



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Capital Adequacy Framework (Exposures to Central Counterparties)

Applicable to:

1. Licensed banks
2. Licensed investment banks
3. Licensed Islamic banks
4. Financial holding companies

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BNM/RH/PD 029-62

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PART A OVERVIEW

1. Introduction

- 1.1 As part of the global financial reforms since 2009, central clearing has become an important mechanism to manage counterparty credit risk through its robust margining requirements and loss sharing framework. Financial institutions are also increasingly involved in derivatives transactions that are centrally cleared.
- 1.2 This policy document is part of the Capital Adequacy Framework and Capital Adequacy Framework for Islamic Banks. It sets out the requirements to manage the risks arising from financial institutions' exposures to central counterparties in their capacity as a clearing member or as a client of a clearing member.
- 1.3 The provisions on (i) the applicability of this policy document, (ii) legal provisions pursuant to which this policy document is issued, (iii) related legal instruments and policy documents, and (iv) level of application of this policy document shall be as follows:

Policy document	Paragraph
<i>Capital Adequacy Framework (Capital Components)</i> issued on 15 December 2023 and as may be amended by the Bank (hereinafter "CAF CC PD")	• Paragraph 2 on 'Applicability' • Paragraph 3 on 'Legal provisions' • Paragraph 6 on 'Related legal instruments and policy documents' • Paragraph 8 on 'Level of application'
<i>Capital Adequacy Framework for Islamic Banks (Capital Components)</i> issued on 15 December 2023 and as may be amended by the Bank (hereinafter "CAFIB CC PD")	• Paragraph 2 on 'Applicability' • Paragraph 3 on 'Legal Provisions' • Paragraph 6 on 'Related legal instruments and policy documents' • Paragraph 8 on 'Level of application'

2. Effective date

- 2.1 This policy document will come into effect on 1 January 2025.
- 2.2 Notwithstanding paragraph 2.1, the following paragraphs shall not come into effect at the effective date of this policy document and are subject to the following transitional arrangements, where applicable:

Paragraphs	Transitional arrangements
Paragraphs 5.4, 8.4, 8.6, 8.7, 8.14 and 8.21, which reference the credit valuation adjustment (CVA) capital requirements, Standardised Approach to Counterparty Credit Risk (SA-	Financial institutions shall apply the prevailing requirements under the

CCR) or the Basel III Standardised Approach to Credit Risk (SA-CR)	applicable policy documents ^{1, 2} until the respective framework (i.e. CVA, SA-CCR or Basel III SA-CR) has come into force, upon which the corresponding requirements shall be applied where applicable ³ .
Paragraphs 9.2 to 9.18	Financial institutions shall only apply the requirements after the SA-CCR policy document has come into force.

- 2.3 Notwithstanding paragraph 2.1, in the event where a financial institution intends to adopt the requirements⁴ prior to the effective date, the financial institution must notify the Bank at least one month in advance of the proposed effective date. The notification shall be submitted to Jabatan Penyeliaan Konglomerat Kewangan or Jabatan Penyeliaan Perbankan, as the case may be.

3. Interpretation

- 3.1 The terms and expressions used in this policy document shall have the same meanings assigned to them in the Financial Services Act 2013 (FSA) or the Islamic Financial Services Act 2013 (IFSA), as the case may be, unless otherwise defined in this policy document.

- 3.2 For the purposes of this policy document–

“S” denotes a standard, an obligation, a requirement, specification, direction, condition and any interpretative, supplemental and transitional provisions that must be complied with. Non-compliance may result in enforcement action;

“G” denotes guidance which may consist of statements or information intended to promote common understanding and advice or recommendations that are encouraged to be adopted;

“banking institution” refers to–

- (a) a licensed bank;
- (b) a licensed investment bank; and
- (c) a licensed Islamic bank, except for a licensed International Islamic bank;

“board” refers to the board of directors of a financial institution, including a committee of the board where the responsibilities of the board as set out in this policy document have been delegated to such a committee;

¹ Financial institutions shall continue to calculate the exposure value for all centrally cleared derivatives transactions using the Current Exposure Method until the SA-CCR policy document has come into force.

² Financial institutions shall apply the risk weight of the CCP under the credit risk capital requirements in cases where the trade exposures to the CCP would not be eligible for the 2% and 4% risk weights.

³ For the avoidance of doubt, there is currently no prevailing Pillar 1 capital requirements for CVA. The capital requirements will be issued in due course.

⁴ Financial institutions are required to fully adopt the requirements in this policy document. Partial adoption of requirements is not allowed.

