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Revised Securitisation Framework



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I INTRODUCTION

1. The Basel Committee on Banking Supervision (BCBS) issued a revised set of standards on the capital requirements for securitisation exposures held in banks' banking books in December 2014. The document entitled "Revisions to the securitisation framework" was subsequently revised in July 2016 (BCBS revised securitisation framework).¹ The revisions made by the BCBS seek to simplify the existing Basel II securitisation framework, reduce mechanistic reliance on external ratings and enhance the risk sensitivity of the framework.
2. This consultation paper outlines the proposed approach of the Hong Kong Monetary Authority (HKMA) to implementing the BCBS revised securitisation framework locally in Hong Kong. Section II discusses the key elements of the framework and the manner in which the HKMA proposes to exercise the national discretions contained within it. Section III sets out the proposed implementation timeline.
3. The HKMA invites comments on its proposals by 17 March 2017.

¹ Available at: <http://www.bis.org/bcbs/publ/d374.pdf>.

II THE REVISED SECURITISATION FRAMEWORK

1. Scope of application

1. For the purpose of determining the “risk-weighted amount for credit risk” as defined in section 2(1) of the Banking (Capital) Rules (BCR), a locally incorporated Authorized Institution (AI) will be required to calculate the risk-weighted amount of its banking book securitisation exposures in accordance with the standards and requirements in the BCBS revised securitisation framework, which the HKMA intends to incorporate (with certain modifications as described below), into the BCR. This may be achieved either by amendment of Part 7 of the BCR or by replacing Part 7 with a new Part. The revised framework will also necessitate some consequential changes to other Parts of the BCR.
2. Under the BCBS revised securitisation framework, a securitisation exposure is defined as an exposure to, or arising from, a traditional securitisation transaction, a synthetic securitisation transaction or a structure which has features common to traditional or synthetic securitisations. More specifically, traditional securitisation transaction refers to a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Synthetic securitisation transaction refers to a structure with at least two different stratified risk positions or tranches that reflect different degrees of credit risk where the credit risk of an underlying pool of exposures is transferred, in whole or in part, through the use of funded or unfunded credit derivative contracts or guarantees that serve to hedge the credit risk of the pool of exposures. A re-securitisation transaction is a securitisation transaction in respect of which at least one of the underlying exposures is itself a securitisation exposure².

² A reference to securitisation exposure in this document includes a re-securitisation exposure unless otherwise specified.

2. Calculation of risk-weight

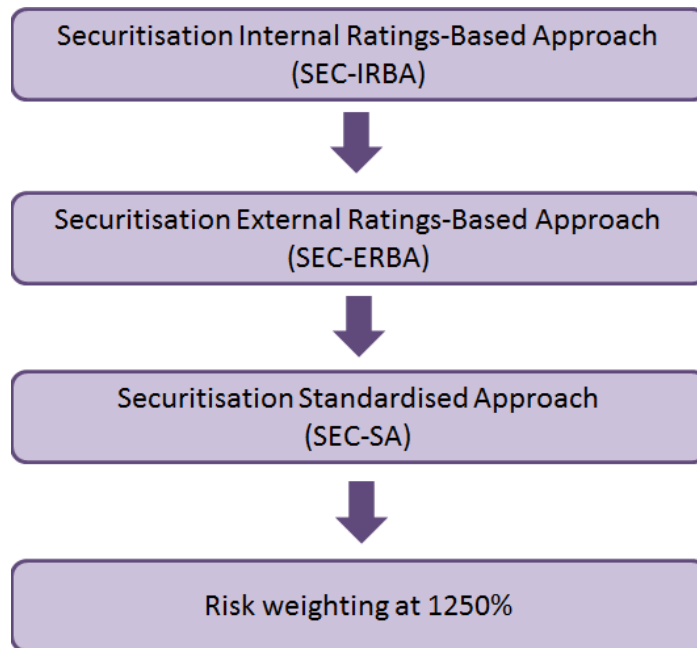
2.1 *Determining which approach to be used*

3. The BCBS revised securitisation framework prescribes a hierarchy of risk-weighting approaches for calculating the capital requirements for securitisation exposures in the banking book. These are the Securitisation Internal Ratings-Based Approach (SEC-IRBA), the Securitisation External Ratings-Based Approach (SEC-ERBA) and the Securitisation Standardised Approach (SEC-SA). A pre-condition for using any of these risk-weighting approaches is that an AI must meet the specified due diligence requirements for the securitisation transaction³.
4. A bank that is eligible to apply the approaches within the hierarchy in respect of its securitisation exposures (excluding re-securitisation exposures)⁴ will be required to apply the risk-weighting approaches in the order given by the hierarchy (the applicability of each of the approaches is discussed below). The framework also specifies a risk-weight (RW) of 1250% as a fall-back in the case where a bank is not qualified, or is unable, to use any of the risk-weighting approaches. The order of application of the risk-weighting approaches and the fall-back RW of 1250% is illustrated in Figure 1.

³ BCBS revised securitisation framework paragraphs 31 to 34.

⁴ See subsection 2.6 below for the capital treatment of re-securitisation exposures.

