MAS NOTICE 637 (AMENDMENT NO. 3) 2017

Issued on: 28 December 2017

RISK BASED CAPITAL ADEQUACY REQUIREMENTS FOR BANKS INCORPORATED IN SINGAPORE

Introduction

1 This document reflects amendments made to MAS Notice 637 to:

(a) introduce a minimum leverage ratio requirement of 3%;

(b) implement revisions to the disclosure requirements for Singapore-incorporated banks;

(c) make technical enhancements to the capital treatment of equity investments, the definition of default under the Internal Ratings Based Approach for credit risk, and the definition of "insurance subsidiary"; and

(d) make technical amendments to the Notice in consideration of the new accounting treatment of provisions.

2 For presentational purposes, the amendments in this document are compared with the version of MAS Notice 637 issued on 14 September 2012, as last revised on 22 September 2017 (the "Original Notice"), except where indicated otherwise.

3 This document can be interpreted as follows:

(a) Text which is coloured and struck through represent deletions;

(b) Text which is coloured and underlined represent insertions;

(c) Text which is highlighted in yellow are annotations to describe changes, and will not be included in the non-marked up version of MAS Notice 637. For instance, portions of the Original Notice which are deleted in entirety are accompanied by the following explanatory text in yellow highlights: *[The previous Division xx / Sub-division xx / Annex xx / Paragraph xx / Table xx is deleted.]*;

(d) Any inserted portions are inserted in numerical or alphabetical order (as appropriate) with the existing text in the Original Notice;

(e) Any inserted definitions in the Glossary at Annex 2A are inserted in alphabetical order with the existing definitions in the Original Notice; and

(f) Portions of the Original Notice which are not reflected in this document are unchanged.

4 The amendments reflected in this document shall take effect on 1 January 2018, except where indicated otherwise.

5 In the event of discrepancies between the amendments in this document and the published versions of MAS Notice 637 revised on 28 December 2017 (version with effect from 31 December 2017, and version with effect from 1 January 2018), the published versions of MAS Notice 637 shall prevail. This document is to be used for reference only.

Amendments to Part II

PART II: DEFINITIONS

2.1.1 The expressions used in this Notice are defined in the Glossary at Annex 2A.

2.1.2 The expressions used in this Notice shall, except where defined in this Notice or where the context otherwise requires, have the same meanings as in the Banking Act.

2.1.3 Any reference to a paragraph, Sub-division, Division, Part or Annex is a reference to a paragraph, Sub-division, Division, Part or Annex in this Notice unless otherwise specified.

GLOSSARY

α	means – (a) in relation to the CCR internal models method, the alpha factor set out in paragraph 2.14 of Annex 7Q of Part VII; and (b) in relation to the BIA, 15%;
β	means in relation to the SA(OR) and the ASA, the fixed beta factor set out for each business line in Table 9-2 of Part IX; [MAS Notice 637 (Amendment) 2016]
ABCP programme or asset-backed commercial paper programme	means a programme where commercial paper with an original maturity of one year or less which is backed by assets or other exposures held in a bankruptcy-remote SPE is predominantly issued;
ABCP programme sponsor	means an entity which – (a) establishes an ABCP programme; (b) approves the sellers of exposures permitted to participate in an ABCP programme; (c) approves the asset pools to be purchased by an ABCP programme; or (d) administers the ABCP programme by monitoring the assets backing the asset-backed commercial paper, arranging for the placement of securities, compiling monthly reports or ensuring compliance with the ABCP programme documents and with the credit and investment policy of the ABCP programme;
Accounting Loss Allowance	means the loss allowance for expected credit losses on the selected non-credit-impaired exposures[AA] set out in Appendix C of MAS Notice 612, that is determined and recognised in accordance with the impairment measurement requirements under FRS 109;
Accounting Standards	has the same meaning as in section 4(1) of the Companies Act (Cap. 50);
affiliate	means, (a) an entity that has a beneficial interest in 20% or more of the total number of ordinary shares or controls 20% or more of the voting power in the Reporting Bank, or (b) an entity in which the Reporting Bank has a beneficial interest in 20% or more of the total number of ordinary shares or controls 20% or more of the voting power in the entity, or (c) an entity in which a related corporation of the Reporting Bank has a beneficial interest in 20% or more of the number of

