund managed by an asset manager will be treated as an entity that is separate from the consolidated group for the purposes of applying the IM threshold as long as the fund is a distinct segregated pool of assets (i) that would be treated as such for the purposes of the fund's default or insolvency and upon the default or insolvency of the asset manager and (ii) that is not collateralised by or otherwise guaranteed or supported by any other investment fund managed by the asset manager or by the asset manager.

26. IM collected from a counterparty may be rehypothecated, repledged or reused (henceforth rehypothecated) with a third party only for the purpose of hedging the licensed person's derivative positions arising out of transactions with the counterparty for which IM was collected and must be subject to the following conditions:

(a) The counterparty is not an entity that regularly holds itself out as making a market in derivatives, routinely quotes bid and offer prices on derivatives contracts and routinely responds to requests for bid or offer prices on derivatives contracts;

(b) The licensed person has:

(i) disclosed to the counterparty its right not to permit rehypothecation and the risks associated with the nature of the counterparty's claim to the rehypothecated collateral in the event of the default or insolvency of the licensed person or the third party; and

(ii) given the counterparty the option to individually segregate the collateral that it posts; and

(iii) the counterparty has given express consent in writing to the rehypothecation of its collateral;

(c) Collateral collected as IM from the counterparty should be treated as a client asset segregated from the licensed person's proprietary assets until rehypothecated. Once rehypothecated, the third party should treat the collateral as a client asset, and segregate it from the third party's proprietary assets. Assets returned to the licensed person after rehypothecation should also be treated as client assets and should be segregated from the licensed person's proprietary assets;

(d) The IM of counterparties which have consented to the rehypothecation of their collateral should be segregated from that of counterparties which have not so consented;

(e) Where IM has been individually segregated, the collateral should only be rehypothecated for the purpose of hedging the licensed person's derivative positions arising out of transactions with the counterparty in relation to which the collateral was provided;

(f) Where IM has been individually segregated and subsequently rehypothecated, the licensed person should require the third party similarly to segregate the collateral from the assets of the third party's proprietary assets and the assets of any other person;

(g) Protection is given to the counterparty from the risk of loss of IM in circumstances where either the licensed person or the third party defaults or becomes insolvent and where both the licensed person and the third party default or become insolvent;

(h) Where the licensed person rehypothecates IM, the agreement with the recipient of the collateral (i.e. the third party) should prohibit the third party from further rehypothecating the collateral;

(i) Where collateral is rehypothecated, the licensed person must notify the counterparty. Upon request by the counterparty and where the counterparty has opted for individual segregation, the licensed person should notify the counterparty of the amount of cash collateral and the value of non-cash collateral that has been rehypothecated;

(j) Collateral must only be rehypothecated to, and held by, an entity that is regulated in a jurisdiction that meets all of the specific conditions contained in this paragraph and in which the specific conditions can be enforced by the licensed person;

(k) The counterparty and the third party may not be within the same group of companies; and

(l) The licensed person and the third party should keep appropriate records to show that all the above conditions have been met.

Variation margin (VM) requirements

27. A licensed person should exchange VM[12] with a covered entity for non-centrally cleared OTC derivative transactions for a one-year period from 1 September each year to 31 August of the following year when the licensed person itself or the group to which it belongs has an average aggregate notional amount of non-centrally cleared OTC derivatives exceeding HK$15 billion. The VM amount exchanged should fully collateralise the current exposure of the non-centrally cleared OTC derivative transactions.

28. VM should be calculated and exchanged for non-centrally cleared OTC derivative transactions subject to a single, legally enforceable netting agreement.

29. A licensed person may agree with its counterparty to include non-centrally cleared OTC derivatives that are otherwise out of scope (from the margin requirements to which the licensed person is subject) within the in-scope portfolio for the purpose of calculating VM, as long as this is done consistently and on an ongoing basis.

30. A licensed person may elect not to exchange VM with a significant non-financial counterparty provided that the licensed person has obtained a declaration from the significant non-financial counterparty that it predominantly uses the non-centrally cleared OTC derivatives for hedging purposes.

Minimum transfer amount

31. A licensed person may agree with the counterparty not to exchange margin if the amount due (aggregate of IM and VM) since the last exchange of margin[13] is equal to or lower than a specified minimum transfer amount not exceeding HK$3.75 million (the "minimum transfer amount").

[12] VM means the collateral which protects the parties to non-centrally cleared OTC derivatives from the current exposure that has already been incurred by one of the parties from changes in the mark-to-market value of the derivatives after the transaction has been executed. The amount of variation margin reflects the size of this current exposure, which can change over time depending on the mark-to-market value of the derivatives at any point in time.