Figure 1: Hierarchy of approaches



5. The type of underlying exposure in a securitisation transaction, and the ability of the AI to meet the applicable “operational requirements” for using a certain risk-weighting approach and to calculate the specified parameters accordingly, will determine which of the approaches, or whether the fall-back risk-weighting at 1250%, is to be used for calculating the RW applicable to a securitisation exposure.
6. As a first step in calculating the RW, an AI will have to determine whether the securitisation pool (i.e. the pool of underlying exposures being securitised in the securitisation transaction) is an IRB pool, an SA pool or a Mixed pool, where –
 - (i) **IRB pool** means a securitisation pool for which the AI has the approval of the HKMA to use, and has sufficient information to use, the internal ratings-based approach (IRB approach) to calculate the capital requirements for all of the underlying exposures in the pool. It will not include any pool that exhibits the above characteristics but that is prohibited by the HKMA from being treated as an IRB pool. In line with paragraph 15 of the BCBS revised securitisation framework, it is proposed that the HKMA should retain discretion to prohibit an AI from

treating a pool as an IRB pool in cases of transactions with highly complex loss allocation structures;

(ii) **SA pool** means a securitisation pool in respect of which any of the following scenarios applies –

- the AI does not have the HKMA’s approval to use the IRB approach for any of the underlying exposures in the pool;
- the AI is unable to calculate the IRB parameters for any underlying exposures, even though it has the approval of the HKMA to use the IRB approach for some or all of the underlying exposures;
- the AI is prohibited by the HKMA from treating a securitisation pool as an IRB pool as described in sub-paragraph (i) above;

(iii) **Mixed pool** means a securitisation pool for which an AI has the HKMA’s approval, and is able, to calculate the IRB parameters for some, but not all, of the underlying exposures in the securitisation pool.

7. An AI will be required to use the SEC-IRBA (see subsection 2.2 below) to determine the RW for any securitisation exposure in respect of an IRB pool.

8. For a securitisation exposure in respect of an SA pool that has:-

- (i) an ECAI issue specific rating⁵; or
- (ii) an inferred rating as derived by the AI for an unrated securitisation exposure based on an ECAI issue specific rating for a reference securitisation exposure that ranks pari passu or subordinate in all respects to the unrated securitisation exposure,

an AI will be required to use the SEC-ERBA (see subsection 2.3 below) in respect of such a “rated” securitisation exposure if the applicable operational requirements are met⁶. For other securitisation exposures in respect of an SA pool, the AI will have to use the SEC-SA (see subsection 2.4 below).

9. For a securitisation exposure in respect of a Mixed pool where an AI can calculate the capital requirements for at least 95% of the underlying

⁵ See paragraph (d) of the definition of “ECAI issue specific rating” in section 2(1) of the BCR.

⁶ For operational requirements applicable to the use of the SEC-ERBA, see paragraph 71 (in cases where an ECAI issue specific rating is available) or paragraphs 72-73 (in cases where an inferred rating is available) of the BCBS revised securitisation framework.

exposures using the IRB approach (which is expressed as a ratio called K_{IRB} ⁷), the AI will be required to use the SEC-IRBA. Otherwise, the AI will have to follow the hierarchy of approaches applicable to an SA pool and apply the SEC-ERBA or the SEC-SA as appropriate to calculate the capital requirements for the securitisation exposure.

10. The BCBS revised securitisation framework allows a jurisdiction to exercise national discretion in relation to the introduction of an Internal Assessment Approach (IAA) to be used by an IRB bank in respect of any unrated securitisation exposure (e.g. liquidity facilities or credit enhancement) extended to an SA pool within an asset-backed commercial paper (ABCP) programme, on the condition that a set of operational requirements are fulfilled. The HKMA's preliminary inclination is not to introduce the IAA into the local framework at this stage on the bases that (i) any use of the IAA is expected to be limited as essentially it would only be applicable to unrated securitisation exposures (such as liquidity facilities or credit enhancement) extended by an AI to an externally rated ABCP programme where coincidentally the AI concerned is not able to calculate the relevant IRB parameters for such exposures; (ii) AIs' likely demand for using the IAA would not appear high based on available regulatory data pertaining to current levels of unrated securitisation exposures; and (iii) if the relevant IRB parameters cannot be calculated it would seem more appropriate for the SEC-SA to be applied from a prudential perspective. However, the HKMA invites industry comment on this and will keep the matter under review in the light of developments in the market and in overseas jurisdictions.
11. To facilitate closer alignment with the BCBS revised securitisation framework, the prudent capitalisation of AIs' securitisation exposures and a level playing field among AIs, the HKMA does not propose to introduce any specifically tailored capital treatment for those AIs that adopt the BSC approach for non-securitisation exposures. In other words, AIs using the BSC approach will be required to apply the SEC-ERBA or SEC-SA in the same circumstances and in the same manner, as an AI that adopts the STC approach and/or the IRB approach. This essentially means for example that whenever a calculation under the SEC-SA requires the application of provisions in Part 4 of the BCR, an AI that adopts the BSC approach will be required to apply the provisions in

⁷ See paragraph 12 below for the definition of the K_{IRB} .

Part 4 of the BCR (rather than the provisions in Part 5 of the BCR (relating to the BSC approach)) for the purpose of the calculation. This policy proposal is consistent with the rationale that the BSC approach is only intended for AIs with a “small, simple and straightforward” business model. Where an AI using the BSC approach engages in securitisation activities or acquires securitisation exposures which are generally more complex and may be potentially more risky, (ignoring for present purposes the issue of the AI’s continuing eligibility for using the BSC approach) the HKMA would expect the AI to be able to adequately understand the risks associated with such activities and capitalise them in a prudent manner, as prescribed in the BCBS revised securitisation framework⁸.