[AA] For the avoidance of doubt, "non-credit-impaired exposures" means credit exposures that do not fall within the definition of "credit-impaired financial asset" under FRS 109.

ordinary shares or controls 20% or more of the voting power in the entity;

[MAS Notice 637 (Amendment No. 2) 2014]

A-IRBA or advanced IRBA	in relation to the IRBA wholesale asset class, means the approach under the IRBA under which a Reporting Bank uses its own estimates of PD, LGD and EAD;
allocation mechanism	in relation to the AMA where a Reporting Bank is a subsidiary of a banking institution incorporated outside Singapore, means the methodology used by the Reporting Bank to determine its operational risk capital based on an allocation of the operational risk capital of the banking institution incorporated outside Singapore;
AMA or advanced measurement approach	means the approach for calculating operational risk capital requirements set out in Division 5 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
AMA elements	means the internal and relevant external data on operational risk losses, scenario analysis and factors reflecting the business environment and internal control systems;
AMA exposure	means any exposure for which a Reporting Bank is using the AMA to calculate its operational risk capital requirement;
ASA or alternative standardised approach	means the approach for calculating operational risk capital requirements set out in Division 4 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
asset class	means – (a) in relation to the SA(CR), one of the classes of exposures set out in Sub-division 1 of Division 3 of Part VII; and (b) in relation to the IRBA, one of the classes of exposures set out in Sub-division 4 of Division 4 of Part VII;
associate	has the same meaning as "associate" under the Accounting Standards;
AT1 Capital or Additional Tier 1 Capital	means - (a) in relation to a Reporting Bank, the sum of items set out in paragraph 6.2.1; and (b) in relation to a subsidiary of a Reporting Bank, the sum of items set out in paragraph 6.2.1, where a reference to "Reporting Bank" shall be construed as a reference to "the subsidiary of the Reporting Bank";

[MAS Notice 637 (Amendment No. 2) 2014]

AT1 capital instrument	means a capital instrument which complies with the requirements set out in paragraph 6.2.2;
Banking Act	means Banking Act (Cap. 19);
banking book	means all on-balance sheet and off-balance sheet exposures of a Reporting Bank other than its trading book positions;
banking group	means the Reporting Bank and its banking group entities;
banking group entity	means any subsidiary or any other entity which is treated as part of the Reporting Bank's group of entities according to Accounting Standards;
banking institution	means – (a) any bank licensed under the Banking Act; (b) any finance company licensed under the Finance Companies Act (Cap. 108); or (c) any entity which is approved, licensed, registered or otherwise regulated by a bank regulatory agency in a foreign jurisdiction to carry on banking business as defined in the Banking Act;
bank regulatory agency	in relation to a foreign jurisdiction, means an authority in the foreign jurisdiction exercising any function that corresponds to a regulatory function of the Authority under the Banking Act;
BCBS	means the Basel Committee on Banking Supervision;
BE&IC	means the business environment and internal control factors;
BIA or basic indicator approach	means the approach for calculating operational risk capital requirements set out in Division 2 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
Board	means the board of directors, or a designated committee of the board of directors;

[MAS Notice 637 (Amendment No. 2) 2014]

borrower grade	in relation to wholesale exposures, means a risk category within the obligor rating scale of a rating system to which obligors are assigned on the basis of a specified and distinct set of rating criteria and from which estimates of PD are derived;
CCF	means credit conversion factor;
CCP or central counterparty	means a clearing facility that interposes itself between counterparties to contracts traded in one or more financial markets,

becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts, through novation, an open offer system or other legally binding arrangements. For the purposes of this Notice, a CCP is a financial institution;

[MAS Notice 637 (Amendment) 2012]
[MAS Notice 637 (Amendment No. 2) 2014]