[13] Exchange of margin means the posting and collecting of margin between two covered entities.

32. A licensed person and the counterparty need to transfer the full amount of margin if the minimum transfer amount is exceeded, i.e. without deduction of the minimum transfer amount.

Timing for the exchange of margin

33. IM should be called at the earliest time possible after either execution of a transaction or upon changes in measured potential future exposure. The IM amount for a given counterparty has to be recalculated at least every ten business days.

34. IM should be collected as soon as practicable within the standard settlement cycle for the relevant collateral type.

35. VM should be calculated at least on a daily basis and be called at the earliest time possible after the trade date and from time to time thereafter.

36. VM should be collected as soon as practicable within the standard settlement cycle for the relevant collateral type.

Assets eligible as margin

37. Subject to paragraphs 38 and 40, the following collateral instruments are eligible as margin (both IM and VM):

(a) Cash in any currency;

(b) Marketable debt securities issued or fully guaranteed by a sovereign[14] or a relevant international organisation[15];

(c) Marketable debt securities issued or fully guaranteed by a multilateral development bank;

(d) Marketable debt securities issued or fully guaranteed by a public sector entity;

(e) Other marketable debt securities;

(f) Gold; or

(g) Listed shares which are subject to a haircut percentage of 15% under the Securities and Futures (Financial Resources) Rules ("FRR").

38. When a licensed person is the collecting party of IM or VM, the following instruments are not eligible for IM or VM:

(a) securities issued by the licensed person or an entity that is within the same group of companies as the licensed person; and

(b) securities whose value exhibits a significant correlation with the creditworthiness of the counterparty or the value of the underlying non-centrally cleared OTC derivative

[14] See footnote 2

[15] As defined in section 2 of Banking (Capital) Rules (Cap 155L). www.elegislation.gov.hk/hk/cap155L!en.assist.pdf

portfolio in such a way that would undermine the effectiveness of the protection offered by the margin (“wrong way risk”).

39. A licensed person should ensure the collateral collected as IM or VM is not overly concentrated in terms of an individual issuer, issuer type and asset type.

40. Assets referred to in paragraph 37(b), (c), (d) and (e) are only eligible as margin if they are associated with a credit quality of investment grade. Notwithstanding the foregoing, the following assets are not eligible:

(a) any special debt securities as defined under the FRR;

(b) any securities or any instrument acknowledging, evidencing or creating a subordinated loan or a debt due from a corporation within a group of companies of which the holder of the securities or instrument is a member;

(c) any structured product other than a bond that -

(i) has a coupon rate that has an inverse relationship to a money market or interbank reference interest rate that is widely quoted; or

(ii) has principal or coupon payments that are linked to an inflation rate;

(d) any securities or instrument the terms and conditions of which provide that, upon the occurrence of one or more events specified in the terms and conditions, one or both of the following must apply in relation to the principal value –

(i) the principal value is to be fully or partially converted into or exchanged for shares of the issuer or a related corporation of the issuer;

(ii) the principal value is to be fully or partially written down; or

(e) listed securities that have been suspended from trading for at least 3 trading days or ceased trading on any exchange on which the securities were listed, except where the securities can continue to be traded on any other exchange on which the securities are listed.

Haircuts

41. A licensed person should apply the haircuts set out in Annex C.

42. For the purpose of exchanging IM, each party may designate only one currency in the trading relationship documentation (such as a master agreement or credit support arrangement).

43. A currency mismatch arises whenever the eligible collateral posted (as either IM or VM) is denominated in a currency other than the currencies designated by the contracting parties in the trading relationship documentation.

44. In the case of a currency mismatch, an additive haircut of 8% (“FX Haircut”) should be applied to the market value of any IM collateral (cash and non-cash IM collateral) and non-cash VM collateral.

45. If the trading relationship documentation does not identify relevant currencies as described in paragraphs 42 and 43 above, the FX Haircut would apply to the market value of all collateral for margin purposes, except cash VM collateral.

Scope of applicability

Netting

46. A licensed person need not exchange IM and VM in circumstances where there is reasonable doubt as to the enforceability of the netting agreement upon default or insolvency of the counterparty.

47. A licensed person need not exchange IM in circumstances where there is a reasonable doubt on the enforceability of arrangements for the protection of posted collateral upon default or insolvency of a counterparty.

48. The licensed person should have a well-founded basis to justify its eligibility for exemption under paragraph 46 or 47 after undertaking an assessment on the enforceability of the netting agreement or the collateral arrangements (as the case may be). This should be supported by an external legal opinion in writing with reference to the netting or collateral provisions in the contractual arrangements used by the licensed person. The licensed person should arrange such legal opinion to be updated on a regular basis as appropriate.

