**Annex 1**

# Completion Instructions

## Return of Capital Adequacy Ratio
## Part I – Summary Certificate on Capital Adequacy Ratios
## Form MA(BS)3(I)

## Introduction

1. Form MA(BS)3(I) is divided into three divisions:

   (a) Division A & C – to be completed by all reporting institutions;
   (b) Division B – to be completed by reporting institutions using the ***internal ratings-based approach (IRB approach)***.

2. Division A is for a reporting institution to provide summary information on its quarter-end Common Equity Tier 1 capital ratio, Tier 1 capital ratio and Total capital ratio and the relevant aggregate figures (mainly extracted from other parts of the Return) for computing the ratios. Division B collects information for the determination of the ***capital floor*** by a reporting institution using the IRB approach. Division C is for a reporting institution to report information relating to capital buffer requirements applicable to it.

3. This return and its completion instructions should be read in conjunction with the Banking (Capital) Rules (BCR) and the relevant supervisory policy/guidance on the revised capital adequacy framework.

## Specific Instructions

### Division A: Calculation of Capital Adequacy Ratios

4. The figures reported for items 1.1 to 1.3, 2.1 to 2.6(ii), 2.8, 2.9 and 2.9a should be extracted from other parts of the Return. See **Annex I-A** for a mapping table on items in this Form and the corresponding items in other Forms.

5. Reporting institutions using the IRB approach, regardless of whether they also use other prescribed approaches to calculate credit risk, are not required to complete item 2.5, since the total ***CVA risk-weighted amount*** of the institutions reported under Part IIIf has already been incorporated into the institutions' ***risk-weighted amount for credit risk*** (credit RWA) reported under Part IIIc and reflected under item 2.3.

6. Only reporting institutions using the IRB approach are required to complete item 2.10 and item 6. It should be noted that item 2.10 will only be accessible to reporting institutions that use the IRB approach, and its value should be equal to item 4 of Division B. In calculating the IRB coverage ratio under item 6, the credit RWA in respect of the relevant reporting institutions' exposures to central counterparties (***CCP***) (i.e. item 2.4) are excluded from the denominator.

7. Item 2.12(i) must be completed by the reporting institution if ***regulatory reserve for general banking risks*** and ***collective provisions*** have been made for or apportioned to—

(a) its non-securitization exposures that are risk-weighted by using the ***basic approach (BSC approach)*** or the ***standardized (credit risk) approach (STC approach)***; or

(b) its securitization exposures that are risk-weighted by using the ***securitization external ratings-based approach (SEC-ERBA)***, ***securitization standardized approach (SEC-SA)*** and ***securitization fall-back approach (SEC-FBA)***.

The institution must report in this item the amount of the above regulatory reserve for general banking risks and collective provisions that exceeds 1.25% of the credit RWA reported under items 2.1, 2.2 and 2.6(ii). To avoid doubts, risk-weighted amount for CCP and CVA, if any, is excluded for the calculation of this 1.25% cap.

8. Item 2.12(ii) refers to the portion of cumulative fair value gains arising from the revaluation of the institution's holdings of land and buildings (except land and buildings mortgaged to the reporting institution to secure a debt) which is not included in Tier 2 Capital. For this purpose, whether such amount should be net or gross of deferred tax liabilities will be based on the prevailing accounting standards applicable within a given jurisdiction.

**Division B: Calculation of Capital Floor**

9. A reporting institution using the IRB approach (whether foundation or advanced) for capital adequacy purposes is subject to a capital floor for the first three years of the adoption of the IRB approach. The use of the capital floor is to prevent a sudden fall in capital charges solely as a result of the changes in how the credit RWA is measured.

10. A reporting institution migrating from the ***foundation IRB approach*** (FIRB) to the ***advanced IRB approach*** (AIRB) will generally not be subject to the capital floor if it has already been subject to a capital floor for a period of three years since its adoption of the FIRB. However, a reporting institution that is migrating to the AIRB during the first three years of using the FIRB will need to continue to adopt the capital floor for the remaining period. For example, a reporting institution moving to the AIRB after using the FIRB for two years should continue to be subject to the capital floor in the third year.

11. The Monetary Authority (MA) may require a reporting institution using the IRB approach to keep the capital floor in place beyond the three-year period or reinstate the capital floor requirement for a reporting institution in the following circumstances-

(i) for so long as the MA is satisfied that the prevailing banking supervisory standards relating to capital issued by the Basel Committee require a capital floor to continue to be applied to entities using the Internal Ratings-Based Approach beyond the first three years of adoption; and

(ii) where this is deemed appropriate by the MA based on the institution's circumstances (e.g. IRB compliance problems have emerged pending rectification or possible material prudential concerns on the financial soundness of the institution).