“central counterparty” or **“CCP”** refers to an entity whose business includes the provision of clearing facilities which interposes itself between counterparties for contracts traded in one or more financial markets, becomes the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CCP becomes a counterparty to trade with market participants through a novation, an open offer system, or other legally binding arrangements;

“clearing member” refers to a member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the CCP, regardless of whether it enters into trades with a CCP for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and other market participants;

“client” refers to a party to a transaction with a CCP through either–

- (a) a clearing member (or a higher level client) acting as a financial intermediary; or
- (b) a clearing member (or a higher level client) guaranteeing the performance of the client of the clearing member (or the lower level client) to the CCP;

“collateral” includes an asset posted by a financial institution in the form of, but is not limited to, cash, securities and other pledged assets;

“counterparty credit risk” refers to the risk that a counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default;

“credit valuation adjustment” or **“CVA”** refers to an adjustment to the mid-market valuation of the portfolio of trades with a counterparty which reflects the market value of the credit risk. This adjustment may include either the market value of the credit risk of the counterparty, or the market value of the credit risk of both the financial institution and the counterparty;

“current exposure” or **“replacement cost”** means the larger of zero or the current market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the immediate default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy;

“default fund” refers to a fund established by a CCP comprising the clearing members' funded or unfunded contributions towards, or underwriting of, a CCP's mutualised loss sharing arrangements. The determination as to whether the fund is a default fund shall be based on the substance of the arrangements, rather than the description given by a CCP. In the case of some CCPs, the fund may be also known as clearing deposits, clearing fund or guaranty fund;

“exposure value” refers to the exposure amount under SA-CR or the exposure at default (EAD) under the internal-ratings based (IRB) approach to credit risk, as the case may be;

“financial institution” refers to a banking institution or a financial holding company, as the case may be;

“financial holding company” or **“FHC”** refers to a financial holding company approved pursuant to section 112(3) of the FSA or section 124(3) of the IFSA and holds investment directly or indirectly in a banking institution;

“initial margin” refers to the funded collateral of a clearing member, or a client, posted to a CCP to mitigate the potential future exposure of the CCP to the clearing member arising from the possible future change in the value of their transactions. It includes the collateral deposited in excess of the minimum amount required, provided that there are arrangements by the CCP or the clearing member to prevent the withdrawal of these excess collateral by the clearing member or the client. In a case where the CCP uses the initial margin to mutualise losses among the clearing members, the collateral shall not be included in the calculation of counterparty credit risk capital requirements and it shall be treated as a default fund exposure to the CCP;

“long settlement transaction” refers to a transaction where a counterparty undertakes to deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities, or vice versa, at a settlement or delivery date that is contractually specified as more than the lower of the market standard for this particular instrument and five business days after the date on which the financial institution enters into the transaction;

“margin lending” refers to transactions where a financial institution extends credit in connection with the purchase, sale, carrying or trading of securities. Margin lending transactions do not include other loans/financing that happen to be secured by securities that are posted as collateral to the financial institution;

“margin agreement” refers to a contractual agreement or provisions to an agreement under which one counterparty must supply variation margin to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level;

“margin period of risk” or **“MPOR”** refers to an estimated time period from the last exchange of collateral covering a netting set of transactions with a defaulting counterparty until the counterparty is closed out and the resulting market risk is re-hedged;

“multi-level client structure” means a structure where an entity that is neither a member, nor a direct participant, of a CCP but provides clearing services as a client of a clearing member, or as a client of another client of a clearing member. This structure consists of–

- (a) **“higher level client”** which refers to an entity which may be the financial institution that provides clearing services to a lower level client; and
- (b) **“lower level client”** which refers to an entity which may be the financial institution that clears through a higher level client;

“offsetting transaction” refers to the transaction leg between a clearing member and the CCP when the clearing member acts on behalf of a client, for example when a clearing member clears or novates a client's trade;

“OTC derivative transaction” refers to an over-the-counter (OTC) derivative contract that is not traded on an exchange;

“qualifying central counterparty” or **“QCCP”** refers to an entity that meets the criteria set out in paragraph 6.1;

“securities financing transactions” or **“SFTs”** refers to transactions where its value depends on market valuations and the transactions are often subject to margin agreements. This includes–

- (a) a repurchase agreement transaction;
- (b) a reverse repurchase agreement transaction;
- (c) a securities/commodities lending or borrowing transaction;
- (d) a margin lending transaction;
- (e) a collateralised *murabahah* arrangement; and
- (f) a sell and buyback agreement transaction;

“senior management” refers to the chief executive officer (CEO) and senior officers, who are employed by a financial institution or an affiliate of the financial institution;

“trade exposures” refers to the current exposure, the potential future exposure and the initial margin of a clearing member, or a client, to a CCP arising from OTC derivatives transactions, exchange-traded derivative transactions, SFTs and long settlement transactions. The current exposure also includes any variation margin due to the clearing member, or the client, that has not yet been received;

“variation margin” refers to the funded collateral of a clearing member, or a client, posted on a daily or intraday basis to a CCP based upon price movements of the transactions.