CCP RWA	means the risk-weighted assets for exposures to CCPs calculated in accordance with Annex 7AJ; [MAS Notice 637 (Amendment) 2012]
CCP trade exposures	means current exposure, including the variation margin due to a clearing member but not yet received, potential future exposure and initial margin of a clearing member or a client of a clearing member arising from any OTC derivative transaction, exchange-traded derivative transaction, long settlement transaction or SFT; [MAS Notice 637 (Amendment) 2012] [MAS Notice 637 (Amendment) 2016]
CCR or counterparty credit risk	means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows;
CCR internal models method	means the method for calculating E or EAD, whichever is applicable, for any pre-settlement counterparty exposure arising from any OTC derivative transaction, long settlement transaction or SFT set out in Annex 7Q of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
CDR	means cumulative default rate;
CET1 Capital or Common Equity Tier 1 Capital	means - (a) in relation to a Reporting Bank, the sum of the items set out in paragraph 6.1.1; and (b) in relation to a subsidiary of a Reporting Bank, the sum of items set out in paragraph 6.1.1, where a reference to "Reporting Bank" shall be construed as a reference to "the subsidiary of the Reporting Bank"; [MAS Notice 637 (Amendment No. 2) 2014]
CET1 capital instrument	means a capital instrument which compiles with the requirements set out in paragraph 6.1.2; [MAS Notice 637 (Amendment) 2014]

CET1 CAR	means Common Equity Tier 1 capital adequacy ratio, calculated in accordance with paragraph 4.1.1;
CF	means commodities finance;
clean-up call	means an option which permits the securitisation exposures to be called before all of the underlying exposures or securitisation exposures have been repaid. In the case of a traditional securitisation, this is generally accomplished by repurchasing the remaining securitisation exposures once the underlying exposures or the outstanding securities issued have fallen below some specified level. In the case of a synthetic securitisation, the clean-up call may take the form of a clause that extinguishes the credit protection;
clearing member	means a member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the CCP, regardless of whether it enters into trades with a CCP for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and other market participants. Where a CCP has a link to a second CCP, that second CCP shall be treated as a clearing member of the CCP [~~AA~~AB]; [MAS Notice 637 (Amendment) 2012]
client	in relation to a clearing member, means a party to a transaction with a CCP through either the clearing member acting as a financial intermediary, or the clearing member guaranteeing the performance of the client to the CCP; [MAS Notice 637 (Amendment) 2012] [MAS Notice 637 (Amendment) 2014]
client sub-account	in relation to a clearing member, means an account for (a) transactions that it enters into with a client acting as a financial intermediary between the client and the CCP, and (b) collateral posted by such a client, that is held separately from the clearing member's proprietary transactions and collateral; [MAS Notice 637 (Amendment) 2016]
CM or capital measure	has the same meaning as Tier 1 Capital; [MAS Notice 637 (Amendment) 2014]

[~~AA~~AB] Whether the second CCP's collateral contribution to the first CCP is treated as initial margin or a default fund contribution shall depend upon the legal arrangement between the CCPs. A Reporting Bank shall consult the Authority to determine whether such collateral contribution by the second CCP to the first CCP should be treated as an initial margin or default fund contribution. The Authority intends to consult and communicate with other financial services regulatory authorities via the "frequently asked questions" process of the Basel Committee on Banking Supervision to ensure consistency.

[MAS Notice 637 (Amendment) 2012]