12. A reporting institution using the IRB approach should indicate whether it is subject to the capital floor requirement as at the reporting date by answering the filtering question at the top of Division B by inputting either "Yes" or "No"[1]. Those institutions which have answered "Yes" should proceed to complete the data table in Division B below the question, while the others should go directly to Part I – Division C of the return.

## (A) Calculation of capital charge for the application of capital floor

13. Subject to paragraph 18, a reporting institution which is subject to the capital floor should calculate the difference between:

(i) the floor amount of capital (capital floor) as calculated in accordance with paragraphs 14 to 16 (details to be reported under items 1(i) to (x) of Division B); and

(ii) the actual amount of capital as calculated in accordance with paragraph 17 (details to be reported under items 2(i) to (ix) of Division B).

If the floor amount of capital is larger than the actual amount of capital, the institution is required to report the product of such difference and 12.5 in item 4 of Division B and add such amount to the credit RWA (i.e. in item 2.10 of Division A). Otherwise, the figures reported under item 4 of Division B and item 2.10 of Division A should be zero.

14. For a reporting institution that has started to use the IRB approach <u>within</u> the transitional period from 1 January 2007 to 31 December 2009, the capital floor is derived by applying an adjustment factor (see paragraph 16) to the sum of the following amounts:

(a) 8% of the total RWA[2] (to be reported under item 1(v)) as calculated:

(i) for credit risk under the BSC approach or the STC approach[3] (to be reported under item 1(i)(a) or (b), as the case requires);

---

[1] By virtue of HKMA circular of 20 December 2013 and related notices issued to relevant AIs under section 225(6) of the BCR, all AIs that use the IRB approach are required to be subject to the capital floor requirement on the ground mentioned in paragraph 11(i).

[2] To facilitate a closer comparison with the capital calculation under the current Accord, a reporting institution adopting the IRB approach <u>within</u> the transitional period is not required to include the RWAs calculated for operational risk for the calculation of the capital floor.

[3] Subject to the prior consent of the MA, a reporting institution using the STC approach for the calculation of credit RWA before migrating to the IRB approach <u>within</u> the transitional period may use the STC approach as the basis for calculating the capital floor.

(ii) for credit risk in respect of securitization exposures under the SEC-ERBA, SEC-SA and SEC-FBA, whichever is applicable (to be reported under item 1(i)(c)); and
(iii) for market risk under the approach in use (i.e. the ***standardized (market risk) approach*** and/or the ***internal models approach***) (to be reported under item 1(ii)).

The total RWA is determined by:

**Credit RWA + market risk capital charges x 12.5**

(b) plus all deductions from the Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital (to be reported under item 1(vi));

(c) less the amount of regulatory reserve for general banking risks and collective provisions which is included in the Tier 2 capital (to be reported under item 1(vii)).

15. For a reporting institution that has started, or will start, to use the IRB approach after the transitional period, the calculation of the capital floor is derived by applying an adjustment factor (see paragraph 16) to the sum of the following amounts:

(a) 8% of the total RWA (to be reported under item 1(v)) as calculated:

(i) for credit risk under the STC approach (to be reported under item 1(i)(b));
(ii) for credit risk in respect of securitization exposures under the SEC-ERBA, SEC-SA and SEC-FBA, whichever is applicable (to be reported under item 1(i)(c));
(iii) for credit risk in respect of exposures to CCP in accordance with Division 4 of Part 6A (the amount reported under item 5 of Part IIIe to be reported under item 1(i)(d));
(iv) for credit risk in respect of ***CVA risk*** to counterparties in accordance with Division 3 of Part 6A (the aggregate of the CVA risk-weighted amounts reported under Part IIIf to be reported under item 1(i)(e));
(v) for market risk under the approach in use (to be reported under item 1(ii)); and
(vi) for operational risk under the approach in use (i.e. the ***basic indicator approach***, the ***standardized (operational risk) approach*** or the ***alternative standardized approach)*** (to be reported under item 1(iii)).

The total RWA is determined by:

**Credit RWA + market risk capital charges x 12.5 + operational risk capital charges x 12.5**

(b) plus all deductions from the Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital (to be reported under item 1(vi));

(c) less the amount of regulatory reserve for general banking risks and collective provisions which is included in the Tier 2 capital (to be reported under item 1(vii)).

