<center>**Completion Instructions**</center>

<center>**Return of Capital Adequacy Ratio**
Part IIIa - Risk-weighted Amount for Credit Risk
Basic Approach
Form MA(BS)3(IIIa)</center>

Introduction

1. Form MA(BS)3(IIIa) of Part III should be completed by each authorized institution (AI) incorporated in Hong Kong using the ***basic approach (BSC approach)*** to calculate ***credit risk*** under Part 5 of the Banking (Capital) Rules (BCR).

2. This Form covers the following exposures of a reporting AI:

   (a) All on-balance sheet exposures and off-balance sheet exposures booked in its ***banking book***, except:

      (i) exposures subject to deduction from the ***CET1 capital, additional tier 1 capital*** and/or ***tier 2 capital*** (which should be reported in Form MA(BS)3(II));

      (ii) ***securitization exposures*** subject to Part 7 of the BCR (which should be reported in Form MA(BS)3(IIId)); and

      (iii) exposures to ***central counterparties*** (CCPs) subject to Division 4 of Part 6A of the BCR (which should be reported in Form MA(BS)3(IIIe)).

   (b) All ***default risk exposures*** to counterparties under ***securities financing transactions*** (SFTs) (see paragraph 13 below) and ***derivative contracts*** booked in its ***trading book***, except:

      (i) exposures subject to deduction from the CET1 capital, additional tier 1 capital and/or tier 2 capital; and

      (ii) exposures to CCPs subject to Division 4 of Part 6A of the BCR (which should be reported in Form MA(BS)3(IIIe)).

   (c) All credit exposures to persons arising from the persons holding collateral posted by the AI in a manner that is not bankruptcy remote from the persons except:

      (i) exposures subject to deduction from the CET1 capital, additional tier 1 capital and/or tier 2 capital; and

      (ii) exposures to CCPs subject to Division 4 of Part 6A of the BCR (which should be reported in Form MA(BS)3(IIIe)).

(d) If applicable, the AI's market risk positions which are (i) exempted from the requirements of Part 8 of the BCR; and (ii) subject to Part 5 of the BCR as required by section 22(4)(c) of the BCR.

3.   This Form and these completion instructions should be read in conjunction with the BCR and the relevant supervisory policy/guidance related to the capital adequacy framework.

Section A: Definitions and Clarification

4.   The amounts reported in the column of "Principal Amount" should be net of *specific provisions* for all items in Division A and items *1* to *9, 18* and *24* in Division B, but gross of specific provisions for items *10* to *17 and 21 to 23* in Division B. For items *10* to *17* in Division B, specific provisions should be deducted from the *credit equivalent amount* (CEA) and the resulting figure should be reported in the column of "Credit Equivalent Amount". For items *21* to *23* in Division B, specific provisions should be deducted from the default risk exposure.

5.   "Tier 1 countries" means Hong Kong, and any country or place other than Hong Kong—

(a) which is a member of the Organization for Economic Co-operation and Development (OECD). Currently, OECD members comprise:

Australia	Germany	Mexico	Sweden
Austria	Greece	Netherlands	Switzerland
Belgium	Hungary	New Zealand	Turkey
Canada	Iceland	Norway	U.K.
Chile	Ireland	Poland	U.S.A.
Czech Republic	Israel	Portugal	
Denmark	Italy	Slovak Republic	
Estonia	Japan	South Korea	
Finland	Latvia	Slovenia	
France	Luxembourg	Spain	

or

(b) which has concluded special lending arrangements with the International Monetary Fund associated with the Fund's General Arrangements to Borrow (at present only Saudi Arabia),

but <u>excludes</u> any such country or place—

(c) which has rescheduled its external sovereign debt, whether to central government or non-central government creditors, within the previous five years; or

(d) which is specified by the Monetary Authority (MA) as being a country or place that is not to be regarded as a Tier 1 country.

6. AIs and ***banks*** include their overseas head offices and branches. For example, a placement with a ***Tier 2 country*** incorporated AI or its overseas branch should be classified as an exposure to an AI regardless of the country of incorporation or location of its branch. A placement with a Tier 1 country incorporated bank's branch, regardless of its location, should be classified as an exposure to a bank incorporated in Tier 1 country.

7. Four types of credit risk mitigation (CRM) viz., collateral, netting, ***guarantees*** and ***credit derivative contracts***, are recognized for the purpose of calculating capital requirement provided that they satisfy the relevant legal and operational requirements set out in—

    (a) in the case of netting, section 2(1) (definition of "***valid bilateral netting agreement***") or section 226B of the BCR, as the case requires;

    (b) in the case of collateral, sections 124 and 125 of the BCR;

    (c) in the case of guarantees, section 132 of the BCR; and

    (d) in the case of credit derivative contracts, section 133 of the BCR.

    To avoid doubt, guarantees issued by other offices of the reporting AI are not regarded as ***recognized credit risk mitigation***. Debt securities which are ***re-securitization exposures*** (whether rated or not) cannot be recognized as collateral (see section 125(2) of the BCR). See Section C for capital treatment and reporting arrangement.

8. Double counting of exposures arising from the same contract or transaction should be avoided. For example, only the undrawn portion of a loan commitment should be reported as an off-balance sheet exposure under item *9a*, *b* or *c* of Division B while the actual amount which has been lent out should be reported as an on-balance sheet exposure under the relevant class in Division A. ***Trade-related contingencies***, such as trust receipts and shipping guarantees, to which the exposures have already been reported as letters of credit issued or loans against import bills etc. should not be reported under item *3* of Division B.

9. In certain cases, credit exposures arising from derivative contracts may already be reflected, in part, on the reporting AI's balance sheet. For example, the AI may have recorded ***current exposures*** to counterparties under exchange rate and interest rate contracts on its balance sheet. To avoid double counting, such exposures should be excluded from on-balance sheet exposures and treated as off-balance sheet exposures for the purposes of this Form.

10. Accruals on an exposure should be classified and risk-weighted in the same way as the exposure. Accruals which cannot be so classified should, with the ***prior consent*** of the MA, be included in Class VII - Other exposures.

11. For SFTs booked in the reporting AI's banking book, the credit exposures to assets underlying the SFTs should be risk-weighted using the "economic substance"

approach as described below and reported in Division A (if the securities are *non-securitization exposures*) or Form MA(BS)3(IIId) (if the securities are securitization exposures):

(a) *repos of securities* - the securities sold by the AI under the transaction should continue to be treated as assets on the balance sheet of the AI, with *regulatory capital* provided for the credit exposure to the securities (see also section 122(2) of the BCR);

(b) *reverse repos of securities* - if the AI has acquired securities under reverse repo agreements, no regulatory capital is required for the money paid by the AI;

(c) *securities lending* - the treatment is similar to that of repo transactions. The securities lent should continue to remain as assets on the balance sheet of the AI, with regulatory capital provided for the credit exposure to the securities (see also section 122(2) of the BCR); and

(d) *securities borrowing* - if the collateral provided is not cash but securities, the securities should continue to remain as assets on the balance sheet of the AI, with regulatory capital provided for the credit exposure to the securities (see also section 122(4)(b) of the BCR).