controlled early amortisation provision	means an early amortisation provision where the following requirements are complied with: (a) the originator has an appropriate capital and liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortisation; (b) throughout the duration of the transaction there is a pro-rata sharing of interest and principal, expenses, losses and recoveries based on the proportion of the originator's interests and the investors' interests in the receivables outstanding at the beginning of the month; (c) the amortisation period is sufficient for at least 90% of the total debt outstanding at the beginning of the amortisation period to have been repaid or recognised as in default; and (d) the speed of repayment is not more rapid than would be achieved by straight-line amortisation over the period set out in item (c);
co-operative society	means a co-operative society registered under the Co-operative Societies Act (Cap. 62); [MAS Notice 637 (Amendment No. 2) 2014]
core market participant	means any of the entities listed in Annex 7L of Part VII;
corporate exposure	means – (a) in relation to the SA(CR), an exposure that falls within the definition in paragraph 7.3.1(f); and (b) in relation to the IRBA, an exposure that falls within the definition in paragraph 7.4.15(a);
corporation	has the same meaning as in section 4(1) of the Companies Act, but includes a co-operative society; [MAS Notice 637 (Amendment No. 2) 2014]
CPF	means the Central Provident Fund Board constituted under section 3 of the Central Provident Fund Act (Cap. 36);
CPSS	means Committee on Payment and Settlement Systems; [MAS Notice 637 (Amendment) 2012]
CRE	means commercial real estate;
credit derivative	means any contract which transfers the credit risk of a reference obligation or set of reference obligations from the protection buyer to the protection seller, such that the protection seller has an exposure to the reference obligation(s);
credit enhancement	means a contractual arrangement in which a Reporting Bank retains or assumes a securitisation exposure that, in substance, provides

some degree of credit protection to other parties to the securitisation;

credit RWA	means the sum of all credit risk-weighted exposure amounts in respect of all credit exposures calculated as set out in paragraph 7.1.1;
credit-enhancing interest only strip	means an on-balance sheet asset that represents a valuation of cash flows related to future margin income and is subordinated to the other securitisation exposures in a securitisation;
CRM or credit risk mitigation	means any technique used by a Reporting Bank to reduce the credit risk associated with any exposure which the Reporting Bank holds;
cross-product netting	means the netting between a Reporting Bank and a counterparty of pre-settlement counterparty exposures arising from transactions involving two or more of the following product categories: (a) OTC derivative transaction; (b) repo, reverse repo, securities or commodities lending transaction and securities or commodities borrowing transaction; (c) margin lending transaction.
CTP or correlation trading portfolio	means a portfolio that incorporates – (a) securitisation exposures and n-th-to-default credit derivatives meeting the following criteria: (i) the positions are neither resecuritisation positions, nor derivatives of securitisation exposures that do not provide a pro-rata share in the proceeds of a securitisation tranche (therefore excluding options on a securitisation tranche, or a synthetically leveraged super-senior tranche); (ii) all reference entities are single-name products, including single-name credit derivatives, for which a liquid two-way market exists. This will include commonly traded indices based on these reference entities; (iii) the positions do not reference an underlying exposure that would be treated as an SA(CR) exposure in the regulatory retail asset class, an SA(CR) exposure in the residential mortgage asset class, or an SA(CR) exposure in the CRE asset class; and (iv) the positions do not reference a claim on a special purpose entity, including any special purpose entity-issued instrument backed, directly or indirectly, by a position that would itself be excluded if held by a Reporting Bank directly, and (b) positions that hedge the securitisation exposures and n-th-to-default credit derivatives described in paragraph (a) above, where –

	(i) the positions are neither securitisation exposures nor n-th-to-default credit derivatives; and (ii) a liquid two-way market exists for the instrument by which the position is taken or its underlying exposures, and for the purpose of this definition, a two-way market is deemed to exist where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and trades settled at such price within a relatively short time conforming to trade custom;
currency mismatch	means a situation where an exposure and the collateral or credit protection provided in support of it are denominated in different currencies;
current exposure	means the larger of zero, or the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in a bankruptcy or insolvency;
CVA or credit valuation adjustment	in relation to a Reporting Bank, means an adjustment to the mid-market valuation of the portfolio of trades with a counterparty, which reflects the market value of credit risk, and may include either the market value of the credit risk of the counterparty or the market value of the credit risk of both the Reporting Bank and the counterparty; [MAS Notice 637 (Amendment No. 2) 2014]
CVA RWA	means the risk-weighted assets for CVA calculated in accordance with Annex 7AI;
default	in relation to the IRBA, has the meaning in Annex 7X of Part VII;
default fund[~~AB~~AC]	means a fund established by a CCP, comprising the pre-funded or unfunded contributions of a CCP and its clearing members towards, or underwriting of, a CCP's mutualised loss sharing arrangements, and includes initial margins posted to a CCP in the case where the CCP uses the initial margins to mutualise losses among clearing members; [MAS Notice 637 (Amendment) 2012]
default fund exposure	means exposure arising from contributions of a Reporting Bank to a default fund of a CCP;

[~~AB~~AC] A default fund may also be known as clearing deposits, guaranty fund deposits or any other name. The description given by a CCP to its mutualised loss sharing arrangements is not determinative of the status of the arrangement as a default fund, rather, the substance of such arrangements shall govern its status as a default fund.