4. Policy documents superseded

- 4.1 This policy document supersedes the following:
- (a) Paragraphs 4 and 5 of Appendix VIII (Counterparty Credit Risk and Current Exposure Method) in the policy document on *Capital Adequacy Framework (Basel II – Risk-Weighted Assets)* issued on 3 May 2019; and
 - (b) Paragraphs 4 and 5 of Appendix VI (Counterparty Credit Risk and Current Exposure Method) in the policy document on *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)* issued on 3 May 2019.

PART B POLICY REQUIREMENTS

5. Scope of application

- S** 5.1 The requirements in this policy document shall apply to financial institutions' exposures to CCP arising from OTC derivatives transactions, exchange-traded derivatives transactions, SFTs and long settlement transactions.
- S** 5.2 With respect to paragraph 5.1, a financial institution using the IRB approach shall observe the IRB coverage requirement by excluding the risk-weighted assets calculated under this policy document from both the numerator and the denominator of the IRB coverage ratio.
- S** 5.3 Exposures arising from the settlement of cash transactions in equities, fixed income, spot foreign exchange and spot commodities are not subject to the requirements in this policy document⁵. For the avoidance of doubt, the settlement of cash transactions remains subject to the capital treatment for failed trades and non-delivery-versus-payment (non-DVP) transactions.
- S** 5.4 Where the clearing member-to-client leg of an exchange-traded derivatives transaction is conducted under a bilateral agreement⁶, a financial institution either in its capacity as a clearing member or as a client shall treat the transaction as an OTC derivative transaction and capitalise the transaction as bilateral trades. In this regard, the financial institution shall–
- (a) assign the relevant risk weight⁷ under credit risk capital requirements and calculate the exposure value, in accordance with the relevant policy documents⁸; and
 - (b) apply the CVA capital requirements.

⁵ For contributions to prefunded default funds covering settlement risk-only products, the applicable risk weight for counterparty credit risk is 0%. However, financial institutions shall continue to apply the relevant credit risk capital requirements for default fund contributions to Bursa Malaysia Securities Clearing.

⁶ In the case where a financial institution in its capacity as a client meets the conditions set out in paragraph 8.10, the transactions are not deemed to be conducted under a bilateral agreement.

⁷ Where a financial institution is a clearing member, it will assign the risk weight of the client. Similarly in the case where a financial institution is a lower level client under a multi-level client structure, it will assign the risk weight of the higher level client as the trades do not qualify for the conditions set out in paragraph 8.10.

⁸ As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.

6. Qualifying CCP

- S** 6.1 A financial institution shall be responsible in determining whether a CCP is a QCCP based on the following criteria:
- (a) the CCP is an entity that is authorised by an appropriate authority in its jurisdiction to operate as a CCP (including an authorisation granted by way of confirming an exemption);
 - (b) the CCP is based in a jurisdiction where it is subject to prudential supervision of a CCP regulator that applies domestic rules and regulations to the CCP that are consistent with the *Principles for Financial Market Infrastructures* (PFMI) issued by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions on an ongoing basis; and
 - (c) the CCP meets the requirements under paragraph 9 in order to permit the financial institution to calculate the capital requirements for their default fund exposures.
- S** 6.2 Where a CCP is in a jurisdiction where it is not subject to PFMI, a financial institution shall apply the capital requirements under paragraph 10 for its trade exposures and default fund contributions to the CCP unless the Bank specifies otherwise.
- S** 6.3 A financial institution shall provide to the Bank a list of CCPs to which it has exposures to, as and when requested by the Bank. The financial institution shall, if required by the Bank, revise the status of a CCP based on its evaluation of the QCCP criteria as specified in paragraph 6.1.
- S** 6.4 When a financial institution is clearing transactions listed under paragraph 5.1 through a QCCP, the financial institution shall apply the capital requirements under paragraphs 8 and 9 for its trade exposures and default fund contributions to the CCP⁹.
- S** 6.5 In the case where the sum of a financial institution's capital requirements for its trade exposures and default fund contributions to the QCCP is higher than the total capital requirement that would be applied to the same exposures under paragraph 10 if the CCP were a non-qualifying CCP, the financial institution shall cap the capital required at the latter amount.
- S** 6.6 In the event where a CCP ceases to be a QCCP because it no longer meets any of the criteria as set out in paragraph 6.1, a financial institution shall continue to account for the exposures to the CCP as though it is still a QCCP for the next three months after the cessation unless the Bank requires otherwise. Thereafter, the financial institution is required to capitalise the exposures to the CCP based on paragraph 10.

⁹ For the avoidance of doubt, a financial institution shall apply the capital requirements under paragraphs 8 and 9 to the transactions listed under paragraph 5.1 that are entered with Bursa Malaysia Derivatives Clearing Berhad (BMDC) as well as on the default fund contributions to BMDC.