If the securities underlying the SFTs are *securitization issues*, the AI should determine the risk-weight attributable to the securities in accordance with Part 7 of the BCR (see also section 122(5) of the BCR) and report the securities in Form MA(BS)3(IIId) accordingly.

12. For SFTs booked in the reporting AI's trading book, the AI's exposures to the assets underlying the SFTs are market risk exposures. Hence, the AI only needs to calculate the *risk-weighted amounts* (RWAs) of its market risk exposures to the assets in accordance with Part 8 of the BCR (see section 123 of the BCR) and report the exposures in Form MA(BS)3(IV). The AI is not required to calculate any RWA for the credit risk of the assets. However, if the AI is granted an exemption under section 22 of the BCR, the AI should comply with section 122 instead of section 123 in calculating the RWAs of its exposures to the assets, and report the exposures in this Form instead.

13. The default risk exposures in respect of SFTs (regardless of whether they are booked in the banking book or trading book) should be reported in Division B in the following manner:

(a) Reporting AIs with the MA's approval to use the *internal models (counterparty credit risk) approach* (*IMM(CCR) approach*) to calculate the default risk exposures in respect of SFTs should report the exposures in items *21* to *23* of Division B (see paragraph 20 for the reporting arrangement) instead of item *18* of Division B.

(b) Reporting AIs without the MA's approval to use the IMM(CCR) approach (or which are permitted not to use the IMM(CCR) approach) to calculate the default risk exposures in respect of SFTs should calculate the exposures as follows:

    (i) *repos of securities* - the AI should treat the securities sold as if it were an on-balance sheet exposure to the counterparty concerned secured on the money received by the AI and calculate the **SFT risk-weighted amount** taking into account the CRM effect of the collateral (i.e. the money received) (see also section 123A(4) of the BCR);

    (ii) *reverse repos of securities* - the transaction should be treated as if it were a collateralized lending to the counterparty concerned and the SFT risk-weighted amount should be calculated with the CRM effect of the collateral (i.e. the securities purchased) taken into account (see also section 123A(5) of the BCR);

    (iii) *securities lending* – the securities lent should be treated as if it were an on-balance sheet exposure to the counterparty concerned secured on the money or securities received by the AI and the SFT risk-weighted amount should be calculated with the CRM effect of the collateral (i.e. the money or securities received) taken into account (see also section 123A(4) of the BCR);

    (iv) *securities borrowing* - the transaction should be treated as if it were an on-balance sheet exposure to the counterparty [1] secured on the securities borrowed and the SFT risk-weighted amount should be calculated with the CRM effect of the collateral (i.e. the securities borrowed) taken into account (see also section 123A(7) of the BCR); and

    (v) *margin lending* - the SFT risk-weighted amount of the transaction should be calculated with the CRM effect of the securities financed by the transaction taken into account (see also section 123A(6) of the BCR).

For the purposes of this paragraph, the collateral must meet the relevant criteria for qualifying as **recognized collateral** under the BCR.

14. An **originating institution** of a **non-eligible securitization transaction** must report the risk-weighted amount of the **underlying exposures** of the transaction in this Form as if the exposures were not securitized. The underlying exposures of an **eligible synthetic securitization transaction** must be reported in this Form in the same manner as a non-eligible securitization transaction except that the CRM for transferring the credit risk of the underlying exposures to the other parties to the transaction can be taken into account in the RWA calculation and therefore should also be included in the reporting. For cases which are not specified in these instructions or in any other supervisory guidance relevant to securitization transactions, reporting AIs should consult the HKMA on the reporting arrangements.

---

[1] For securities lending or borrowing where the contractual agreement is made between the securities borrower/lender and the custodian (e.g. Clearstream Banking or Euroclear Bank), and the securities borrower/lender has no knowledge of from/to whom the security is borrowed/lent, the custodian becomes the "counterparty" of the securities borrower/lender.

Section B: Exposure Classification, Determination of Credit Conversion Factors and Risk-weights

B.1 On-balance Sheet Exposures

Exposure Classification

15. Division A of the Form is organized according to the 8 standard classes into which on-balance sheet exposures should be classified under the BSC approach:

Class I	-	*Sovereign* exposures
Class II	-	*Public sector entity* exposures
Class III	-	Multilateral development bank exposures
Class IV	-	Bank exposures
Class V	-	*Cash items*
Class VI	-	*Residential mortgage loans*
Class VII	-	Other exposures
Class VIII	-	Exposures subject to 1250% risk-weight

16. The 8 classes are mutually exclusive and therefore each exposure should be reported under only one of them.

Determination of Risk-weights

17. The following explains how exposures in each class are risk-weighted, and, if applicable, the relevant reporting principles.

Item   Nature of item

Class I   **Sovereign Exposures**

Deposits placed with, and loans made to, the Government (including those for the account of the Exchange Fund and the clearing balances with the Exchange Fund) should be reported under item *1*.

Market makers who have short positions in Exchange Fund Bills/Notes may report their net holdings of such instruments provided that the short positions are covered by the Sale and Repurchase Agreements with the HKMA. The following steps should be taken in determining the amount to be reported:

(a) the long and short positions of instruments with a residual maturity of less than 1 year may be offset with each other;

(b) the long and short positions of instruments with a residual maturity of not less than 1 year may be offset with each other;

(c) if the net positions of both (a) and (b) above are long, the positions should be reported under items *2* and *3* respectively;

(d)   if the net positions in (a) is long and the net position in (b) is short, or the other way round, the two positions can be netted with each other on a dollar for dollar basis. The resultant net long position, if any, should be reported under item *2* or *3* as appropriate.

1.   Loans to, or loans guaranteed by, sovereigns of Tier 1 countries are risk-weighted at 0%. The *credit protection covered portion* of loans covered by *recognized guarantees* given by the sovereigns of Tier 1 countries should be reported under this item.

2.   Fixed rate debt securities with a residual maturity of less than 1 year, or floating rate debt securities of any maturity, issued by sovereigns of Tier 1 countries are risk-weighted at 10%.

3.   Fixed rate debt securities with a residual maturity of not less than 1 year issued by sovereigns of Tier 1 countries are risk-weighted at 20%.

4.   Fixed rate debt securities with a residual maturity of less than 1 year, or floating rate debt securities of any maturity, that are covered by recognized guarantees given by sovereigns of Tier 1 countries are risk-weighted at 10%.

5.   Fixed rate debt securities with a residual maturity of not less than 1 year that are covered by recognized guarantees given by sovereigns of Tier 1 countries are risk-weighted at 20%.

6.   Loans to, or loans guaranteed by, sovereigns of Tier 2 countries are risk-weighted at 0% if the loans are *domestic currency exposures*, (e.g. a Malaysian Ringgit loan which is granted to the Malaysian government and funded by Malaysian Ringgit liabilities). The credit protection covered portion of loans covered by recognized guarantees given by sovereigns of Tier 2 countries should be reported under this item.