Intragroup transactions

49. The margin provisions in Part II of this Schedule do not apply to non-centrally cleared OTC derivative transactions between a licensed person and a covered entity which is in the consolidated group to which the licensed person belongs (i.e. an affiliate), provided that,

(a) the licensed person and the affiliate are accounted for on a full basis in the consolidated financial statements of the holding company of the group of companies to which they belong, for the purpose of and in compliance with the Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants, the International Financial Reporting Standards issued by the International Accounting Standards Board, or the Standards of accounting practices applicable to the holding company in the place in which it is incorporated; and

(b) the risk evaluation, measurement and control procedures applicable to the licensed person and the affiliate are centrally overseen and managed within the group of companies to which they belong.

Comparability assessment

50. Substituted compliance is available for those transactions in non-centrally cleared OTC derivatives if the SFC or HKMA has issued a comparability determination or the respective foreign jurisdiction is deemed comparable pursuant to paragraph 51. Comparability determination may be made on all or part of a foreign jurisdiction’s requirements, and may be subject to conditions. Where a comparability determination has been issued by HKMA in respect of a given jurisdiction’s requirements, licensed

persons may elect to adhere to such requirements, subject to such modification or restriction as the SFC may specify at its discretion.

51. Where a licensed person notifies the SFC of their intention to comply with the margin requirements of WGMR member jurisdictions[16], such requirements are deemed as comparable from the day the respective standards have entered into force in such jurisdiction until the SFC or HKMA has completed a comparability assessment.

[16] The WGMR member jurisdictions are Australia, Canada, the European Union, India, Japan, Republic of Korea, Mexico, Russia, Singapore, Switzerland and the United States.

Annex A - Calculating IM amounts by reference to a standardised margin schedule

A.1 The total amount of IM required on a portfolio according to the standardised margin schedule should be computed by referencing the standardised margin rates in A.3 below and by adjusting the gross IM amount by an amount that relates to the net-to-gross ratio pertaining to all derivatives in the legally enforceable netting set. The IM amount would be calculated in two steps. First, the margin rate in the schedule set out in A.3 would be multiplied by the gross notional size for each derivative contract, and then this calculation would be repeated for each derivative contract to arrive at the gross IM. Second, the gross IM amount is adjusted by the ratio of the net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

***Net Standardised IM** = 0.4 * Gross IM + 0.6 * NGR * Gross IM*

where NGR is defined as the level of net replacement cost over the level of gross replacement cost for transactions subject to legally enforceable netting agreements. Net replacement cost is the sum of positive and negative market values of all derivative contracts in the netting set. The value is set to zero if the sum is negative. Gross replacement cost is the sum of the positive market values of derivative contracts in the netting set.

A.2 The total amount of IM required for a portfolio according to the standardised margin schedule is the net standardised IM amount.

A.3 Standardised IM schedule

Asset class	IM requirement (% of notional exposure)
Interest rate[17]: 0-2 year duration 2- 5 year duration 5+ year duration	 1 2 4
Foreign exchange	6
Commodity[18]	15
Equity	15
Credit: 0-2 year duration 2-5 year duration 5+ year duration	 2 5 10
Other	15

[17] Inflation swaps, which transfer inflation risk between counterparties, are to be considered as part of the interest rate asset class.

[18] This includes gold and other precious metals such as silver and platinum.

Annex B - Calculating IM amounts by reference to a quantitative portfolio margin model

B.1 Supervisory requirements

B.1.1 A licensed person should obtain approval in writing from the SFC before using an internally developed or a third party IM model.

B.1.2 The applicant needs to demonstrate that the relevant IM model satisfies all of the criteria set out in this Annex and any other requirement as specified by the SFC on an ongoing basis.

B.1.3 Unless the SFC agrees otherwise, a licensed person should notify the SFC at least 60 days in advance before making any subsequent material changes to an approved model.

B.1.4 The SFC may consider that a licensed person using a model should collect a greater amount of IM than that determined by the licensed person's model if additional collateral is appropriate due to the structure, complexity or other features of the licensed person's non-centrally cleared OTC derivatives portfolio.

B.2 Modelling standards and calculation

B.2.1 A licensed person's IM model should be conceptually sound and designed to calculate IM in an appropriately risk-sensitive manner.

B.2.2 The level of sophistication of the modelling approach should reflect the nature, scale and complexity of the risks inherent in the derivative contracts it is applied to.