2.2 SEC-IRBA

12. Under the SEC-IRBA, the RW to be assigned to a securitisation exposure (RW_{IRBA}) will, subject to a floor of 15% (see subsection 2.5 below), be derived by using the following formulas:

- For $K_{IRB} \geq D_p$:

$$RW_{IRBA} = 1250\%$$

- For $D_p > K_{IRB} > A_p$:

$$RW_{IRBA} = \left[\left(\frac{K_{IRB} - A_p}{D_p - A_p} \right) \times 12.5 \right] + \left[\left(\frac{D_p - K_{IRB}}{D_p - A_p} \right) \times 12.5 \times K_{SSFA(K_{IRB})} \right]$$

- For $A_p \geq K_{IRB}$:

$$RW_{IRBA} = K_{SSFA(K_{IRB})} \times 12.5$$

where –

- K_{IRB} , expressed in decimal form, is the ratio of (a) the sum of the capital charge and the expected loss amount (and where applicable, dilution risk) calculated under the use of the IRB approach in accordance with Part 6 of the BCR for the pool of underlying exposures in a securitisation transaction (as if those exposures were not securitised and were held directly by the AI), subject to the effect of any credit protection covering

⁸ The hierarchy of approaches and other capital treatment in the BCBS revised securitisation framework were calibrated, needless to say, without taking account of the local BSC approach.

those exposures; to (b) the exposure amount of the underlying exposures;

- A_p , expressed in decimal form between 0 and 1, is the attachment point⁹, being the greater of (a) 0; and (b) the ratio of (i) the outstanding balance of all underlying exposures in the securitisation transaction minus the outstanding balance of all tranches that rank senior or pari passu to the tranche that contains the securitisation exposure concerned (including the exposure itself) to (ii) the outstanding balance of all underlying exposures in the securitisation transaction;
- D_p , expressed in decimal form between 0 and 1, is the detachment point⁹, being the greater of (a) 0; and (b) the ratio of (i) the outstanding balance of all underlying exposures in the securitisation transaction minus the outstanding balance of all the tranches that rank senior to the tranche that contains the securitisation exposure concerned to (ii) the outstanding balance of all underlying exposures in the securitisation transaction;
- $K_{SSFA(K_{IRB})} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u-l)}$, with the constant e being the base of the natural logarithms and the variables a , u and l being respectively:

$a = - (1 / (p \times K_{IRB}))$, in which p is a supervisory parameter representing a capital surcharge on securitisation tranches over the capital requirements for the underlying exposures

$u = D_p - K_{IRB}$

$l = \max (A_p - K_{IRB}; 0)$.

13. In line with the existing capital treatment of purchased receivables under the IRB approach, the HKMA proposes to exercise the national discretion in the BCBS revised securitisation framework (paragraphs 50(a) and (b) as read together) to apply the top-down approach for purchased receivables to securitisation exposures except with respect to the calculation of default risk of non-retail underlying exposures (for which the bottom-up approach must

⁹ The attachment point represents the threshold at which losses within the underlying pool would first be allocated to the securitisation exposure; whereas the detachment point represents the threshold at which losses within the underlying pool result in a total loss of principal for the tranche in which a securitisation exposure resides.

be used)¹⁰. In other words, AIs may calculate the K_{IRB} of securitisation exposures in accordance with the existing IRB treatment of purchased receivables as set out in sections 197 to 200 of the BCR (with the adaptations as prescribed in the BCBS revised securitisation framework), where the underlying exposures in the pool falling within the IRB class of retail exposures will be treated as if they were purchased retail receivables and the remaining underlying exposures in the pool as if they were purchased corporate receivables.

14. When applying the SEC-IRBA to a Mixed pool, K_{IRB} in the formulas above must be replaced by $K_{IRB (Mixed\ pool)}$, where –
- $K_{IRB (Mixed\ pool)} = d \times K_{IRB} + (1 - d) \times K_{SA}$;
 - K_{SA} is as defined in paragraph 20 below; and
 - d is the percentage of the exposure amount of underlying exposures for which the AI can calculate K_{IRB} over the exposure amount of all underlying exposures in the Mixed pool.
15. Further details in respect of the SEC-IRBA are set out in paragraphs 48 to 64 of the BCBS revised securitisation framework.

2.3 SEC-ERBA

16. Subject to compliance with the specified operational requirements, the SEC-ERBA is applicable to rated securitisation exposures¹¹. For the purposes of implementing the SEC-ERBA, the HKMA intends to adopt the relevant definitions in the BCR, with all necessary modifications to align with the applicable standards in the BCBS revised securitisation framework¹².

¹⁰ The application of the “top-down approach” means that AIs are permitted to group purchased receivables of substantially similar risk characteristics into portfolios or “pools”, and estimate the risk parameters and calculate the credit risk capital requirements for these receivables at the level of the pool as a whole. In contrast, the “bottom-up approach” requires that the estimates of risk parameters and calculation of capital requirements be at the level of the individual receivables making up the pool.

¹¹ See footnote 6 above.