7.   Fixed rate debt securities with a residual maturity of less than 1 year, or floating rate debt securities of any maturity, issued by sovereigns of Tier 2 countries that are domestic currency exposures are risk-weighted at 10%.

8.   Fixed rate debt securities with a residual maturity of not less than 1 year issued by sovereigns of Tier 2 countries that are domestic currency exposures are risk-weighted at 20%.

9.   Fixed rate debt securities with a residual maturity of less than 1 year or floating rate debt securities of any maturity are risk-weighted at 10% if they are (i) covered by recognized guarantees given by

sovereigns of Tier 2 countries; and (ii) denominated and funded in the *local currencies* of the Tier 2 countries.

10.   Fixed rate debt securities with a residual maturity of not less than 1 year are risk-weighted at 20% if they are (i) covered by recognized guarantees given by sovereigns of Tier 2 countries; and (ii) denominated and funded in the local currencies of the Tier 2 countries.

11.   Exposures to Tier 2 countries, other than those reported under items *6* to *10*, are risk-weighted at 100%.

12.   Exposures to *relevant international organizations* are risk-weighted at 0%.

Class II   **Public Sector Entity (PSE) Exposures**

13.   Exposures to PSEs of Tier 1 countries are risk-weighted at 20%.

14.   Exposures to PSEs of Tier 2 countries are risk-weighted at 100%.

Class III   **Multilateral Development Bank (MDB) Exposures**

15.   Exposures to MDBs are risk-weighted at 0%.

Class IV   **Bank Exposures**

For the purposes of this class, clean[2] export trade bills negotiated under other banks' letters of credit may be reported as exposures to the issuing banks of the letters of credit.

16.   Exposures to AIs are risk-weighted at 20%.

17.   Exposures to banks incorporated in Tier 1 countries are risk-weighted at 20%.

18.   Exposures to banks incorporated in Tier 2 countries with a residual maturity of less than 1 year are risk-weighted at 20%.

19.   Exposures to banks incorporated in Tier 2 countries with a residual maturity of not less than 1 year are risk-weighted at 100%.

Class V   **Cash Items**

20.   Notes and coins are allocated a risk-weight of 0%.

21.   Government certificates of indebtedness are allocated a risk-weight of 0%.

---

[2] This includes cases where discrepancies have been accepted by the issuing bank concerned.

22.	Gold bullion held by the reporting AI or held by another person for the AI on an allocated basis, to the extent backed by gold bullion liabilities, is risk-weighted at 0%. Gold bullion held in safe custody for other entities or customers, to which the AI has no credit exposure, is not required to be included in this Form.

Gold bullion held for the AI on an unallocated basis by a third party, though backed by gold liabilities, should be risk-weighted as an exposure to that third party and reported under the class to which the third party belongs.

23.	Gold bullion held <u>not</u> backed by gold liabilities (i.e. all other holdings of gold bullion not included in item *22* above) is risk-weighted at 100%.

24.	Cash items in the course of collection refer to the amount of cheques, drafts and other items drawn on other banks that are payable to the account of the reporting AI immediately upon presentation and which are in the process of collection. Such items are allocated a risk-weight of 20%. Included are cheques and drafts against which the AI has paid to its customers (i.e. by purchasing or discounting the cheques or drafts presented by the customers) and in respect of which it now seeks payment from the drawee banks.

Import and export trade bills held by the AI which are in the process of collection should not be included in this item. They should be reported as exposures to the counterparty concerned and allocated a risk-weight applicable to the counterparty.

Unsettled clearing items under the interbank clearing system in Hong Kong and receivables arising from transactions in securities (other than ***repo-style transactions***), foreign exchange, and ***commodities*** which are not yet due for settlement should be excluded.

25a. to e.	<u>Failed trade – delivery-versus-payment (DvP) basis</u>

For any transaction in securities (other than repo-style transactions), foreign exchange, and commodities entered into on a ***delivery-versus-payment (DvP) basis***[3] where payment / delivery has not yet taken place after the settlement date, the reporting AI should report the ***positive current exposure*** of the transaction in the column of "Principal Amount". The RWA of the transaction is calculated by multiplying the positive current exposure of the transaction by the risk-weight corresponding to the length of the period of unsettlement (both the start and end days of the period inclusive).

---

[3] DvP transactions include payment-versus-payment (PvP) transactions.

When such transaction is entered into on a non-DvP basis and payment / delivery from the counterparty has not yet taken place up to and including the fourth *business day* after the settlement date, the amount of the payment made or the current market value of the thing delivered by the AI, plus any positive current exposure associated with the transaction, should be treated as an exposure to that counterparty. The amount of the exposure should be reported under the class to which the counterparty belongs and risk-weighted at the risk-weight applicable to that counterparty.

When payment / delivery under any of the above non-DvP transactions has not yet taken place for five or more business days after the settlement date, the AI should report the exposure in item *29c*.

26.   Exposures collateralized by cash deposits held by the reporting AI (including certificates of deposit and comparable instruments issued by the AI) are risk-weighted at 0%. When a cash deposit pledged to the AI is held at third-party bank in a non-custodial arrangement, the AI should treat the cash deposit as an exposure to that third-party bank and report it in accordance with the instructions in Section C.

Class VI   **Residential Mortgage Loans (RMLs)**

The ***credit protection uncovered portion***, if any, of the following RMLs should be reported under item *27a* or *27c* whichever is applicable:

(A) RMLs granted for the purchase of flats under the Home Ownership Scheme, Private Sector Participation Scheme Tenants Purchase Scheme and other similar schemes which are covered by guarantees issued by the Housing Authority;

(B) Reverse mortgage loans granted under the Reverse Mortgage Programme of HKMC Insurance Limited; and

(C) RMLs granted under Mortgage Insurance Programmes of HKMC Insurance Limited.

The credit protection covered portion of the above RMLs should be reported in Class II in accordance with the instructions in Section C if the guarantee or insurance concerned meets all the criteria set out in section 132 of the BCR.

27a.   RMLs that satisfy the criteria set out in section 115(1) of the BCR are risk-weighted at 50% and should be reported under this item.

27b.   If the reporting AI has opted to risk-weight those RMLs that are secured by a first legal charge on residential properties situated outside Hong Kong according to the regulatory capital rules of the jurisdictions in which the properties are situated, the RMLs should be reported under this item if the risk-weights are other than 50% and 100%. RMLs that are risk-weighted at 50% or 100% according to those jurisdictions' regulatory capital rules should be reported under item *27a* or *27c*, whichever is applicable.

27c.   Other RMLs, i.e. those which do not satisfy the criteria set out in sections 115(1) and 115(2) of the BCR, should be risk-weighted at 100% and reported under this item.