B.2.3 The IM model should calculate a conservative estimate of the potential future exposure of non-centrally cleared OTC derivatives, reflecting a variation in value of the instrument that is based on a one-tailed 99% confidence interval over a 10-day horizon. The maturity of a derivative contract may be used instead of the 10-day requirement if it is shorter than 10 days[19].

B.2.4 The IM model should be calibrated based on historical data in the most recent continuous period prior to the calibration date for no less than 3 years and no more than 5 years.

B.2.5 At least 25% of the data used for calibration should be representative of a period of significant financial stress, identified and applied separately at least for each asset class, which is appropriate to the derivatives to which the IM model is applied. If the most recent data period does not contain at least 25% stressed data, the least recent data in the time series should be replaced by data from a period of significant financial stress, until the overall proportion of stressed data is at least 25% of the overall data set.

B.2.6 The data within each of the identified periods should be equally weighted for calibration purposes.

---

[19] If VM is exchanged at less than daily frequency, the number of days in between VM collection should be added to the 10-day horizon. In case VM is exchanged at varying frequencies between the calculation of IM amounts, the number of days to be added to the 10-day horizon should be the maximum number of days in between VM collections within this period.

B.2.7 Derivatives that are not subject to the same netting set should not be considered in the same IM model calculation.

B.3 Model elements

B.3.1 The IM model should capture all relevant risk factors which materially influence the non-centrally cleared OTC derivative contracts in a netting set. As a minimum, risk factors should include foreign exchange or interest rate risk, equity risk, credit risk and commodity risk.

B.3.2 The model should appropriately assess other material risks arising from imperfect correlations, idiosyncratic risks for credit underlying, market liquidity, and non-linear dependencies.

B.3.3 Risk-offsetting features should only be recognised within the same asset class and not across different asset classes.

B.4 Model performance

B.4.1 A licensed person has to ensure that the data used in the model are subject to a process that ensures their quality.

B.4.2 The process should include recalibration, back testing and validation of the IM model.

B.4.3 The licensed person should ensure that the model:

(a) Employs a methodology with an accepted economic or sound theoretical basis which incorporates all factors that counterparties would reasonably consider in calculating the IM;

(b) Is appropriately calibrated and tested for validity;

(c) Is subjected to independent model review, validation and approval periodically and when material changes are made; and

(d) Outputs are subjected to regular independent review and verification.

The results of model calibration, testing, review and validation should be documented.

B.5 Documentation

B.5.1 A licensed person should maintain adequate documentation in respect of the IM model.

B.5.2 The documentation should be sufficient to ensure that any knowledgeable third-party would be able to understand the design and operational detail of the IM model.

Annex C - Standardised haircut schedule

The market value of eligible collateral (see paragraph 37) should be adjusted as follows:

*Adjusted value of collateral = value of collateral * (1-applicable asset class haircut – applicable currency mismatch haircut)*

Asset class	Residual maturity	Haircut	Haircut credit quality grade 1	Haircut credit quality grades 2 & 3
	Year(s)	(%)		
Cash in same currency		0	-	-
Marketable debt securities associated with a credit quality of investment grade issued or fully guaranteed by: (i) A multilateral development bank; or (ii) A relevant international organization.	less than one	0.5	-	-
	between one and five	2	-	-
	greater than five	4	-	-
Marketable debt securities associated with a credit quality of investment grade issued or fully guaranteed by: (i) A sovereign; or (ii) A public sector entity.	less than one	-	0.5	1
	between one and five	-	2	3
	greater than five	-	4	6
Other marketable debt securities associated with a credit quality of investment grade that are publicly traded, subject to paragraph 38	less than one	-	1	2
	between one and five	-	4	6
	greater than five	-	8	12
Eligible equities[20]		15	-	-
Gold		15	-	-
Add-on FX-haircut for currency mismatch, subject to paragraph 44		8	-	-

Where a debt security has two external credit ratings that map onto different credit quality grades, a licensed person should use the higher of the haircuts associated with the two credit quality grades. Where a debt security has three external credit ratings which map onto two or more different credit quality grades, a licensed person should use the higher of the two lowest haircuts associated with the applicable credit quality grades.

[20] Please refer to paragraph 37(g) for details.

Credit Quality Grade for Long-Term Exposures

Credit quality grade	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings
1	AAA AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-
2	A+ A A-	A1 A2 A3	A+ A A-
3	BBB+ BBB BBB-	Baa1 Baa2 Baa3	BBB+ BBB BBB-

Credit Quality Grade for Short-Term Exposures

Credit quality grade	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings
1	A-1+ A-1	P-1	F1+ F1
2	A-2	P-2	F2
3	A-3	P-3	F3