7. Risk management requirements for centrally cleared exposures

- S** 7.1 A financial institution shall maintain adequate capital for its exposures to all CCPs. In particular, a financial institution shall consider whether it needs to hold capital in excess of the minimum capital requirements as part of its Internal Capital Adequacy Assessment Process (ICAAP) based on the following events which include but are not limited to:
- (a) its dealings with a CCP which may give rise to riskier exposures;
 - (b) where the financial institution is not able to establish that the CCP meets the definition of a QCCP; or
 - (c) an external assessment¹⁰ has found material shortcomings in the CCP or the regulation of the CCP, and the shortcomings identified have not been addressed by the CCP or the CCP regulator.
- S** 7.2 A financial institution that acts as a clearing member shall undertake appropriate scenario analysis and stress testing to assess whether the level of capital held against exposures to a CCP adequately addresses the inherent risks of those transactions. This assessment shall include potential future or contingent exposures resulting from future drawings on default fund commitments, and from secondary commitments to take over or replace offsetting transactions from clients of another clearing member in the event of a default or an insolvency of the clearing member, where applicable.
- S** 7.3 A financial institution shall monitor and report to its senior management and board on a regular basis, at minimum, its overall exposures to CCPs, including exposures arising from trading through a CCP and exposures arising from CCP membership obligations such as default fund contributions.

8. Trade exposures to qualifying CCPs

Exposures to a QCCP where a financial institution is a clearing member

- S** 8.1 A financial institution shall apply a 2% risk weight to its trade exposures to the QCCP arising from transactions entered for the financial institution's own purpose.
- S** 8.2 A financial institution shall also apply a 2% risk weight to its trade exposures to the QCCP that arise when the financial institution offers clearing services to clients and is obligated to reimburse the clients for any losses from changes in the value of its transactions in the event that the QCCP defaults¹¹.
- S** 8.3 A financial institution shall calculate the exposure value for its trade exposures in accordance with the relevant policy documents¹².

¹⁰ For example, a Financial Sector Assessment Program by the International Monetary Fund.

¹¹ For the avoidance of doubt, the trade exposures to the QCCP would be zero if the financial institution is not obligated to reimburse the clients.

¹² As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.

- S 8.4** With respect to paragraph 8.3, a financial institution shall apply the following computation:
- (a) in a case where the netting set does not contain illiquid collateral or exotic trades¹³ and there are no disputed trades within the netting set¹⁴, the floor of 20 business days¹⁵ for netting sets where the number of trades exceeds 5,000 does not apply;
 - (b) in all cases, a minimum MPOR of 10 business days must be used for OTC derivatives transactions; and
 - (c) where a QCCP retains variation margin against certain trades and the clearing member collateral is not protected against the insolvency of the QCCP, the minimum time risk horizon applied to the financial institution's trade exposures on these trades must be the lesser of one year and the remaining maturity of the transactions, with a floor of 10 business days.
- S 8.5** Where the settlement of transactions is legally enforceable on a net basis in an event of default, regardless of whether the counterparty is insolvent, bankrupt, or in liquidation, a financial institution shall only calculate the total replacement cost of all contracts relevant to the trade exposures as a net replacement cost if the applicable close-out netting sets meet the requirements set out in the relevant policy documents¹⁶. If the financial institution is not able to demonstrate that the netting agreements meet these requirements, the financial institution shall regard each single transaction as a netting set of its own for the calculation of trade exposures.

Exposures to clients where a financial institution is a clearing member

- S 8.6** A financial institution shall capitalise its trade exposures to clients as bilateral trades, irrespective of whether the financial institution guarantees the trade¹⁷ or acts as a financial intermediary between the client and the QCCP. In this regard, the financial institution shall–
- (a) assign the risk weights of the clients under the credit risk capital requirements and calculate the exposure value, in accordance with the relevant policy documents¹⁸; and
 - (b) apply the CVA capital requirements.

¹³ Must be determined in the context of stressed market conditions. These are characterised by the absence of continuously active markets where a counterparty would, within two or fewer days, obtain multiple price quotations that would not move the market or represent a price reflecting a market discount (in the case of collateral) or premium (in the case of a trade).

¹⁴ For the avoidance of doubt, this refers to no margin call disputes on a particular netting set.

¹⁵ Specifically, the MPOR floor under SA-CCR and minimum holding period under Basel III SA-CR.

¹⁶ As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD. To the extent that the requirements include the term "master agreement" or the phrase "a netting contract with a counterparty or other agreement", this terminology must be read as including any enforceable arrangement that provides legally enforceable rights of set-off.

¹⁷ This includes trades cleared through BMDC clearing members, as they guarantee the settlement of client trades.

¹⁸ As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.