Class VII   **Other Exposures**

Included in this class are all on-balance sheet exposures which are subject to credit risk capital requirements and have not been included in Classes I to VI and VIII in this Form. Exposures included in this class are subject to a risk-weight of 100%, unless otherwise specified in the BCR or by the MA. Examples of exposures to be included in this class are:

28a.   <u>Exposures to corporates or individuals not elsewhere reported</u>

This refers to exposures to corporates or individuals which have not been included in other classes of exposures.

28b.   <u>Holdings of equity or other forms of capital instruments issued by, and non-capital LAC liabilities of, financial sector entities subject to 100% risk-weight</u>

This item is for reporting holdings[4], whether rated or not, falling within section 116(1)(a)(i) and (iii) of the BCR subject to 100% risk-weight under section 116(2)(a) of the BCR.

28c.   <u>Investments in equity of entities (other than financial sector entities) subject to 100% risk-weight and holding of collective investment schemes</u>

Included are investments in ***commercial entities*** which are subject to 100% risk-weight (see sections 116 and 117A of the BCR). Holding of ***collective investment schemes*** should also be reported here.

28d.   <u>Premises, plant and equipment, other fixed assets for own use, and other interest in land</u>

Included are –

---

[4] Reporting of holdings of non-capital LAC liabilities starts from the position as of end-June 2019.

- investments in premises, plant and equipment and all other fixed assets of the reporting AI which are held for own use;
- a right-of-use asset recognized by the reporting AI as a lessee in accordance with the prevailing accounting standards issued by Hong Kong Institute of Certified Public Accountants where the asset leased is a tangible asset; and
- other interests in land which are not occupied by the AI or used in the operation of the AI's business.

28e.   Holdings of equity or other forms of capital instruments issued by financial sector entities subject to 250% risk-weight

This item is for reporting holdings, whether rated or not, falling within section 116(1)(a)(ii) of the BCR which are subject to 250% risk-weight under section 116(2)(b) of the BCR.

28f.   Multiple-name credit-linked notes

This item refers to multiple-name *credit-linked notes* (CLN) (e.g. first-to-default CLN) for which the applicable risk-weights are determined according to section 117(a)(ii) of the BCR.   Also see paragraph 18(b) below.

28g.   Other on-balance sheet exposures which are not elsewhere reported

This item refers to other investments or exposures (e.g. those falling within section 116(1)(b) of the BCR) which are not reported elsewhere.

28h.   If necessary, the MA may specify a risk-weight which is greater than 100% for an exposure falling within this class. Such exposure should be reported under this item.

This item also includes credit protection covered portions of exposures which are –

- secured by recognized collateral for which the applicable risk-weights are determined under Part 7 of the BCR; or
- covered by credit derivative contracts eligible for a risk-weight of 2% or 4% under section 134(7) or 135(6A) of the BCR (The credit protection covered portions should be reported as a separate item from the credit protection covered portions arising from other types of CRM. To avoid doubt, if section 119(f)(ii) or 226I(b) of the BCR applies to the credit derivative contracts concerned, the default risk exposures in respect of the contracts are regarded as zero for the purposes of Form MA(BS)3(IIIe).).

Class VIII   **Exposures subject to 1250% risk-weight**

Report here the following types of on-balance sheet exposure which are subject to a risk-weight of 1250%.

29a.   First loss portion of credit protection

This item refers to the first loss portion mentioned in sections 135(2) and (8) of the BCR.

29b.   Significant exposures to commercial entities

This item refers to the reporting AI's holdings of shares in commercial entities that exceed the threshold set out in section 117A of the BCR.

29c.   Non-DvP transactions remain unsettled for 5 or more business days

This item refers to the amount of payment made or the current market value of things delivered by the reporting AI, plus any positive current exposure, in respect of securities (other than repo-style transactions), foreign exchange and commodities transactions entered into on a basis other than a DvP basis, where the payment or deliverables from the counterparty remain unsettled after the contractual settlement date for 5 or more business days (see also section 114A of the BCR).

18.   Risk-weights for Credit-linked Notes held

(a) A single-name CLN held by the reporting AI should be allocated a risk-weight which is the higher of the risk-weight of the ***reference obligation*** of the note and the risk-weight of the note issuer. The amount of the exposure, which is the book value of the note, should be reported under the relevant class in Division A.

(b) If the note is a multiple-name CLN (e.g. a first-to-default CLN), the risk-weighting method mentioned in paragraph (a) applies except that the AI should determine the risk-weight of the basket of reference obligations according to the principles set out in section 117(a)(ii) of the BCR (see paragraph 27(g) in Section B.2 below for explanation). The CLN should be reported in Division A under the class applicable to the issuer of the note if the risk-weight of the issuer is assigned to the CLN, otherwise, the CLN should be reported under Class VII item *28f* in that Division.

B.2 Off-balance Sheet Exposures

Classification and Determination of Credit Conversion Factors

19. The reporting AI should classify its off-balance sheet exposures into the appropriate standard items listed below and report the ***principal amount*** and the RWA of each exposure based on the instructions set out in Section C.

20. ***Credit conversion factors*** (CCFs) for items *1* to *9* are set out in section 118(1) of the BCR. CCFs for items *10* to *17* and *24* are set out in sections 118(2) and 120 of the BCR respectively (also see paragraphs 21 to 25 for explanation).

Item	Nature of item
1.	***Direct credit substitutes***
2.	***Transaction-related contingencies***
3.	Trade-related contingencies
4.	***Asset sales with recourse***
5.	***Forward asset purchases***
6.	***Partly paid-up shares and securities***
7.	***Forward forward deposits placed***

This refers to a commitment to place a forward forward deposit. If the reporting AI has contracted to receive a forward forward deposit, failure to deliver by the counterparty will result in an unanticipated change in the AI's interest rate exposure and may involve a replacement cost. Such exposure should therefore be accorded the same treatment as ***interest rate contracts*** and reported under item *11* below.

8. ***Note issuance and revolving underwriting facilities***

9a. to c. Other commitments

Included is the undrawn portion of any binding arrangements which obligate the reporting AI to provide funds or to incur off-balance sheet exposures (e.g. commitment to issue letters of credit or performance bonds) at some future dates. The latter does not include commitments to enter into OTC derivative transactions / credit derivative contracts.

A commitment is regarded as being created no later than the acceptance in writing by the customer of the facility offered.

In the case of an off-balance sheet exposure (exposure A) arising from a commitment the drawdown of which will give rise to another off-balance sheet exposure (exposure B) falling within any of items *1 to 8* and *24,* the CCF applicable to exposure A should be the lower of—

‒ the CCF applicable to exposure A based on the original maturity[5] of the commitment and whether it can be cancelled at any time unconditionally; and

‒ the CCF applicable to exposure B.

If the commitment is in the form of a general banking facility consisting of 2 or more credit lines (including lines for entering into OTC derivative transactions / credit derivative contracts), the AI should assign a CCF to exposure A based on the original maturity of the commitment and whether the commitment can be unconditionally cancelled at any time.