[MAS Notice 637 (Amendment) 2012]

[MAS Notice 637 (Amendment) 2012]

dilution	means any reduction in an amount receivable from a counterparty through cash or non-cash credits to the counterparty;
double default framework	means the framework for the recognition of credit protection for IRBA exposures set out in Annex 7G of Part VII;
DvP	means delivery-versus-payment;
EAD or exposure at the time of default	has the meaning in paragraph 4.1 of Annex 7Y of Part VII;
early amortisation exposure	means any securitisation exposure or class of securitisation exposures for which a Reporting Bank is subject to the early amortisation treatment in accordance with Sub-division 6 of Division 6 of Part VII;
early amortisation provision	means a contractual clause which requires on the occurrence of defined events, an investor's position to be redeemed prior to the original maturity of the securities issued;
ECAI	means an external credit assessment institution, and includes all entities trading under the trade name of that external credit assessment institution; [MAS Notice 637 (Amendment) 2014]
EE or expected exposure	means the average of the distribution of exposures at any particular future date before the longest maturity transaction in the netting set matures;
effective EE	means as at a specific date, the maximum EE that occurs at that date or any prior date. Alternatively, it may be defined for a specific date as the greater of the expected exposure at that date, or the effective EE at the previous date;
effective EPE	means the weighted average over time of effective EEs over the first year of future exposures, or if all the contracts within the netting set mature before one year, over the time period of the longest maturity contract in the netting set, where the weights are the proportion that an individual effective EE represents of the entire time interval;
EL or expected loss	in relation to the IRBA, means the ratio of the amount expected to be lost on an exposure arising from a potential default of a counterparty, dilution or both, over a one-year period to the amount outstanding at default;
EL amount	has the meaning in Sub-division 14 of Division 4 of Part VII;

eligible CRE	means any CRE held as collateral where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
eligible credit protection	means any guarantee (or other instrument as the Authority may allow) or credit derivative where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
eligible financial collateral	means – (a) in relation to the FC(SA), one or more types of collateral set out in paragraph 2.2 of Annex 7F of Part VII; and (b) in relation to the FC(CA), one or more types of collateral set out in paragraph 2.3 of Annex 7F of Part VII, where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
eligible IRBA collateral	means one or more types of collateral set out in paragraph 2.5 of Annex 7F of Part VII where the requirements and guidelines set out in that Annex are satisfied;
	[Insertion of definition of "eligible liquidity facility" is compared with the version of MAS Notice 637 as last revised on 29 Nov 2017]
eligible liquidity facility	in relation to the leverage ratio, means an off-balance sheet securitisation exposure that is a liquidity facility where the following requirements are complied with – (a) the facility documentation clearly identifies the nature, purpose and extent of any undertaking or commitment provided to the SPE, and limits the circumstances under which it may be drawn; (b) the facility is limited to a specified amount and duration, unless the Reporting Bank is able to withdraw, at its absolute discretion, the facility at any time with a reasonable period of notice; (c) any draw made under the facility is provided to the SPE and not directly to investors, and is limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any seller-provided credit enhancements; (d) the facility does not cover any losses incurred in the underlying exposures prior to a draw, and is not structured such that draw-down is certain (as indicated by regular or continuous draws or continuous revolving funding); (e) the facility is subject to an asset quality test that precludes it from being drawn to cover credit risk exposures where the obligor(s) are in default; (f) if the exposures that the liquidity facility is required to fund are securities with an external credit assessment by a recognised ECAI, the facility is used to fund only securities that have a credit quality grade of "10" or better or a short-term credit quality grade of "III" or better as set out in Tables 7R-3 and 7R-4, respectively, of Annex 7R at the time of funding; (g) the facility cannot be drawn after all applicable (e.g. transaction-specific and programme-wide) credit