- S** 8.7 In respect of paragraph 8.6(a), a financial institution shall capitalise its exposure to clients by applying an MPOR of at least 5 business days under the SA-CCR¹⁹. The reduced exposure value shall also be used to calculate the CVA capital requirement.
- S** 8.8 A financial institution shall only recognise a collateral²⁰ for both the QCCP-clearing member leg and the clearing member-client leg of the client-cleared trade if the financial institution collects the collateral from a client for client-cleared trades and this collateral is passed on to the QCCP. This treatment shall also be applicable to trades between a higher level client and a lower level client.

Exposures to a QCCP where a financial institution is a client

- S** 8.9 Subject to the conditions in paragraph 8.10, a financial institution shall also apply the treatment as set out in paragraphs 8.1 to 8.5 to the following trade exposures:
- (a) exposures to a clearing member where the financial institution is the client of a clearing member, and the transactions arise as a result of the clearing member acting as a financial intermediary (i.e. the clearing member completes an offsetting transaction with a QCCP);
 - (b) exposures to a higher level client where the financial institution is the lower level client in a multi-level client structure, and the transactions arise as a result of the higher level client acting as a financial intermediary (e.g. the higher level client completes an offsetting transaction with a clearing member);
 - (c) exposures to a QCCP where the financial institution is the client of a clearing member, and the clearing member guarantees the performance of the financial institution's exposure to the QCCP; or
 - (d) exposures to a QCCP where the financial institution is the lower level client in a multi-level client structure, and the higher level client guarantees the performance of the financial institution's exposure to the QCCP.
- S** 8.10 For the purpose of paragraph 8.9, the conditions which must be met by a financial institution are as follows:
- (a) the offsetting transactions are identified by the QCCP as client transactions;
 - (b) the collateral to support the offsetting transactions is held by the QCCP or the clearing member, or both, under arrangements that prevent any losses to the client due to:
 - (i) the default or insolvency of the clearing member;
 - (ii) the default or insolvency of the clearing member's other clients;and

¹⁹ The lower floor for MPOR is to recognise the shorter close-out period for client cleared transactions. For the avoidance of doubt, the lower floor is also applicable to trades cleared through a higher level client via a multi-level client structure.

²⁰ Including the initial margin posted by clients to the financial institution, which mitigates the exposure the financial institution has against these clients.

- (iii) the joint default or insolvency of the clearing member and any of its other clients;
- (c) upon the insolvency of the clearing member, there is no legal impediment (other than the need to obtain a court order as required or entitled by the client) to transfer the collateral belonging to the clients of a defaulting clearing member to the QCCP, to one or more surviving clearing members, or to the clients or their respective nominees;
- (d) the financial institution has conducted sufficient legal review and has a well-founded basis to conclude that, in the event of a legal challenge, the relevant courts and authorities under their respective jurisdictions would find that the arrangements would be legal, valid, binding and enforceable under the relevant laws of the relevant jurisdictions. The financial institution shall undertake further review as necessary to ensure continuing enforceability of the arrangements²¹; and
- (e) the relevant laws, regulations, rules, contractual arrangements or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through, or by, the QCCP. In such circumstances, the client positions and collateral held with the QCCP shall be transferred at market value unless the financial institution requests to close out the position at market value.

- S** 8.11 With regards to paragraph 8.10(e), a financial institution shall consider whether the offsetting transactions are highly likely to be ported based on prevailing market practices and precedence. These include whether there is a clear precedent for transactions to be ported at a QCCP and that there is a clear industry intent for such practices to continue. The financial institution shall not determine that the trades are highly likely to be ported solely on the basis that the QCCP documentation that does not prohibit client trades from being ported.
- S** 8.12 A financial institution that is a lower level client in a multi-level client structure shall only apply the treatment specified in paragraph 8.9 if the conditions set out in paragraph 8.10 are met at every level of the structure. The arrangements must be binding on all relevant parties (including the clearing member, the higher level client and the QCCP) and legally enforceable in all relevant jurisdictions.
- S** 8.13 Where the condition in paragraph 8.10(b)(iii) is not met but all other conditions in paragraph 8.10 are met, a financial institution that is a client of a clearing member or a lower level client in a multi-level client structure shall apply the treatment as set out in paragraphs 8.3 to 8.5, together with a risk weight of 4%, to the financial institution's trade exposures as listed in paragraph 8.9.

²¹ The financial institution shall be required to undertake a review periodically (no later than once every three years) or when there are developments that could impact the enforceability of the arrangements, whichever is earlier.

- S** 8.14 For cases where a financial institution cannot apply the treatment in paragraphs 8.9 and 8.13, the financial institution shall capitalise its trade exposures as bilateral trades. In this regard, the financial institution shall—
- (a) assign the risk weights of the clearing member or a higher level client under the credit risk capital requirements and calculate the exposure value, in accordance with the relevant policy documents²²; and
 - (b) apply the CVA capital requirements.