9a.   This item includes off-balance sheet exposures arising from commitments which are unconditionally cancellable without prior notice by the reporting AI other than for "force majeure" reason, or which effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. This also includes any revolving or undated/open-ended commitments, e.g. overdrafts or unused credit card lines, provided that they can be unconditionally cancelled at any time and subject to credit review at least annually.

9b.   This item captures other off-balance sheet exposures arising from—

- commitments with an original maturity of up to one year; or
- commitments the drawdown of which would give rise to off-balance sheet exposures subject to a CCF of 20%.

9c.   This item captures other off-balance sheet exposures arising from—

- commitments with an original maturity of over one year; or
- commitments the drawdown of which would give rise to off-balance sheet exposures subject to a CCF of 50%.

10. to 17.   <u>Default Risk Exposures (Current Exposure Method): Bilateral Trades – Derivative Contracts (including centrally cleared trades that are treated as bilateral trades)</u>

Reporting AIs that are using the ***current exposure method*** to calculate the ***counterparty default risk*** of bilateral trades (including centrally

---

[5] This is the length of time between the date the commitment is made and the earliest date on which the reporting AI can, at its option, unconditionally cancel the commitment.

cleared trades that are treated as bilateral trades) arising from derivative contracts should report the trades in these items.

10.	***Exchange rate contracts***

Forward exchange rate contracts arising from swap deposit arrangements are <u>excluded</u> from the calculation of RWA. Under such arrangements, the money deposited by customers is under the control of the reporting AI during the life of the forward contracts, therefore the AI is able to ensure that the customers do not default on the settlement of the forward contracts.

11.	Interest rate contracts

12.	***Equity contracts***

13.	***Precious metal contracts***

14.	***Debt security contracts*** or ***other commodity contracts***

15.	Credit derivative contracts

This item is intended for the reporting of counterparty default risk exposures arising from ***credit default swaps*** and ***total return swaps***.

> Credit risk exposure to ***reference entities*** of credit derivative contracts booked in the <u>banking book</u> does not fall within the scope of this item and should be reported in the following manner:
>
> (a) Reporting AI as protection seller
>
> Credit risk exposure to a reference entity of a credit derivative contract is reported as "direct credit substitutes" under item *1* above.
>
> (b) Reporting AI as protection buyer
>
> Credit risk protection provided by a credit derivative contract is either:
>
> - ignored for capital adequacy purposes if the protection is not bought for the purposes of hedging the credit risk of an exposure of the AI or the credit derivative contract is not a ***recognized credit derivative contract***; or
>
> - accounted for in the ways as described in Section C if the protection is bought for the purposes of hedging the

> credit risk of an exposure of the AI and the credit derivative contract is a recognized credit derivative contract.

16.   Derivative contracts subject to valid bilateral netting agreements

This item refers to the default risk exposure obtained using the methodology set out in section 131 of the BCR (also see the explanation in paragraph 36). For capital adequacy purposes, only default risk exposures of derivative contracts may be reported on a net basis.

17.   Other derivative contracts not specified above

This item is for the reporting of default risk exposures in respect of derivative contracts that are not covered by items *10* to *16*.

18.   Default Risk Exposures (Non-IMM(CCR) Approach): Bilateral Trades – SFTs (including centrally cleared trades that are treated as bilateral trades)

Reporting AIs that are using the methods explained in paragraph 13 to calculate the counterparty default risk of bilateral trades (including centrally cleared trades that are treated as bilateral trades) arising from SFTs should report the trades in this item.

19. to 23.   Default Risk Exposures (IMM(CCR) approach): Bilateral Trades (including centrally cleared trades that are treated as bilateral trades)

Reporting AIs that are using the IMM(CCR) approach to calculate the counterparty default risk of bilateral trades (including centrally cleared trades that are treated as bilateral trades) arising from derivative contracts and SFTs should report the trades in these items.

19.   Portfolio-level risk-weighted amount based on current market data

The portfolio-level risk-weighted amount calculated under sections 226D(1)(a) and (2)(a) of the BCR should be reported in this item.

20.   Portfolio-level risk-weighted amount based on stress calibration

The portfolio-level risk-weighted amount calculated under sections 226D(1)(b) and (2)(b) of the BCR should be reported in this item.

Only the higher of item *19* and item *20* will be used in the calculation of the total RWA for credit risk under the BSC approach.

21. to 23.	Breakdown of Portfolio-level Risk-weighted Amount

Items *21* to *23* capture the breakdown of the portfolio-level risk-weighted amount that will be used in the capital adequacy ratio calculation. In other words, if the portfolio-level risk-weighted amount calculated using current market data is larger, the data reported in items *21* to *23* should be those that make up the amount reported in item *19*.

21.	Netting sets (not subject to recognized netting)

This item captures transactions that are not subject to *recognized netting* or that are required to be treated as a separate *netting set* under section 226J(1) of the BCR. If the reporting AI's *IMM(CCR) approval* covers derivative contracts or SFTs and does not exclude *long settlement transactions*, the AI should report long settlement transactions in item *21a* or *21b*, depending on the nature of the long settlement transactions concerned. If the AI only uses the IMM(CCR) approach for long settlement transactions but not for other transactions, the AI should report the long settlement transactions in item *21c*.

22.	Netting sets (subject to valid bilateral netting agreements)

This item captures transactions that are subject to valid bilateral netting agreements and that are not required to be treated as a separate netting set under section 226J(1) of the BCR. The reporting treatment for long settlement transactions mentioned in item *21* above applies to item *22*.

23.	Netting sets (subject to valid cross-product netting agreements)

This item captures transactions that are subject to valid cross-product netting agreements and that are not required to be treated as a separate netting set under section 226J(1) of the BCR.

24.	Other off-balance sheet exposures which are not elsewhere reported

Off-balance sheet exposures other than those included in items *1* to *23* above should be reported in this item, these include the credit exposures to persons holding collateral posted by the reporting AI (other than collateral posted for centrally cleared trades and held by CCPs) in a manner that is not bankruptcy remote from the persons. For other off-balance sheet exposure, the AI should consult the HKMA on the reporting arrangements.

21. *CCFs for OTC derivative transactions under the current exposure method*

The CCFs applicable to OTC derivative transactions are set out in the following table:

Residual Maturity	Exchange Rate (including gold)	Interest Rate	Equity	Precious Metal	Debt Security or Other Commodity
1 year or less	1.0%	0%	6.0%	7.0%	10.0%
Over 1 year to 5 years	5.0%	0.5%	8.0%	7.0%	12.0%
Over 5 years	7.5%	1.5%	10.0%	8.0%	15.0%

For a contract with multiple exchanges of principal, the CCF to be used should be multiplied by the number of remaining payments under the contract.