¹² In essence, this means that the existing list of external credit assessment institutions (ECAIs) whose ECAI issue specific ratings are recognized for the purposes of Part 7 of the BCR (see

17. For a securitisation exposure with a short-term rating, or when an inferred rating based on a short-term rating is available, the relevant RW prescribed in Table 1 of paragraph 66 of the BCBS revised securitisation framework will be required to be used as the RW_{ERBA} .
18. For a securitisation exposure with a long-term rating, or when an inferred rating based on a long-term rating is available, the applicable RW_{ERBA} , subject to a floor of 15%, will be required to be calculated as:

- In the case of a senior tranche:

$$RW_{ERBA} = RW_{adjusted}$$

- In the case of a non-senior tranche:

$$RW_{ERBA} = RW_{adjusted} \times (1 - \min(T, 50\%))$$

where –

- $RW_{adjusted}$ refers to the RW after adjusting for tranche maturity, determined by linear interpolation between the relevant RWs for one and five years prescribed in Table 2 of paragraph 68 of the BCBS revised securitisation framework; and
 - T refers to the tranche thickness, being D_p minus A_p (with D_p and A_p as defined in paragraph 12 above).
19. Further details in respect of the SEC-ERBA are set out in paragraphs 65 to 73 of the BCBS revised securitisation framework.

2.4 SEC-SA

20. Where an AI is unable to use the SEC-IRBA or the SEC-ERBA in respect of a securitisation exposure, the SEC-SA, which has been calibrated to deliver generally more conservative RWs, will be used to derive the capital requirements of the securitisation exposure provided the AI knows the

paragraph (d) of the existing definition of “ECAI issue specific rating” in section 2(1) of the BCR), the current requirements that the ECAI issue specific ratings be mapped to a scale of credit quality grades for the purposes of calculating the capital requirements of rated securitisation exposures (where the RWs will be those specified in paragraphs 66 to 70 of the BCBS revised securitisation framework), and other provisions in Part 7 of the BCR that remain relevant for the application of the SEC-ERBA, will be retained with necessary modification under the SEC-ERBA.

delinquency status of at least 95% of the underlying exposures in the pool¹³. The RW to be assigned to a securitisation exposure under the SEC-SA (RW_{SA}), subject to a floor of 15%, will be derived by using the following formulas:

- For $K_A \geq D_P$:

$$RW_{SA} = 1250\%$$

- For $D_P > K_A > A_P$:

$$RW_{SA} = \left[\left(\frac{K_A - A_P}{D_P - A_P} \right) \times 12.5 \right] + \left[\left(\frac{D_P - K_A}{D_P - A_P} \right) \times 12.5 \times K_{SSFA(K_A)} \right]$$

- For $A_P \geq K_A$:

$$RW_{SA} = K_{SSFA(K_{SA})} \times 12.5$$

where –

- $K_A = (1 - W) * K_{SA} + W * 0.5$, with (1) W being the ratio of delinquent underlying exposures to the total underlying exposures in the pool; and (2) K_{SA} being the capital charge that would have applied to the underlying exposures calculated in accordance with Part 4 of the BCR had they not been securitised, or

if the AI does not know the delinquency status for some, but not more than 5%, of the underlying exposures in the securitisation pool:-

$$K_A = \left(\frac{EAD_{\text{Subpool 1 where W known}}}{EAD_{\text{underlying pool}}} \times K_A^{\text{Subpool 1 where W known}} \right) + \frac{EAD_{\text{Subpool 2 where W unknown}}}{EAD_{\text{underlying pool}}};$$

- D_P and A_P are as defined in paragraph 12 above; and
- $K_{SSFA(K_A)} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u-l)}$, with the constant e being the base of the natural logarithms and the variables a , u and l being respectively:

$a = - (1 / (p \times K_A))$, in which p is set at 1 for a securitisation exposure that is not a re-securitisation exposure

¹³ The term “delinquent underlying exposures” is defined in paragraph 82 of the BCBS revised securitisation framework as underlying exposures that are 90 days or more past due, subject to bankruptcy or insolvency proceedings, in the process of foreclosure, held as real estate owned, or in default (as defined within the securitisation deal documents). Where an AI does not know the delinquency status in respect of more than 5% of the underlying exposures in the pool, the securitisation exposure must be assigned a RW of 1250%.

$$u = D_p - K_A$$

$$l = \max (A_p - K_A; 0).$$

21. See paragraphs 78 to 87 of the BCBS revised securitisation framework for further details in respect of the SEC-SA.

2.5 Minimum and maximum risk-weights

22. Under all of the above calculation approaches, the resulting RW is subject to a floor of 15%, which has been designed to address concerns in respect of the effectiveness of certain credit enhancements in securitisation structures such that senior securitisation exposures will not be undercapitalised. Moreover, for an exposure in respect of a non-senior tranche, the RW must not be lower than the RW corresponding to a senior tranche of the same securitisation transaction with the same rating and maturity.
23. A cap on the RW may be applied to a senior securitisation exposure (provided that the AI has information on the composition of the underlying exposures at all times so that it can determine the RW of the underlying exposures) whereby –
- (i) in the case of an IRB pool or an SA pool, the applicable RW may be capped at a RW equal to the exposure weighted-average RW that would be applicable to the underlying exposures as calculated in accordance with Part 6¹⁴ or Part 4 of the BCR respectively as if the underlying exposures were not securitised and were held directly by the AI;
 - (ii) in the case of a Mixed pool to which the SEC-IRBA is applied, the IRB portion of the underlying pool will receive the corresponding RW as calculated in accordance with Part 6 of the BCR¹⁵, and the SA portion will receive the corresponding RW as calculated in accordance with Part 4 of the BCR. For a Mixed pool to which the SEC-ERBA or the SEC-SA is applied, the cap will be based on the exposure weighted-average RW of the underlying exposures calculated in accordance with Part 4 of the BCR.