Treatment of posted collateral

- S** 8.15 A financial institution shall continue to apply the relevant risk weights on any collateral posted, including excess initial margin or variation margin, based on the prevailing banking book or trading book treatment under the Capital Adequacy Framework and Capital Adequacy Framework for Islamic Banks, regardless of whether such assets have been posted as a collateral to a QCCP.
- S** 8.16 In the case where a collateral posted, with a QCCP or a clearing member, is not held in a bankruptcy-remote manner, a financial institution shall apply the counterparty credit risk capital requirements to the collateral by recognising the credit risk based on the risk of loss of these collateral due to the creditworthiness of the entity holding such collateral²³.
- S** 8.17 Where a collateral is included in the definition of trade exposures, held by a custodian²⁴ and held bankruptcy-remote from the QCCP, a financial institution shall apply zero counterparty credit risk capital requirements to the collateral.
- S** 8.18 Where a collateral is included in the definition of trade exposures, held by the QCCP and not held in a bankruptcy-remote manner, a financial institution shall apply the following risk weights to the collateral:
- (a) a 2% risk weight, where the financial institution is a clearing member;
 - (b) a 2% risk weight, where the financial institution is a client and applies the treatment in paragraph 8.9;
 - (c) a 4% risk weight, where the financial institution is a client and applies the treatment in paragraph 8.13;
 - (d) the risk weight of the clearing member, where the financial institution is a client and applies the treatment in paragraph 8.14²⁵; or
 - (e) the risk weight of the higher level client, where the financial institution is a lower level client and applies the treatment in paragraph 8.14²⁵.

²² As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.

²³ The requirements include, but not limited to, increasing the counterparty credit risk exposure due to the application of haircuts.

²⁴ Custodian may include a trustee, agent, pledgee, secured creditor or any other person that holds property in a way that does not give such person a beneficial interest in such property and will not result in such property being subject to legally enforceable claims by the creditors of such persons, or to a court-ordered stay of the return of such property, should such person become insolvent or bankrupt.

²⁵ For the avoidance of doubt, similar treatment applies in the case where a collateral is included in the definition of trade exposures, but the collateral is held by a clearing member (or a higher level client) and not held in a bankruptcy-remote manner.

- S** 8.19 Notwithstanding paragraph 8.18(a), the financial institution shall apply zero counterparty credit risk capital requirements to the collateral collected from a client and posted to the QCCP where–
- (a) the collateral is not held in a bankruptcy-remote manner; and
 - (b) the financial institution is not obligated to reimburse the client for any loss of the posted collateral in the event that the QCCP defaults.
- S** 8.20 For collateral that is not included in the definition of trade exposures and is not posted as a default fund contribution, a financial institution shall apply the counterparty credit risk capital requirements to the collateral by assigning such collateral with the risk weight of the QCCP under the credit risk capital requirements in accordance with the relevant policy documents²⁶.
- S** 8.21 In respect of the calculation of the exposure value, a financial institution shall account for all collaterals posted that are not held in a bankruptcy-remote manner in the net independent collateral amount term²⁷ under SA-CCR.

9. Default fund exposures to qualifying CCPs

- S** 9.1 As part of the transitional arrangement for this policy document²⁸, a financial institution shall–
- (a) apply a 2% risk weight to its default fund exposures to Bursa Malaysia Derivatives Clearing Berhad; and
 - (b) capitalise its default fund exposures to any other QCCP based on the requirements in paragraphs 9.3 to 9.18.
- S** 9.2 Upon the expiry of the transitional arrangement in paragraph 9.1, a financial institution shall determine the capital requirement for its default fund exposures to the QCCP in accordance with paragraphs 9.3 to 9.18.
- G** 9.3 The capital requirement for a financial institution's default fund contributions to the QCCP is determined according to a risk-sensitive formula that considers the size and quality of the QCCP's financial resources, the counterparty credit risk exposures of the QCCP and the application of the QCCP's financial resources via its loss bearing waterfall structure, in the event of default by one or more clearing members.

²⁶ As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.

²⁷ Net independent collateral amount (NICA) represents any collateral (segregated or unsegregated) posted by the counterparty less the unsegregated collateral posted by the financial institution.

²⁸ For avoidance of doubt, this refers to the period from the effective date of this policy document until the implementation of SA-CCR.