	enhancements from which the facility would benefit have been exhausted; (h) repayment of draws on the facility is not subordinated to any interests of any note holder in the programme or subject to deferral or waiver; (i) the obligations of the Reporting Bank under the facility are standalone from its obligations under any other facility, commitment or undertaking provided by the Reporting Bank; and (j) either – (i) an independent third party co-provides 25% of the liquidity facility that is to be drawn and re-paid on a pro-rata basis; or (ii) all the underlying exposures have a credit quality grade of "3" or better or a short-term credit quality grade of "III" or better as set out in Tables 7R-1 and 7R-2, respectively, of Annex 7R, and the facility documentation expressly provides that the Reporting Bank may reduce (and ultimately withdraw) its funding if the external credit assessment of the exposures falls to a credit quality grade of "4" or worse or to a short-term credit quality grade of "IV" as set out in Tables 7R-1 and 7R-2, respectively, of Annex 7R;
eligible physical collateral	means any physical collateral where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
eligible protection provider	means - (a) in the case of a Reporting Bank using the SA(CR), SA(EQ), SA(SE) or IRBA(SE), a guarantor or protection seller which is – (i) a central government, a central bank, the Bank for International Settlements, the International Monetary Fund, the European Central Bank or the European Community; (ii) an MDB; (iii) a PSE; (iv) a banking institution; or (v) in the case where the credit protection is – (A) not provided for a securitisation exposure, any other entity with an external credit assessment by a recognised ECAI; or (B) provided for a securitisation exposure, any other entity which has a credit quality grade of "2" or better as set out in Table 7R-1 of Annex 7R of Part VII at the time the credit protection was provided, and a credit quality grade of "3" or better as set out in Table 7R-1 of Annex 7R of Part VII during the period of recognition of the effects of CRM; (b) in the case of a Reporting Bank adopting the F-IRBA and not intending to use the double default framework, a guarantor or protection seller which is – (i) any entity in paragraphs (a)(i) to (v) above; or

	(ii) any entity which is internally rated; and (c) in the case of a Reporting Bank adopting the F-IRBA and intending to use the double default framework, a guarantor or protection seller which complies with the requirements set out in paragraph 3.1 of Annex 7G of Part VII;
eligible purchased receivables exposure	in relation to the IRBA, means any exposure that falls within the definition in paragraph 7.4.18;
eligible receivables	means any financial receivables held as collateral where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
eligible RRE	means any RRE held as collateral where the requirements and guidelines set out in Annex 7F of Part VII are satisfied;
Eligible Total Capital	in relation to a Reporting Bank or subsidiary of the Reporting Bank, means the sum of Tier 1 Capital and Tier 2 Capital; [MAS Notice 637 (Amendment No. 2) 2014]
EM or exposure measure	means the amount as calculated in accordance with paragraph 2.3 of Annex 4A; [MAS Notice 637 (Amendment) 2014]
EPE or expected positive exposure	means the weighted average over time of EEs over the first year, or if all the contracts within the netting set mature before one year, over the time period of the longest maturity contract in the netting set, where the weights are the proportion that an individual EE represents of the entire time interval;
equity exposure	has the meaning given to it in Sub-division 1 of Division 5 of Part VII; [MAS Notice 637 (Amendment No. 2) 2014]
ESR or excess spread ratio	in relation to securitisation exposures with early amortisation features, means the ratio of the 3-month average excess spread to the point at which a Reporting Bank is required to trap excess spread as economically required by the structure, expressed as a percentage;
excess spread	means any gross finance charge collections and other income received by the trust or SPE after deducting certificate interest, servicing fees, charge-offs, and other senior trust or SPE expenses;
facility grade	in relation to wholesale exposures, means a risk category within the facility rating scale of a rating system to which exposures are assigned on the basis of a specified and distinct set of rating criteria and from which estimates of LGD are derived;