16. The adjustment factors to be used for the calculation of the floor amount of capital by a reporting institution starting to use the IRB approach within or after the transitional period are set out in the table below, unless the MA has specified another adjustment factor (not exceeding 100%) pursuant to section 225(5)(c) or (6)(c)(i) of the BCR.

| Date of IRB approach implementation | 1st year of implementation | 2nd year of implementation | 3rd year of implementation |
|---|---|---|---|
| Within transitional period | 95% | 90% | 80% |
| After transitional period[4] | 90% | 80% | 70% |

The institution is required to fill in the applicable adjustment factor in item 1(ix).

**(B) Calculation of capital charge under the various approaches in use**

17. In the years in which the capital floor applies, a reporting institution should also calculate the actual amount of capital as follows:

(a) 8% of total RWA (to be reported under item 2(v)) as determined under the various approaches in use for

(i) credit risk, including credit risk in respect of securitization exposures or exposures to central counterparties where applicable (to be reported under items 2(i)(a), (b), (c), (d), (e) or (f), as the case requires);
(ii) market risk (to be reported under item 2(ii)); and
(iii) operational risk (to be reported under item 2(iii)).

The total RWA is determined by:

**Credit RWA + market risk capital charges x 12.5 + operational risk capital charges x 12.5**

(b) plus all deductions from the Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital (to be reported under item 2(vi)), including the shortfall amount (i.e. ***total EL amount*** > ***total eligible provisions***) derived from EL-EP calculation (See Section C of the Completion Instructions for MA(BS)3(IIIc));

(c) less the amount of regulatory reserve for general banking risks and collective provisions included in the Tier 2 capital (to be reported under item 2(vii)) if the institution uses the BSC approach, the STC approach, the SEC-ERBA, SEC-SA and/or SEC-FBA for any portion of its credit exposures;

(d) less the surplus amount of provisions under the IRB approach (i.e. where total eligible provisions > total EL amount) included in the Tier 2 capital derived from EL-EP calculation; and the portion of total regulatory reserve for general banking

[4] Lower adjustment factors are used to take account of the inclusion of operational risk capital charges for the calculation of capital floor after the transitional period (see also footnote 2).

risks and collective provisions relevant to the securitization internal ratings-based approach (SEC-IRBA) that is included in the Tier 2 capital (to be reported under item 2(viii)).

**(C) Adjustments to the calculation methods of capital floors**

18. Where the MA extends or reapplies the capital floor requirement to a reporting institution using the IRB approach in the circumstance stated in paragraph 11(i), the MA may specify in a notice to the institution –

(i) an adjustment factor (not exceeding 100%) for the purposes of calculating the floor amount of capital; and

(ii) any other adjustments to the method of calculating the floor amount of capital and the actual amount of capital,

which is considered reasonable by the MA to ensure that the capital floor is calculated substantially in accordance with the relevant prevailing banking supervisory standards relating to capital issued by the Basel Committee.

**Division C: Capital Buffer Requirements**

19. A reporting institution is required to observe the following in reporting under this Division:

| Item | | Reporting |
|---|---|---|
| 1. | Net CET1 capital ratio[5] | Report the ratio, expressed as a percentage, of (a) the amount of the institution's CET1 capital less the amount of CET1 capital that the institution requires for maintaining (i) the minimum CET1 capital ratio, Tier 1 capital ratio and Total capital ratio applicable to it as set out in section 3B of the BCR and as varied by the MA under section 97F of the Banking Ordinance and (ii) the minimum external or internal LAC risk-weighted ratio (as the case requires) that the institution is required to maintain under the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules, to (b) the sum of the institution's risk-weighted amount for credit risk, risk-weighted amount for market risk, risk-weighted amount for operational risk and risk-weighted amount for sovereign concentration risk, as determined in accordance with the BCR (i.e. the Total risk-weighted amount as reported under item 2.13 in Division A).<br><br>Please refer to the illustrative examples in **Annex I-B** on how to calculate the net CET1 capital ratio. |

[5] Reporting reflects calculation requirement under section 3E(2) of the BCR.