For a contract which is structured to settle outstanding exposures on specified payment dates and the terms of the contract are reset so that the market value of the contract is zero on these dates, the residual maturity of the contract should be treated as being equal to the period until the next reset date. If the contract is an interest rate contract where the remaining time to final maturity of the contract is more than one year, the CCF is subject to a floor of 0.5%

22. *CCFs for credit derivative contracts booked in the trading book under the current exposure method*

The CCFs for calculating the **potential exposure** of single-name credit derivative contracts are as follows:

	Protection buyer	Protection seller
Total Return Swap		
Qualifying reference obligation[6]	5%	5%
Non-qualifying reference obligation[5]	10%	10%
Credit Default Swap		
Qualifying reference obligation[5]	5%	5%*
Non-qualifying reference obligation[5]	10%	10%*

* The protection seller of a credit default swap is required to calculate potential exposure only when such a swap is subject to close-out upon insolvency of the protection buyer while the reference entity is still solvent. The potential exposure of such swap should be capped at the amount of unpaid premium. The protection seller of any credit default swaps without such a "close-out" clause is not required to calculate potential exposure.

In the case of a **first-to-default credit derivative contract**, the CCF for **non-qualifying reference obligation** should be applied to the contract if there is at least one non-qualifying reference obligation in the basket of reference obligations specified in the contract, otherwise, the CCF for **qualifying reference obligation** should be used. In the case of a **second-to-default credit derivative contract**, the CCF for non-qualifying reference obligation should be applied to the contract if there are at least two non-qualifying reference obligations in the basket of reference obligations specified in the contract, otherwise, the CCF for qualifying reference obligation should be used. The same principle applies to other subsequent-to-default credit derivative contracts.

---

[6] The definition of "qualifying" is same as that of the "qualifying" category for the treatment of specific risk under the Standardized (Market Risk) approach described in Part 8 of the BCR and also includes reference obligations issued by sovereigns whose credit quality grades are 1, 2 or 3 as determined in accordance with section 287 of the BCR.

23. *CCFs for other derivative contracts under the current exposure method*

For OTC derivative transactions and credit derivative contracts that are not mentioned in paragraphs 21 and 22, the applicable CCFs are the same as those applicable to debt security contracts or other commodity contracts.

24. For off-balance sheet items not mentioned above, a CCF of 100% should be applied unless otherwise specified by the MA.

25. For exchange traded derivative contracts that are treated as bilateral trades for risk-weighting purpose, the CCFs applicable to the contracts should be determined as if they were OTC derivative transactions or credit derivative contracts, as the case requires.

26. *Default risk exposures of certain credit derivative contracts under the current exposure method and the IMM(CCR) approach*

The default risk exposures of credit derivative contracts falling within the following categories can be regarded as zero:

(a) Credit default swaps that have been reported as "direct credit substitutes" under item *1* in Division B or as securitization exposures in Form MA(BS)3(IIId) (i.e. the reporting AI has already held capital against the credit risk of the reference obligations underlying the swaps);

(b) Recognized credit derivative contracts held by the reporting AI as protection buyer in respect of which the CRM effects have already been taken into account in accordance with Divisions 7 and 8 of Part 5 or Division 5 of Part 7 of the BCR for the purposes of RWA calculation.

Determination of Risk-weights for Off-balance Sheet Items

27. *Risk-weights for items other than default risk exposures arising from derivative contracts and SFTs (i.e. items 1 to 9 and 24)*

The risk-weight of an off-balance sheet item is determined in the same manner as an on-balance sheet exposure except for the following:

(a) Asset sales with recourse;
(b) Forward asset purchases;
(c) Partly paid-up shares and securities; and
(d) Direct credit substitutes arising from the selling of credit derivative contracts in the form of total return swaps or credit default swaps booked in the reporting AI's <u>banking book</u>.

The risk-weight of an exposure falling within any of the above categories should be determined as:

(e) in the case of (a) and (b), the risk-weight allocated to the asset sold/to be purchased or the **obligor** of the asset, as the case requires;

(f) in the case of (c), the risk-weight allocated to the relevant shares or securities; and

(g) in the case of (d), the risk-weight of the relevant reference obligation of the credit derivative contract. The risk-weights of credit derivative contracts that provide **credit protection** to a basket of exposures should be determined as follows:

 (i) if the credit derivative contract sold is a first-to-default credit derivative contract, the reporting AI should allocate to the contract a risk-weight which is equal to the sum of the risk-weights of the reference obligations in the basket of reference obligations specified in the contract, subject to a maximum of 1,250%;

 (ii) if the credit derivative contract sold is a second-to-default credit derivative contract, the AI should allocate to the contract a risk-weight which is equal to the sum of the risk-weights of the reference obligations in the basket of reference obligations specified in the contract, but excluding that reference obligation which carries the lowest risk-weight, subject to a maximum of 1,250%. The same principle, with all necessary modifications, also applies to other subsequent-to-default credit derivative contracts; and

 (iii) if the credit derivative contract sold provides credit protection proportionately to the reference obligations in the basket specified in the contract, the risk-weight of the AI's exposure arising from the contract (i.e. RW_a) must be calculated by the following formula:

$$RW_a = \sum_i a_i \times RW_i$$

where:

RW_a = Average risk-weight of a basket of reference obligations
a_i = Proportion of credit protection allocated to a reference obligation
RW_i = Risk-weight of a reference obligation

28. *Risk-weights for default risk exposures arising from derivative contracts and SFTs (i.e. Items 10 to 23)*

The applicable risk-weights are determined by reference to the **attributed risk-weights** allocated to the counterparties of these contracts.

Section C: Calculation and Reporting of Risk-weighted Amount

C.1   On-balance Sheet Exposures

29.   For each on-balance sheet exposure, the RWA is calculated by multiplying its principal amount (after deduction of specific provisions) by an appropriate risk-weight determined in accordance with Part 5 of the BCR.

30.   If an exposure is not covered by any recognized CRM, the whole principal amount (after deduction of specific provisions) is reported in the "Principal Amount" column of the row for the risk-weight applicable to the exposure. If an exposure is covered fully or partially by recognized CRM, the amount reported in the "Principal Amount" column should be adjusted to reflect the CRM effect as set out below:

(a) **CRM treatment by substitution of risk-weights** (applicable to collateral, guarantees and credit derivative contracts)

(i)   Firstly, divide the principal amount (after deduction of specific provisions) of the exposure into two portions: the credit protection covered portion and the credit protection uncovered portion;

(ii)   Secondly, report the amount of the credit protection covered portion in the "Principal Amount" column of the row for the class and risk-weight applicable to the credit protection in accordance with the instructions set out in Section B above. That is, the credit protection covered portion should be allocated a risk-weight which is the risk-weight of the collateral, or, in the case of guarantees or credit derivative contracts, the risk-weight of the *credit protection provider* (or the CCP if the credit derivative contracts fall within section 134(7));

(iii) Thirdly, report the amount of the credit protection uncovered portion in the "Principal Amount" column of the row for the class and risk-weight applicable to the exposure in accordance with the instructions set out in Section B above; and

(iv)   Fourthly, the RWAs of the credit protection covered and uncovered portions are then calculated by multiplying the principal amounts by their applicable risk-weights.