¹⁴ For the purpose of determining the average RW of the underlying exposures, an AI must apply a scaling factor of 1.06 to the RWs derived in accordance with Part 6 of the BCR and include the expected loss multiplied by 12.5.

¹⁵ See footnote 14.

24. The HKMA proposes, however, that the RW floor of 15% will apply even if the RW cap derived as set out in paragraph 23 is lower than 15%. This proposal is considered to be in line with the underlying objective of the floor as stated above and the expectation is that the frequency of conflict between cap and floor is likely to be rare. In any case, the caps on the capital requirements for securitisation exposures set out in the BCBS revised securitisation framework will be implemented to avoid excessive capital requirements on such exposures (see subsection 5.1 below).

2.6 Re-securitisation exposures

25. An AI will be required to apply the SEC-SA in calculating the RW for a re-securitisation exposure, with adjustments as specified in paragraphs 94 and 95 of the BCBS revised securitisation framework. The resulting RW will be subject to a RW floor of 100%. In line with the requirements of the BCBS revised securitisation framework, the caps on both RW and capital requirements (as discussed in subsections 2.5 and 5.1 respectively) will not apply.
26. Consistent with the requirements of paragraph 42 of the BCBS revised securitisation framework, when an AI is unable to apply the SEC-SA to a re-securitisation exposure, it must assign to the exposure a RW of 1250%.

2.7 Market risk hedges

27. Following the BCBS revised securitisation framework, the RW of market risk hedges, such as interest rate contracts (e.g. an interest rate swap) or exchange rate contracts (e.g. a currency swap), will be inferred from a securitisation exposure that is pari passu to the contract pertaining to the hedges, or if such an exposure does not exist, inferred from the next subordinated tranche. Accordingly, the current requirements set out in sections 246 and 258 of the BCR that the counterparty credit risk of such market risk hedges be calculated in accordance with the credit risk approach an AI adopts in respect of its non-securitisation exposures will be amended.

3. Calculation of risk-weighted amount

3.1 Treatment of on- and off-balance sheet securitisation exposures

28. The risk-weighted amount of a securitisation exposure will be required to be calculated as the product of the principal amount of the exposure and the applicable RW derived in accordance with subsection 2 above.
29. In relation to the RWA calculation, the principal amount of a securitisation exposure is the sum of the on-balance sheet amount and the off-balance sheet amount, where applicable, of the exposure, which will be determined as:-
- (i) in the case of an on-balance sheet securitisation exposure, (a) the value of the exposure determined in accordance with section 4A of the BCR if the exposure is measured at fair value; or (b) the book value of the exposure if the exposure is not measured at fair value. The amounts derived under (a) and (b) will be net of any specific provisions, partial write-off or non-refundable purchase price discount pertaining to the securitisation exposure;
 - (ii) in the case of an off-balance sheet securitisation exposure,
 - (a) for off-balance sheet exposures in the form of credit protection sold, the value derived according to the treatment set out in paragraphs 33(ii) and 33(iii) under subsection 3.2 below;
 - (b) for other off-balance sheet exposures that are not default risk exposures in respect of derivative contracts¹⁶, the value derived by multiplying the contracted amount or the undrawn balance, whichever is applicable, by a credit conversion factor (CCF) of 100% or (where eligible) the preferential CCF discussed in paragraph 30 below;
 - (c) for other off-balance sheet exposures that are default risk exposures in respect of derivative contracts other than credit derivative

¹⁶ In this document, the term “derivative contracts” includes OTC derivative contracts and credit derivative contracts.

contracts, the value as determined in accordance with Part 6A¹⁷ of the BCR.

If a securitisation exposure of an AI is covered by recognized CRM, the risk-weighted amount of the exposure calculated based on the principal amount of the exposure calculated under paragraph 29(i), (ii)(a), (ii)(b) or (ii)(c), as the case may be, can be reduced by taking into account the recognized CRM in accordance with the treatment set out in paragraphs 33(i) and (iii) under subsection 3.2 below.

30. The HKMA proposes to exercise the national discretion set out in paragraph 20 of the BCBS revised securitisation framework. AIs will be allowed to use the CCF for unconditionally cancellable commitments (UCC) under the STC approach, as prescribed in Part 4 of the BCR, to derive the exposure amount of the undrawn portion of a servicer cash advance facility that meets the eligibility criteria referred to in existing comparable provisions in the BCR, including that the facility is unconditionally cancellable by an AI without prior notice to the person to whom the facility is provided¹⁸.
31. In line with the Basel requirements relating to the exercise of this national discretion, the HKMA will require AIs to have in place adequate control measures to ensure that the amount of the undrawn portion of UCC is measured in a conservative manner and in compliance with all applicable

¹⁷ The HKMA intends to include the standardised approach for measuring counterparty credit risk (SA-CCR) and the modified current exposure method (see Section III of the consultation paper issued in October 2015) in Part 6A of the BCR and remove the provisions related to calculation of default risk exposures in respect of derivative contracts (i.e. those related to the current exposure method) from Parts 4, 5 and 6 of the BCR.