| Item | | Reporting |
|---|---|---|
| | | |
| 2. | Buffer level | Report the buffer level that is applicable to an institution, expressed as a percentage and calculated according to section 3G of the BCR –<br>(a) if the institution is a G-SIB or a D-SIB –<br>Item 2.1 + 2.2 + 2.3 in this Division; or<br>(b) in any other cases –<br>Item 2.1 + 2.2 in this Division. |
| 2.1 | Capital conservation buffer ratio (CB ratio) | Report the CB ratio for calculating an institution's buffer level under section 3G of the BCR as at the reporting date. |
| 2.2 | Countercyclical capital buffer ratio (CCyB ratio) | Report the CCyB ratio for calculating an institution's buffer level under section 3G of the BCR as at the reporting date.<br><br>The CCyB ratio reported in this item should be consistent with the ratio reported in the cell labelled "CCyB ratio" in column (8) of the Quarterly Reporting on the Countercyclical Capital Buffer (Form MA(BS)25). |
| 2.3 | Higher loss absorbency ratio (HLA ratio) | Report the HLA ratio notified by the MA as applicable to the institution, if any, for calculating the institution's buffer level under section 3G of the BCR as at the reporting date. |

Hong Kong Monetary Authority
September 2019

## Annex I-A

| Items in MA(BS)3(I) | | Cross reference with other return forms |
|---|---|---|
| Division A | Division B | |
| 1.1 | N/A | MA(BS)3(II) – Item (E) of Part II |
| 1.1(i) | N/A | MA(BS)3(II) – Item (B) of Part II |
| 1.1(ii) | N/A | MA(BS)3(II) – Item (D) of Part II |
| 1.2 | N/A | MA(BS)3(II) – Item (G) of Part II |
| 1.3 | N/A | MA(BS)3(II) – Item (H) of Part II |
| 2.1 | 2(i)(a) | MA(BS)3(IIIa) – Item (A+B) of Division B |
| 2.2 | 2(i)(b) | MA(BS)3(IIIb) – Item (A+B) of Division B |
| 2.3 | 2(i)(c) | MA(BS)3(IIIc) – Item 10 of Division A |
| 2.4 | 1(i)(d)<br>2(i)(f) | MA(BS)3(IIIe) – Item 5 |
| 2.5 | 1(i)(e) | For AIs not using the IRB approach<br>MA(BS)3(IIIf) – Item "Total" row of "Risk-weighted Amount" column of Division A + Item 3 of "Risk-weighted Amount" column of Division B<br><br>For AIs using the IRB approach<br>*Division A of Part I*: The figure should be zero. Refer to paragraph 5 for details<br>*Division B of Part I*: MA(BS)3(IIIf) – Item "Total" row of "Risk-weighted Amount" column of Division A + Item 3 of "Risk-weighted Amount" column of Division B |
| 2.6(i) | 2(i)(e) | MA(BS)3(IIId) – Column 1 of item A5(a) of Division A |
| 2.6(ii) | 2(i)(d) | MA(BS)3(IIId) – Column 1 of items A5(b) and A6 of Division A |
| 2.8 | 2(ii) | MA(BS)3(IV) – Item 3 of Division G |
| 2.9 | 2(iii) | MA(BS)3(V) – Item 5 |
| 2.9a | N/A | MA(BS)3(VI) – Item 2 |
| N/A | 2(vi) | MA(BS)3(II) –Sum of items (f)(i) to (xxi), items (i)(i) to (v) and items (r)(i) to (viii) of Part II |
| N/A | 2(vii) | MA(BS)3(II) – Item (o) of Part II |
| N/A | 2(viii) | MA(BS)3(II) – Items (p) and (q) of Part II |

**Annex I-B**

## Illustrative examples to calculate the net CET1 capital ratio

Scenario 1

Suppose Bank A is classified as a resolution entity under the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules (AI LAC Rules). Bank A's risk-weighted amount is 100 units and it has 15 units of Total capital (comprising 14 units of CET1 capital and 1 unit of Tier 2 capital) and 8 units of non-capital LAC debt resources. Therefore, the CET1 capital ratio, Tier 1 capital ratio, Total capital ratio and external LAC risk-weighted ratio of Bank A are 14%, 14%, 15% and 23% respectively.