- S** 9.4 Where a default fund of the QCCP is shared between products or types of business with settlement risk only²⁹ and products or types of business which give rise to counterparty credit risk³⁰, a financial institution shall apply the capital requirements for all its default fund exposures to the QCCP, without apportioning to the different classes or types of business or products.
- S** 9.5 Where the contributions from clearing members to a default fund of the QCCP are segregated by products or types of business (product types) and only accessible for specific product types³¹, a financial institution shall apply the capital requirements for the default fund exposures for each specific product type giving rise to counterparty credit risk. If the QCCP's own prefunded resources are shared among product types, the financial institution shall ensure that the funds are allocated to each of the calculations in proportion to the respective product-specific exposure value.
- S** 9.6 The calculations of the capital requirement for a financial institution's default fund contributions to the QCCP shall include calculations of the hypothetical capital requirement of QCCP (K_{CCP}), the total prefunded default fund contributions from all clearing members (DF_{CM}^{pref}) and the QCCP's own prefunded resources which are contributed to the default waterfall, where these are junior or *pari passu* to the prefunded clearing members' default fund contributions (DF_{CCP}).
- G** 9.7 For purposes of paragraph 9.6, the calculations may be performed by the financial institution, the QCCP, the QCCP supervisor or any other entity with access to the required data.
- S** 9.8 Where the financial institution relies on another entity, including the QCCP, the QCCP supervisor or any other entity as described in paragraph 9.7 to undertake any of these calculations, the financial institution shall ensure that the capital requirements are calculated according to paragraphs 9.11 to 9.16 and that the following conditions are met:
- (a) the entity performs the calculations of K_{CCP} , DF_{CM}^{pref} and DF_{CCP} in a transparent manner that allows the QCCP supervisor to oversee those calculations;
 - (b) the entity shares sufficient information of the calculation results to allow the financial institution to calculate the capital requirement for its default fund contributions, and to allow the Bank to review and confirm the calculations;
 - (c) the entity calculates K_{CCP} on a quarterly basis at a minimum, or more frequently if so by required by the Bank in case of material changes³²;
 - (d) the entity performing the calculations makes available to the Bank on a quarterly basis at a minimum, or more frequently if required by the Bank,

²⁹ For example, cash transactions in equities and bonds.

³⁰ OTC derivatives transactions, exchange-traded derivative transactions, SFTs and long settlement transactions.

³¹ For avoidance of doubt, this refers to where the default fund contributions can only be utilised for a specific product type and cannot be used to subsidise between product types.

³² For example, the clearing of a new product by a QCCP.

sufficient aggregate information about the composition of the QCCP's exposures to clearing members and the information provided to the financial institution for the purposes of calculating K_{CCP} , DF_{CM}^{pref} and DF_{CCP} ; and

- (e) the entity calculates K_{CCP} on a quarterly basis, and whenever there are material changes to the number or exposures of transactions cleared by the QCCP, or material changes to the financial resources of the QCCP.

- S** 9.9 For purposes of calculating the risk-sensitive capital requirement for a financial institution's default fund contribution (K_{CMFI}) to a QCCP, the following steps shall be carried out:
- (a) determine the K_{CCP} due to the counterparty credit risk exposures of the QCCP to all its clearing members and their clients; and
 - (b) apply the capital requirement for the financial institution based on the formula and inputs specified in paragraph 9.18.

First step: Hypothetical capital requirement of the QCCP

- G** 9.10 The K_{CCP} is a hypothetical capital requirement for a QCCP, calculated on a consistent basis for the sole purpose of determining the capitalisation of the clearing members' default fund contributions. It does not represent the actual capital requirements of the QCCP.

- S** 9.11 For purposes of paragraph 9.10, the following formula shall be used to calculate the K_{CCP} :

$$K_{CCP} = \sum_{CM_i} EAD_i \times RW \times \text{capital ratio}$$

whereby—

- (a) CM is the clearing member;
- (b) the sum (Σ) is over all clearing member accounts;
- (c) EAD_i is the exposure value of the QCCP to clearing member "i", relating to the valuation at the end of the regulatory reporting date before the margin called on the final margin call of that day is exchanged. The exposure includes the clearing member's own transactions and client transactions guaranteed by the clearing member, as well as all values of collateral held by the QCCP (including the clearing member's prefunded default fund contribution) against these transactions;
- (d) RW is a risk weight of 20%, except where the Bank has communicated a higher risk weight³³; and
- (e) the capital ratio is 8%.

- S** 9.12 Where a clearing member provides client clearing services, and the client transactions and collateral are held in a separate (individual or omnibus) sub-accounts to the clearing member's proprietary transactions, each of such client sub-account shall be included in the sum of EAD_i in the formula under paragraph 9.11 separately. In this regard, the exposure value of the QCCP to

³³ For example, the Bank may consider increasing the risk weight if the clearing members in a QCCP are not highly rated.

clearing member “*i*” shall be the sum of the exposure value of the client sub-accounts and the exposure value of any house sub-account³⁴. If any of these sub-accounts contain both the derivatives and SFTs, the EAD of that sub-account shall be the sum of the derivatives EAD and the SFT EAD.