¹⁸ Sections 240(7) and 252(3) of the BCR implement, under the STC(S) approach and IRB(S) approach respectively, the national discretion under Basel II that “eligible servicer cash advance facilities” that are unconditionally cancellable without prior notice be eligible to a preferential CCF of 0%. As the national discretion under paragraph 20 of the BCBS revised securitisation framework is a continuation of this Basel II treatment, the HKMA is of the view that certain of the eligibility criteria referred to in these BCR provisions (eg section 252(3) cross-refers to section 252(1) and (2)) will remain relevant and appropriate under the revised framework. These BCR provisions will however need to be modified to remove references to liquidity facilities and reflect that the preferential CCF will be the prevailing CCF for UCC as set out in Part 4 of the BCR.

requirements¹⁹, and that the use of this preferential treatment be subject to regular review by the independent risk control function of the AI.

32. See paragraphs 19 to 20 of the BCBS revised securitisation framework for more details on the technical requirements applicable to the calculation of securitisation exposure amount.

3.2 Treatment of credit risk mitigation

33. As regards the treatment of CRM, the HKMA proposes that the standards set out in paragraphs 99 to 108 of the BCBS revised securitisation framework be followed. In essence:-

- (i) an AI that has obtained full (or proportional) credit protection for a securitisation exposure may recognise the full (or proportional) CRM effects of recognized collateral, a recognized guarantee or a recognized credit derivative contract, in accordance with the CRM framework of the STC approach (generally in cases where the SEC-ERBA or SEC-SA is applied) or the IRB approach (generally in cases where the SEC-IRBA is applied), whichever is applicable, as set out in Part 4 and Part 6 of the BCR respectively (subject to necessary modifications²⁰);
- (ii) an AI that has provided full (or proportional) credit risk protection to a securitisation exposure will be required to calculate its capital requirements as if it directly held the full (or proportional) portion of the securitisation exposure; and
- (iii) in the case of tranching credit protection, the original securitisation tranche will be decomposed into a protected sub-tranche and an

¹⁹ This may include, among other things, the adoption of the definition of UCC and related requirements as set out under the STC approach in the BCR and in the revised standardized approach for credit risk to be published by the BCBS.

²⁰ These three types of eligible CRM instruments will have the same meaning as defined under “recognized credit risk mitigation”, in paragraphs (b), (c) and (d), in section 2(1) of the BCR in relation to securitisation exposures. Some necessary modifications of the CRM provisions in the current BCR will be required for adaptation to the new risk-weighting approaches prescribed in the BCBS revised securitisation framework and to reflect the proposal outlined above that there will be no specifically tailored treatment in respect of AIs that adopt the BSC approach for credit risk.

unprotected sub-tranche, and an AI that has obtained eligible credit protection may recognise the CRM effects in respect of the protected sub-tranche whereas an AI that has provided the tranching protection will be required to calculate its capital requirements as if it was directly exposed to the protected sub-tranche.

4. Recognition of significant credit risk transference

34. The BCBS revised securitisation framework follows the existing framework in granting regulatory capital relief for securitisation transactions to an originating AI, provided that a significant proportion of the credit risk arising from the underlying exposures has genuinely been transferred to, or hedged by, one or more independent third parties and the specified operational requirements are met. As securitisation transactions can be structured in many forms, any assessment of significant credit risk transfer and compliance with applicable operational requirements will be conducted based on the economic substance rather than the legal form of the transaction.
35. In this connection, the BCBS revised securitisation framework prescribes and the HKMA proposes to adopt the following requirements:-
 - (i) in the case of a traditional securitisation transaction, where there is a significant transfer of the credit risk of the underlying exposures as evidenced by an originating AI's full compliance with the operational requirements set out in paragraphs 24 and 26 to 30 of the framework, the AI will be allowed to exclude the underlying exposures from the calculation of its risk-weighted amount for credit risk;
 - (ii) in the case of a synthetic securitisation transaction, where there is a significant transfer of the credit risk of the underlying exposures as evidenced by an originating AI's full compliance with the operational requirements set out in paragraphs 25 to 30 of the framework, the AI will be allowed to recognise the use of CRM techniques for hedging the underlying exposures in its calculation of the risk-weighted amount of the underlying exposures in the transaction; and
 - (iii) in the case of any securitisation exposures retained or repurchased by an originating AI such that the credit risk of the underlying exposures

continues to reside with the AI, regulatory capital must be provided for the securitisation exposures held in accordance with the BCBS revised securitisation framework as implemented locally.

36. The HKMA proposes to incorporate paragraphs 24 to 30 of the BCBS revised securitisation framework into the BCR by updating and aligning the corresponding requirements currently set out in Schedule 9 (where they relate to traditional securitisation transactions) and Schedule 10 (where they relate to synthetic securitisation transactions) to the BCR. The opportunity will also be taken to review whether it would also be appropriate to retain some of the current requirements in these Schedules that, while not explicitly specified in the BCBS revised securitisation framework, are more in the nature of elaboration and clarification of the relevant Basel text and which have worked well since the implementation of Basel II in Hong Kong²¹.
37. In addition, with a view to improving consistency in interpreting “significant credit risk” referred to in paragraph 24(a) (in respect of traditional securitisation transactions) and paragraph 25(d) (in respect of synthetic securitisation transactions) in the BCBS revised securitisation framework, the HKMA proposes to introduce quantitative thresholds as one of the factors for determining whether a significant transfer of credit risk has occurred²². This reflects practices observed in some other jurisdictions.
38. As a quantitative threshold, the HKMA is minded to consider that for significant credit risk transfer to have occurred in respect of a securitisation transaction, an originating AI of that transaction and any member of its group must not, in aggregate and at any time, have a holding, measured in risk-weighted amount, in the transaction that exceeds any of the following thresholds:-
 - (i) holding of securitisation issues in any tranche of non-senior securitisation issues of the transaction which represents more than 20% of that tranche;

²¹ As an example, current provisions that may be subject to such a review will include paragraphs (g)(i) and (ii), (k), (l) and (m) in Schedule 9, and paragraphs (h), (i) and (j) of section 1 of Schedule 10, to the BCR.