Taking into account Bank A's minimum capital adequacy and loss-absorbency capacity (LAC) requirements (assuming 5.3%, 7.1%, 9.5% and 19% for CET1 capital ratio, Tier 1 capital ratio, Total capital ratio and external LAC risk-weighted ratio respectively in this scenario), the calculation of the net CET1 capital ratio includes the following steps:

| **Tier of capital / LAC** | **CARs of Bank A** | **Bank A's capital requirement[5] (as varied under s.97F of the BO)** | **CET1 capital required to meet Bank A's capital requirement** | **Remarks** |
|---|---|---|---|---|
| CET1 capital | 14.0% | 5.3% | 5.3 units | |
| Tier 1 capital | 14.0% | 7.1% | = 5.3 + (7.1 - 5.3)<br>= 5.3 + 1.8<br>= 7.1 units | Since Bank A has no Additional Tier 1 capital, the bank must make use of an additional 1.8 unit of CET1 capital to meet its Tier 1 capital requirement |
| Total capital | 15.0% | 9.5% | = 7.1 + [(9.5 - 7.1) - 1]<br>= 7.1+1.4<br>= 8.5 units | Since Bank A has only 1 unit of Tier 2 capital and no Additional Tier 1 capital, the bank must make use of an additional 1.4 unit of CET1 capital to meet its total capital requirement |

| | **External LAC risk-weighted ratio of Bank A** | **Bank A's minimum external LAC risk-weighted ratio (as determined under Part 4 of the AI LAC Rules)** | **CET1 capital required to meet Bank A's LAC requirement** | **Remarks** |
|---|---|---|---|---|
| External loss-absorbing capacity | 23% | 19% | = 8.5 + [(19 – 9.5) – 8]<br>= 8.5 + 1.5<br>= 10 units | Since Bank A has only 8 units of non-capital LAC debt resources with no available Additional Tier 1 capital or Tier 2 capital (other than those mentioned above), the bank must make use of an additional 1.5 units of CET1 capital to meet its total LAC requirement |

| | |
|---|---|
| Net CET1 Capital | = 14.0 – 10.0<br>= 4.0 units |
| **Net CET1 Capital Ratio** | **= 4.0 / 100**<br>**= 4.0%** |

Scenario 2

Suppose Bank B is classified as a resolution entity under the AI LAC Rules. Bank B's risk-weighted amount is 100 units and it has 18 units of Total capital (comprising 14 units of CET1 capital, 2 units of Additional Tier 1 capital and 2 units of Tier 2 capital) and 8 units of non-capital LAC debt resources. Therefore, the CET1 capital ratio, Tier 1 capital ratio, Total capital ratio and external LAC risk-weighted ratio of Bank B are 14%, 16%, 18% and 26% respectively.

Taking into account Bank B's minimum capital adequacy and LAC requirements (assuming 5.3%, 7.1%, 9.5% and 19% for CET1 capital ratio, Tier 1 capital ratio, Total capital ratio and external LAC risk-weighted ratio respectively in this scenario), the calculation of the net CET1 capital ratio includes the following steps:

| **Tier of capital / LAC** | **CARs of Bank B** | **Bank B's capital requirement[6] (as varied under s.97F of the BO)** | **CET1 capital required to meet Bank B's capital requirement** | **Remarks** |
|---|---|---|---|---|
| CET1 capital | 14.0% | 5.3% | 5.3 units | |
| Tier 1 capital | 16.0% | 7.1% | 5.3 units | Since Bank B has 2 units of Additional Tier 1 capital, the bank does not need to make use of additional units of CET1 capital to meet its Tier 1 capital requirement |
| Total capital | 18.0% | 9.5% | = 9.5 - 2 - 2<br>= 5.5 units | Since Bank B has 2 units of Additional Tier 1 capital and 2 units of Tier 2 capital, the bank needs to make use of an additional 0.2 unit of CET1 capital to meet its total capital requirement |

[6] Please refer to subsection 3.5 of the HKMA Supervisory Policy Manual module CA-G-5 *Supervisory Review Process* for details on the apportionment of the P2A to the three minimum capital ratios (http://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/supervisory-policy-manual/CA-G-5.pdf).

| | **External LAC risk-weighted ratio of Bank B** | **Bank B's minimum external LAC risk-weighted ratio (as determined under Part 4 of the AI LAC Rules)** | **CET1 capital required to meet Bank B's LAC requirement** | **Remarks** |
|---|---|---|---|---|
| External loss-absorbing capacity | 26% | 19% | = 19 – 2 – 2 - 8<br>= 7 units | Since Bank B has 2 units of Additional Tier 1 capital, 2 units of Tier 2 capital and 8 units of non-capital LAC debt resources, the bank need to make use of an additional 1.5 units of CET1 capital to meet its total LAC requirement |

| | |
|---|---|
| Net CET 1 Capital | = 14.0 - 7.0<br>= 7.0 units |
| **Net CET1 Capital Ratio** | **= 7.0 / 100**<br>**= 7.0%** |