- S** 9.13 In the case where the collateral is held against an account containing both derivatives and SFTs, the prefunded initial margin provided by the clearing member or client must be allocated to the derivatives and SFT exposures in proportion to the respective product specific EADs, calculated according to:
- (a) the credit risk mitigation component under SA-CR³⁵ for SFTs; and
 - (b) the SA-CCR calculation without including the effects of collateral, for derivatives transactions.
- S** 9.14 In the case where the default fund contributions of a clearing member are not split with regards to client and house sub-accounts, such default fund contributions must be allocated per sub-account according to the respective fraction the initial margin of the sub-account has in relation to the total initial margin posted by or for the account of the clearing member.
- S** 9.15 For derivatives transactions, EAD_i shall be calculated using the SA-CCR as the bilateral trade exposure the QCCP has against the clearing member and shall also be subject to the following:
- (a) an MPOR of 10 business days must be used to calculate the QCCP's potential future exposures to its clearing members on derivatives transactions. For the avoidance of doubt, the floor of 20 business days on the MPOR for netting sets with more than 5,000 trades does not apply; and
 - (b) all collateral held by a QCCP to which the QCCP would have a legal claim in the event of the default of the clearing member or its client, including the default fund contributions of that member, must be used to offset the QCCP's exposure to that clearing member or client through inclusion in the potential future exposure (PFE) multiplier³⁶.
- S** 9.16 For SFTs, EAD_i shall be equal to $\max(EBRM_i - IM_i - DF_i; 0)$, whereby:
- (a) $EBRM_i$ shall be the exposure value to clearing member “*i*” before risk mitigation as according to the credit risk mitigation component under SA-CR³⁷. For the purposes of this calculation, the mark-to-market value of the transactions incorporate the variation margin that has been exchanged before the margin called on the final margin call of that day;
 - (b) IM_i shall be the initial margin collateral posted by the clearing member with the QCCP; and

³⁴ This ensures that the collateral posted by the client and held at the QCCP cannot be used to offset the QCCP's exposures to clearing members' proprietary activity in the calculation of K_{QCCP} .

³⁵ Specifically, the treatment of repo-style transactions covered under master netting agreements.

³⁶ The PFE multiplier reflects the risk-reducing property of collateral, including excess collateral. This multiplier decreases as the excess collateral increases without reaching zero, and is also activated when the current value of derivatives transactions is negative.

³⁷ Specifically, the treatment of repo-style transactions covered under master netting agreements.

- (c) DF_i shall be the prefunded default fund contribution by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce the QCCP loss.

S 9.17 With respect to the calculations in paragraphs 9.11 to 9.16:

- (a) the standard supervisory haircuts and the holding period requirements for SFTs as set out in the credit risk mitigation component under SA-CR must be applied; and
- (b) the netting sets that are applicable to regulated clearing members are the same as paragraph 8.5. For all other clearing members, the netting rules as laid out by the QCCP based upon the notification of each of its clearing members shall be applicable. Notwithstanding this, where the Bank requires more granular netting sets than those laid out by the QCCP, the financial institution shall comply with such requirement.

Second step: Capital requirement for each financial institution

S 9.18 A financial institution shall calculate the capital requirement for its default fund contribution ($K_{CM_{FI}}$) based on the following formula:

$$K_{CM_{FI}} = \max \left(K_{CCP} \times \frac{DF_{FI}^{pref}}{DF_{CCP} + DF_{CM}^{pref}}; 8\% \times 2\% \times DF_{FI}^{pref} \right)$$

whereby–

- (a) $K_{CM_{FI}}$ is the capital requirement on the default fund contribution of the financial institution;
- (b) DF_{CM}^{pref} is the total prefunded default fund contributions from all clearing members;
- (c) DF_{CCP} is the QCCP's own prefunded resources³⁸ which are contributed to the default waterfall and these are junior or *pari passu* to the prefunded clearing members' default fund contributions;
- (d) DF_{FI}^{pref} is the prefunded default fund contribution provided by the financial institution; and
- (e) 2% is the risk weight floor on the default fund exposures.

³⁸ For example, contributed capital and retained earnings.

10. Exposures to non-qualifying CCPs

- S** 10.1 A financial institution shall compute the capital requirement for its trade exposures to a non-QCCP by–
- (a) calculating the exposure value for the trade exposures in accordance with the relevant policy documents³⁹; and
 - (b) applying the risk weight under the SA-CR, based on the category of the exposures, to its trade exposures to the non-QCCP.
- S** 10.2 A financial institution shall apply a risk weight of 1250% to its default fund contribution to a non-QCCP. The default fund contribution shall include both the prefunded and unfunded contributions which are liable to be paid by the financial institution if the non-QCCP so requires.
- G** 10.3 With respect to paragraph 10.2, where there is a liability for unfunded contributions arising from unlimited binding commitments to the default fund of the non-QCCP, the Bank will communicate the amount of unfunded commitments to which the 1250% risk weight applies.

³⁹ As listed in paragraph 6 of the CAF CC PD and CAFIB CC PD.