²² For examples of the factors that the HKMA will normally take into account in assessing significant credit risk transfer, see the relevant section in the HKMA’s *Questions and Answers on Banking (Capital) Rules* (updated on 31 December 2014).

- (ii) holding of non-senior securitisation issues of the transaction which, in aggregate, represent more than 20% of the total non-senior securitisation issues of the transaction; or
- (iii) holding of securitisation exposures to, or arising from, the transaction which, in aggregate, represent more than 20% of the total securitisation exposures to, or arising from, the transaction.

For the purpose of calculating the above thresholds, the risk-weighted amounts in both the numerator and the denominator should be calculated without the constraint of any cap on RW and capital requirements (see subsections 2.5 and 5.1 respectively).

- 39. The above thresholds are proposed in view of their simplicity in design and greater capability (compared to other designs considered) to cater for the different structures of securitisation transactions and to facilitate consistency in interpretation and implementation by anchoring their calculations to the RWA construct under the BCBS revised securitisation framework as implemented locally. The HKMA invites industry comments on the proposed design and calibrations of these quantitative thresholds.
- 40. Operationally, the HKMA proposes to replace the current “prior consent” requirement in relation to significant credit risk transference as set out in section 229(1) of the BCR with a simpler “prior notification” requirement. Under this proposal, an originating AI will be required, at least one month before²³ recognizing any such significant credit risk transference in its regulatory capital calculation, to: (i) notify the MA in writing of its intention to do so; and (ii) provide an opinion from a party that is independent of the staff and management of the AI responsible for originating the securitisation transaction concerned (including its underlying exposures) confirming that all

²³ In cases where an originating AI was able to meet all of the requirements of Schedule 9 or 10 to the BCR at the time of origination of a securitisation transaction but subsequently fails to do so (eg due to a breach of a quantitative threshold), then if thereafter the AI again complies with all of the requirements in Schedule 9 or 10, the HKMA proposes that the AI should again notify the MA (and provide the requisite opinion /documentation) as soon as reasonably practicable but no later than two weeks after it has resumed recognition of regulatory capital relief in accordance with section 229 of the BCR.

of the applicable requirements are satisfied²⁴, together with the supporting documentation and information²⁵. The HKMA may request further information as necessary, and will reserve the right to prohibit the AI from recognising such credit risk transference in the event that, notwithstanding the confirmation provided, the HKMA reasonably considers that genuine risk transfer has not in fact occurred in all the circumstances.

5. Maximum capital requirement and calculation of capital base

5.1 Maximum capital requirement

41. The BCBS revised securitisation framework provides that, subject to certain conditions, the regulatory capital for a securitisation exposure may be capped at the capital requirement that would otherwise be applicable to the underlying exposures had they not been securitised and were held directly by the bank²⁶.
42. Such caps serve to avoid creating potential disincentives for banks to securitise their exposures where there is a difference in the applicable capital requirements under the general credit risk framework and the securitisation framework. The HKMA therefore proposes to adopt this “maximum capital requirement” for AIs acting as originator or sponsor of a securitisation

²⁴ The HKMA would be minded to consider the following entities as acceptable for the purpose of issuing a confirmation provided that they are in fact independent of the staff and management responsible for originating the securitisation transaction concerned:

- (a) an external or an in-house legal counsel;
- (b) a manager of the AI (within the meaning of the definition of “manager” in section 2(1) of the Banking Ordinance) that is principally responsible for the affairs of the AI specified in item 4 (relating to systems of control), 7 (relating to internal audits and inspections) or 8 (relating to compliance) of the Fourteenth Schedule to the Ordinance, provided in each case that they have the necessary experience and expertise to conduct an assessment to support issuance of the required notice.

²⁵ To avoid doubt, the HKMA’s proposal regarding independent confirmation of compliance is not intended to supersede or replace any of the operational requirements that require the obtaining of a legal opinion (e.g. as in the case of paragraph 24(b) of the BCBS revised securitisation framework).

²⁶ BCBS revised securitisation framework paragraphs 90 to 93.

transaction but not for AIs which are investors in such transactions, and irrespective of whether the AI uses the SEC-IRBA, the SEC-ERBA or the SEC-SA.²⁷

5.2 Calculation of capital base

43. The BCBS revised securitisation framework retains the current requirement that an AI must deduct from its Common Equity Tier 1 capital any increase in equity capital resulting from a securitisation transaction, such as the amount of any gain-on-sale arising from a securitisation transaction in which an AI is the originator that is recognised in its capital base²⁸.
44. As in the case of Basel II, the BCBS revised securitisation framework (paragraph 37) does not clearly specify whether the general provisions made by banks in respect of their securitisation exposures are eligible for capital recognition as in the case of non-securitisation exposures²⁹. Taking note that general provisions (as well as, locally, the regulatory reserve for general banking risks) are made by AIs in respect of potential credit losses on securitisation exposures that have not yet materialised and thus still possess loss-absorbing capability, the BCR currently provide for their recognition as Tier 2 capital as in the case of non-securitisation exposures (see section 42(2) and (4) of the BCR).
45. The HKMA is currently minded to retain and apply the current capital treatment of general provisions in the BCR in the implementation of the BCBS revised securitisation framework. This will however necessitate the development of a means to map the hierarchy of approaches in the BCBS

²⁷ The BCBS revised securitisation framework makes the cap on capital requirement available to originators and sponsors in the case of SEC-ERBA and SEC-SA, but extends it to investors in the case of SEC-IRBA. Recognizing the policy intent underlying these caps as discussed above and taking account of the current BCR treatment (see sections 242 and 254, which also do not apply the cap to an AI as investor), the HKMA does not propose to make the cap available to investing AIs in securitisation exposures under the SEC-IRBA.