(v)   For collateral, the value of credit protection is its market value subject to a minimum revaluation frequency of 6 months. If the collateral is in the form of cash deposits, certificates of deposit or other comparable instruments and it is held at a third-party bank in a non-custodial arrangement and unconditionally and irrevocably pledged or assigned to the reporting AI, the collateral should be allocated the same risk-weight as that of the third-party bank. If there is *currency mismatch* between the exposure and the collateral concerned, the value of the collateral should be reduced by a standard *haircut* of 8%.

(vi) For <u>guarantees and credit derivative contracts</u>, the value of credit protection is the maximum liability of the credit protection provider to the reporting AI under the credit protection. If there is currency mismatch between the credit protection and the exposure, the value of credit protection should be reduced by a standard haircut of 8%.   However, if the credit protection for a basket of exposures consists of a credit derivative contract with the following features, the extent of credit protection should be determined as follows:

(A) if the contract is a recognized <u>first-to-default credit derivative contract</u>, the AI may recognize that credit protection for the exposure in the basket which would carry the lowest RWA in the absence of the credit protection, provided that the principal amount of the exposure is not more than the ***notional amount*** of the credit derivative contract. The AI may substitute the risk-weight of the credit protection provider (or the CCP concerned where applicable by virtue of section 135(6A) of the BCR) for the risk-weight of that exposure;

(B) if the contract is a recognized <u>second-to-default credit derivative contract</u>, the AI may substitute the risk-weight of the credit protection provider (or the CCP concerned where applicable by virtue of section 135(6A) of the BCR) for the risk-weight of the exposure in the basket which would carry the second lowest RWA in the absence of the credit protection only if—

- the AI has, as a protection buyer, entered into a recognized first-to-default credit derivative contract of which the basket of obligations, or the basket of obligations used for the purposes of determining whether a ***credit event*** has occurred, is the same as that of the second-to-default credit derivative contract; or

- an obligation in the basket referred to in the first bullet above has defaulted;

(C) if the contract is any other subsequent-to-default credit derivative contract, the same principle as that applied to a second-to-default credit derivative contract, with all necessary modifications, applies;

(D) if the contract provides credit protection proportionately to the reference obligations in the basket specified in the contract, the AI may substitute the risk-weight of the credit protection provider (or the CCP concerned where applicable by virtue of section 135(6A) of the BCR) for the risk-weights of the exposures to the extent of the amounts protected.

(b) **CRM treatment by reduction of principal amount** (applicable to on-balance sheet netting)

(i) Firstly, identify the class to which the obligor of the exposures belongs and the risk-weight applicable to that obligor. Then calculate the net principal amount of the exposures and liabilities which are subject to recognized

netting by subtracting the aggregate book value of the liabilities from the aggregate principal amount of the exposures. If there is currency mismatch between the exposures and the liabilities, the aggregate book value of the liabilities should be reduced by a haircut of 8%;

    (ii)   Secondly, report this net principal amount in the "Principal Amount" column of the row for the risk-weight applicable to the obligor; and

    (iii) Thirdly, the RWA is calculated by multiplying the "Principal Amount" by the risk-weight of the obligor.

31.   *Credit protection by means of Credit-linked Notes*

    If the reporting AI issues a CLN to cover the credit risk of an exposure, the amount of credit protection is the amount of funds received from that note. The amount of the exposure which is covered by the funds is treated as an exposure collateralized by cash deposits.

C.2   Off-balance Sheet Exposures

32.   For each off-balance sheet exposure, the reporting AI should identify the relevant item in Division B to which the exposure belongs, and report the exposure in the row for that item.

33.   For the purposes of items 15, 16 and 19 to 23 in Division B, if the derivative contract concerned is a single-name credit default swap that falls within section 226J(1) of the BCR and the default risk exposure in respect of the swap is determined in accordance with section 226J(3) of the BCR, the reporting AI should not take into account any recognized CRM afforded to the swap when calculating the RWA of the swap (see also section 121(6A) of the BCR).

For Items other than Default Risk Exposures arising from Derivative Contracts and SFTs (i.e. items *1* to *9* and *24*)

34.   If an off-balance sheet exposure is not covered by recognized CRM, the process for calculating the RWA is as follows:

    (a) Firstly, report the whole principal amount (after deduction of specific provisions) of the exposure in the "Principal Amount" column of the row for the item to which the off-balance sheet exposure belongs;

    (b) Secondly, calculate the CEA of the exposure by multiplying the principal amount (after deduction of specific provisions) by the applicable CCF; and

    (c) Thirdly, multiply the CEA by the applicable risk-weight to calculate the RWA.

35.   If an off-balance sheet exposure is covered fully or partially by recognized CRM, the calculation is similar to that of on-balance sheet exposures (see Section C.1), except

that in calculating the RWA, CEA is used instead of principal amount. The following CRM treatment by substitution of risk-weights applies to collateral, guarantees and credit derivatives contracts:

(a) Firstly, report the whole principal amount (after deduction of specific provisions) of the exposure in the "Principal Amount" column of the row for the item to which the exposure belongs;

(b) Secondly, divide the principal amount into two portions: the credit protection covered portion and credit protection uncovered portion (the value of the credit protection for different types of recognized CRM is determined in the same way as set out in Section C.1);

(c) Thirdly, multiply the amount of each of the two portions by the CCF applicable to the exposure to come up with two CEAs and report the sum of the two CEAs in the column of "Credit Equivalent Amount"; and

(d) Fourthly, multiply the CEA of the credit protection covered portion by the risk-weight attributed to the collateral or credit protection provider (or the CCP concerned where applicable by virtue of section 134(7) or 135(6A) of the BCR) and multiply the CEA of the credit protection uncovered portion by the risk-weight applicable to the exposure to come up with two RWAs. The sum of the two RWAs is reported in the column of "Risk-weighted Amount".

For Default Risk Exposures arising from Derivative Contracts under the Current Exposure Method (i.e. items *10* to *17*)

36. Contracts which are not covered by valid bilateral netting agreements should be reported under items *10* to *15* and *17*. For contracts covered by valid bilateral netting agreements, the reporting AI may report them on a net basis under item *16*.

(a) Current exposure method

(i) Firstly, report the principal amount of the contract(s) in the column of "Principal Amount".

(ii) Secondly, calculate the CEA which is the sum of the current exposure and the potential exposure as calculated below:

(A) current exposure is—

- a contract's mark-to-market replacement cost (if the cost is negative or zero, the current exposure should be taken as zero); or

- (if contracts are covered by a valid bilateral netting agreement) the sum of the positive and negative mark-to-market replacement costs of individual contracts (if the sum so obtained is negative or zero, the current exposure should be taken as zero).

(B) potential exposure (i.e. the add-on) is—

- derived by multiplying the principal amount of a contract by the applicable CCF specified in Section B.2; or

- (if contacts are covered by a valid bilateral netting agreement) derived by the formula set out in paragraph (b) below.