²⁸ See existing sections 236A and 251A of the BCR.

²⁹ Basel II paragraphs 42 and 43 (as revised by Basel III) permit banks to recognize their general provisions for non-securitisation exposures as Tier 2 capital up to specified limits (standardised approach – up to 1.25% of corresponding risk-weighted amount for credit risk; IRB approach – up to 0.6% of corresponding risk-weighted amount for credit risk).

revised securitisation framework to the binary divide between STC(S) approach and IRB(S) approach under Basel II. For example, one option might be to simply map the SEC-IRBA to the IRB(S) approach and both the SEC-ERBA and SEC-SA to the STC(S) approach; alternatively, it might be argued that in terms of the risk factors used, both the SEC-IRBA and SEC-ERBA should be mapped to the IRB(S) approach³⁰, leaving the SEC-SA to be mapped to the STC(S) approach. In this respect, we would welcome any comments and proposals from the industry, together with supporting analyses and justifications, on the treatment of provisions and the regulatory reserve. It will also be necessary to take account of any impact of the implementation of IFRS 9 *Financial Instruments*.

6. Implicit support

46. Implicit support arises when a bank provides support to a securitisation transaction in excess of its predetermined (explicit) contractual obligations. The BCBS revised securitisation framework has retained the Basel II treatment for implicit support, i.e. when a bank provides implicit support to a securitisation transaction, it must: (i) at a minimum, hold capital against all of the underlying exposures associated with the securitisation transaction as if they had not been securitised; (ii) disclose publicly that (a) it has provided non-contractual support and (b) the capital impact of doing so; and (iii) (in the case of an originating bank) not recognise any gain-on-sale arising from the securitisation transaction in its capital base.
47. To better align with the BCBS framework, the HKMA proposes to withdraw the current prohibition in section 230 of the BCR that an originating AI shall not provide implicit support in respect of a securitisation transaction, and amend this section to the effect that an AI, whether or not it is an originator, will be subject to the requirements described in paragraph 46 above whenever it has provided implicit support to any securitisation transaction.

³⁰ See Section (2) “Approaches” of the BCBS revised securitisation framework.

7. Simple, transparent and comparable securitisation transactions

48. The BCBS revised securitisation framework provides an alternative capital treatment for traditional securitisation transactions (other than ABCP) which meet the specific criteria in Annex 2 to the framework (STC securitisations).
49. While the adoption of the alternative treatment might increase the risk sensitivity of the capital requirement for STC securitisations, it will also impose significant operational burdens on AIs in demonstrating compliance with the relevant criteria. Furthermore, from a local perspective, the amount of AIs' exposures that could potentially meet the criteria for the alternative treatment for STC securitisations is not expected to be material. Therefore, the HKMA is not proposing to introduce the alternative capital treatment for STC securitisations at this stage, but would intend to keep the matter under review in the light of observed implementation practices in other jurisdictions.

8. Securitisation exposures in trading book

50. According to the BCBS revised securitisation framework, securitisation exposures held in the trading book will be subject to the revised framework for the trading book ("Minimum capital requirements for market risk") issued by the BCBS in January 2016. There is however a time gap of 2 years between the effective dates of the two frameworks³¹.
51. To minimise undue disruption, the HKMA considers that, instead of devising a transitional framework to bridge the 2-year gap, it would be more practical for AIs' securitisation exposures held in the trading book to continue to be subject to the current market risk capital framework (principally implemented by way of section 287A of the existing BCR) in the interim period until the revised market risk capital framework comes into operation locally.

³¹ The BCBS expects the revised securitisation framework to be implemented by 1 January 2018, and banks to start reporting in accordance with the revised market risk capital framework by the end of 2019.

III IMPLEMENTATION TIMELINE

52. The HKMA proposes to implement the BCBS revised securitisation framework with effect from 1 January 2018 in accordance with the BCBS implementation timetable.
53. After receiving the industry's feedback to this consultation, the HKMA will refine the proposals and prepare a set of draft amendments to the BCR. The HKMA expects to consult the industry on these Banking (Capital) (Amendment) Rules in the second half of 2017. Where appropriate, technical provisions may be set out in a new Code of Practice to be issued under section 97M of the Banking Ordinance.
54. In the event that the implementation of the BCBS revised securitisation framework coincides with the implementation of the Basel capital standards relating to counterparty credit risk and banks' equity investment in funds³², appropriate alignment will be made across the various amendment rules to ensure the internal consistency and coherence of the revised BCR. The industry will be further consulted on the proposed text for amending the BCR.

³² In a circular letter issued to the Industry Associations on 9 September 2016, the HKMA indicated a current intension to defer implementation of these Basel capital standards tentatively for one year to 1 January 2018.