If the exposure arising from the contract(s) falls within section 226Z of the BCR, the CEA should be multiplied by the applicable scaling factor.

(iii) Thirdly, deduct specific provisions and *CVA losses*, if any, from the exposure amount calculated under subparagraph (ii) and report the resultant amount in the column of "Credit Equivalent Amount".

(iv) Finally, multiply the reported "Credit Equivalent Amount" by the risk-weight applicable to the counterparty to calculate the RWA.

(b) Add-on of derivative contracts subject to recognized netting

The net add-on (A_{Net}) of derivative contracts covered by a <u>valid bilateral netting agreement</u> is calculated by using the following formula:

$$A_{Net} = 0.4 \times A_{Gross} + 0.6 \times NGR \times A_{Gross}$$

where:

A_{Gross} = The sum of the individual add-on amounts derived by multiplying the principal amounts of all of the individual contracts by the applicable CCFs

NGR = The ratio of net replacement cost for all the contracts to gross replacement cost for all the contracts

The NGR in the above formula can be calculated on a <u>per counterparty basis</u> or on an <u>aggregate basis</u>. However, the basis chosen by the reporting AI should be used consistently. An illustration of the calculation of the NGR based on the two calculation bases is given in the **Annex IIIa-A**.

There is no need to calculate the potential exposure of single currency floating/floating interest rate swaps. The current exposure, i.e. replacement cost, of these contracts should be taken as their CEAs.

37. If the (net) exposure to a counterparty is covered fully or partially by recognized CRM, the calculation is similar to that of on-balance sheet exposures (see Section C.1 above), except that in calculating the RWA, CEA is used instead of principal amount:

(a) Firstly, report the principal amount of the contract in the column of "Principal Amount";

(b) Secondly, convert the principal amount into a CEA using the current exposure method. If the exposure arising from the contract falls within section 226Z of the BCR, the CEA should be multiplied by the applicable scaling factor;

(c) Thirdly, deduct specific provisions and CVA losses, if any, from the exposure amount calculated under paragraph (b) and report the resultant amount in the column of "Credit Equivalent Amount";

(d) Fourthly, divide the amount reported in the column "Credit Equivalent Amount" into two portions: the credit protection covered portion and the credit protection uncovered portion; and

(e) Finally, multiply the credit protection uncovered portion by the risk-weight applicable to the counterparty and the credit protection covered portion by the risk-weight applicable to the credit protection to calculate two RWAs. The sum of the two RWAs is reported in the column of "Risk-weighted Amount".

For SFTs of which the default risk exposures are not calculated by using the IMM(CCR) Approach (i.e. item *18*)

38. Reporting AIs should report SFTs as follows:

(a) Column "Principal amount" – report the aggregate principal amount (after deduction of specific provisions for default risk exposures) of the securities sold or lent, or the money paid or lent, or the securities or money provided as collateral, under the SFTs;

(b) Column "Risk-weighted amount" – the CRM effect of any recognized CRM afforded to the transactions should be reported in the following manner:

 (i) For each of the SFTs, divide the principal amount (after deduction of specific provisions for default risk exposures) into two portions: the credit protection covered portion and credit protection uncovered portion;

 (ii) Multiply the credit protection covered portion by the risk-weight attributed to the collateral (i.e. the securities or money received by the AI under the SFT) and multiply the credit protection uncovered portion by the risk-weight applicable to the counterparty to come up with two RWAs; and

 (iii) Repeat the two steps above for each of the SFTs and report the sum of the resulting RWAs in the column of "Risk-weighted Amount".

For Transactions of which the Default Risk Exposures are Calculated by using the IMM(CCR) Approach (items *19* to *23*)

39. In items *21a* to *23*, the amount reported in "Default Risk Exposure" should be net of CVA losses if applicable.

40. In items *21b* and *22b,* the "Principal Amount" of SFTs should be the principal amount of the securities sold or lent, or the money paid or lent, or the securities or money provided as collateral, under the SFTs. The default risk exposures in respect of SFTs calculated by using the IMM(CCR) approach should be reported in the column of "Default Risk Exposure".

41. In the case of long settlement transactions, the principal amount to be reported in the column of "Principal Amount" will be based on the nature of the transactions (i.e. whether the transactions are akin to SFTs or derivative contracts).

42. In the case of items *22a, b and c and 23*, the default risk exposures reported should be the netting set level default risk exposures (i.e. after taking into account the effect of recognized netting).

C.3 Multiple Credit Risk Mitigation

43. An exposure covered by two or more forms of recognized CRM (e.g. with both collateral and guarantee partially covering the exposure) should be divided into different portions which respectively represent the proportions of the exposure being covered by each of the forms of the recognized CRM used. The calculation of the RWA of each portion will be done separately. If there is an overlap of coverage between the different forms of recognized CRM used, the reporting AI may select, in respect of the overlapped portion, the form of recognized CRM which will result in the lowest RWA of that overlapped portion of the exposure.

44. If credit protection is obtained for a general banking facility consisting of several types of credit line, the reporting AI may determine how the credit protection should be allocated amongst individual exposures under each of the credit lines.

C.4 Maturity Mismatches

45. If the credit protection provided has a residual maturity which is shorter than the residual maturity of the exposure, the reporting AI must <u>not</u> take into account the CRM effect of that credit protection.

Hong Kong Monetary Authority
March 2019

Example of calculating the Net to Gross Ratio (NGR)

1. The following table illustrates how the NGR is calculated on a per counterparty basis and on an aggregate basis:

Transaction	Counterparty A		Counterparty B		Counterparty C	
	Notional amount	Mark-to-market value	Notional amount	Mark-to-market value	Notional amount	Mark-to-market value
Outstanding contract 1	100	10	50	8	30	-3
Outstanding contract 2	100	-5	50	2	30	1
Gross replacement cost (GR)		10		10		1
Net replacement cost (NR)		5		10		0
NGR (per counterparty)	0.5		1		0	
NGR (aggregate)	$\sum NR / \sum GR = 15 / 21 = 0.71$					

2. The gross replacement costs (GR) include only the sums of <u>positive</u> market values, they are therefore, 10, 10 and 1 respectively for counterparties A, B and C. The corresponding net replacement costs (NR) are the <u>non-negative</u> sums of <u>both</u> positive and negative market values, i.e. 5, 10 and 0 for A, B and C respectively. Accordingly, the NGR calculated on a per counterparty basis should be 5/10 = 0.5, 10/10 = 1 and 0/1 = 0 for A, B and C respectively. Based on the per counterparty NGR, the net potential exposure on a per counterparty basis can be calculated using Formula 15 in section 131 of the BCR. The aggregate net potential exposure would be the sum of the per counterparty net potential exposure.

3. If the NGR is calculated on an aggregate basis, it will be the ratio of total net replacement costs to total gross replacement costs, i.e. 15/21 = 0.71. The aggregate net potential exposure is then calculated by substituting this ratio into Formula 15 for each individual counterparty, i.e. A, B and C.