FC(CA) or financial collateral comprehensive approach	means the method for calculating the effects of CRM arising from eligible financial collateral set out in Annex 7I of Part VII;
FC(SA) or financial collateral simple approach	means the method for calculating the effects of CRM arising from eligible financial collateral set out in Sub-division 4 of Division 3 of Part VII;
financial institution	means an entity the principal activity of which is to carry on business in one or more of the following activities[B,C]: (a) banking business; (b) insurance business; (c) dealing or trading in securities, exchange-traded derivatives or OTC derivatives, whether as an agent or on a proprietary basis; (d) foreign exchange trading and leveraged foreign exchange trading, whether as an agent or on a proprietary basis; (e) advising on corporate finance; (f) fund management; (g) real estate investment trust management; (h) securities financing; (i) providing custodial services; (j) operating an exchange, trading system or market; (k) providing central counterparty services; (l) operating a payment system, securities depository, securities settlement system or trade repository; (m) providing financial advisory services; (n) insurance broking; (o) trust business; (p) money broking; (q) money-changing business; (r) remittance business; (s) lending; (t) factoring; (u) leasing; (v) provision of credit enhancements; (w) securitisation; or (x) such other business that the Authority may specify from time-to-time;
financial year	has the same meaning as in section 4(1) of the Companies Act (Cap. 50);
F-IRBA or foundation IRBA	in relation to the IRBA wholesale asset class, means the approach under the IRBA under which a Reporting Bank uses its own estimates of PD but not its own estimates of LGD and EAD;
FRA	means a forward rate agreement;

B This includes a financial holding company which is not an operating entity that holds as a subsidiary, a banking institution or an insurance subsidiary.

[MAS Notice 637 (Amendment No. 2) 2014]

C For avoidance of doubt, this includes any entity that is approved, licensed, registered or otherwise regulated by the Authority, or any foreign entity that carries out activities which, if carried out in Singapore, would have to be approved, licensed, registered or otherwise regulated by the Authority.

FRS ~~39~~109	means the Singapore Financial Reporting Standard ~~39~~109;
funded credit protection	means a CRM where the reduction of the credit risk of an exposure of a Reporting Bank is derived from the right of the Reporting Bank, in the event of the default of a counterparty or on the occurrence of other specified credit events relating to the counterparty, to liquidate, to obtain transfer or appropriation of, or to retain, certain assets or amounts;
gain-on-sale	means any increase in the equity of a Reporting Bank which is an originator resulting from the sale of underlying exposures in a securitisation; [MAS Notice 637 (Amendment No. 2) 2014]
general allowance	means loss allowance for credit exposures that do not fall within the definition of "credit-impaired financial asset" under FRS 109[CA];
general wrong-way risk	means the risk that arises when the probability of default of counterparties is positively correlated with general market risk factors;
hedging set	means a group of transactions within a single netting set within which full or partial offsetting is recognised for the purpose of calculating the potential future exposure under the SA-CCR; [MAS Notice 637 (Amendment) 2016]
higher level client	in relation to a multi-level client structure, means the financial institution providing clearing services; [MAS Notice 637 (Amendment) 2016]
house sub-account	in relation to a clearing member, means an account for (a) transactions conducted for its proprietary purposes and (b) collateral posted by the clearing member for such transactions, and that account is held separately from transactions conducted by the clearing member acting as a financial intermediary between the CCP and its client and collateral posted by such clients, in client sub-accounts; [MAS Notice 637 (Amendment) 2016]
HVCRE	means high-volatility commercial real estate;
IA	means the internal audit function or an equally independent function of a Reporting Bank;
IAM or internal assessment method	means the method for calculating credit risk-weighted exposure amounts for securitisation exposures set out in Annex 7AF of Part VII or, if the reference is to any regulatory requirements of, or

[CA] For avoidance of doubt, general allowances include loss allowances maintained by a bank in excess of the Accounting Loss Allowance.

	administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
ICA or independent collateral amount	means the amount of collateral other than variation margin posted by the counterparty that the Reporting Bank may seize upon default of the counterparty, which does not change in response to the value of transactions it secures, and includes the Independent Amount parameter defined in standard industry documentation[D]; [MAS Notice 637 (Amendment) 2016]
ICAAP	means internal capital adequacy assessment process;
IMA or internal models approach	means the approach for calculating market risk capital requirements set out in Division 3 of Part VIII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
IMA exposure	means any exposure for which a Reporting Bank is using the IMA to calculate its market risk capital requirement;
IMM or internal models method	means the method for calculating credit risk-weighted exposure amounts for IRBA(EQ) exposures set out in Sub-division 4 of Division 5 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
implicit support	means any support that a Reporting Bank provides to a securitisation in excess of its predetermined contractual obligations;
initial margin	in relation to exposures to a CCP, means collateral of a clearing member or a client of a clearing member posted to the CCP to mitigate the potential future exposure of the CCP to the clearing member arising from the possible future change in value of their transactions, but shall not include any contribution to a CCP for mutualised loss sharing arrangements. This includes collateral in excess of the minimum amount required, provided the CCP or clearing member may prevent the clearing member or the client of a clearing member from withdrawing such excess collateral; [MAS Notice 637 (Amendment) 2012] [MAS Notice 637 (Amendment) 2016]
	[Revision to definition of "insurance subsidiary" effective from 31 Dec 2017]
insurance subsidiary	means – (a) a subsidiary which carries on insurance business as an insurer;

D For example, the 1992 (Multicurrency-Cross Border) Master Agreement and the 2002 Master Agreement published by the International Swaps & Derivatives Association, Inc. (ISDA Master Agreement). The ISDA Master Agreement includes the ISDA CSA: the 1994 Credit Support Annex (Security Interest – New York Law), or, as applicable, the 1995 Credit Support Annex (Transfer – English Law) and the 1995 Credit Support Deed (Security Interest – English Law).

(b) a subsidiary which is –

(i) a holding company of the subsidiary referred to in sub-paragraph (a); and

(ii) subject to specific capital adequacy requirements set out in a direction issued by the Authority under section 28 of the Monetary Authority of Singapore Act; or

(c) a subsidiary of the holding company referred to in sub-paragraph (b), which is included by the holding company in its computation of specific capital adequacy requirements set out in a direction issued by the Authority under section 28 of the Monetary Authority of Singapore Act.

internal loss data	in relation to the AMA, means the internal data on operational risk losses;
IOSCO	means the International Organisation of Securities Commissions;
IPRE	means income-producing real estate;
IRBA or internal ratings-based approach	means the approach for calculating credit risk-weighted exposure amounts set out in Division 4 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
IRBA adoption date	means the date from which a Reporting Bank begins using the IRBA for calculating any part of its regulatory capital requirements;
IRBA asset class	means any one of the classes of exposures belonging to the IRBA wholesale asset class, the IRBA retail asset class or the IRBA eligible purchased receivables asset class;
IRBA asset sub-class	in relation to IRBA, means any one of the classes of exposures set out in paragraphs 7.4.15 to 7.4.18;
IRBA eligible purchased receivables asset class	in relation to the IRBA, means the class of exposures comprising eligible purchased receivables exposures;
IRBA exposure	means any exposure for which a Reporting Bank is using the IRBA to calculate its credit risk-weighted exposure amount;
IRBA parameters	means PD, LGD and EAD;
IRBA retail asset class	in relation to the IRBA, means the class of exposures comprising retail exposures;
IRBA wholesale asset class	in relation to the IRBA, means the class of exposures comprising wholesale exposures;

IRBA(EQ) or internal ratings-based approach for equity exposures	means the approach for calculating credit risk-weighted exposure amounts for equity exposures set out in Sub-division 4 of Division 5 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
IRBA(EQ) exposure	means – (a) any equity exposure (excluding equity investments in funds held in the banking book) for which a Reporting Bank is using the IRBA(EQ) to calculate its credit risk-weighted exposure amount; or (b) in the case where the Reporting Bank uses IRBA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures, any equity investment in funds held in the banking book;
IRBA(SE) or internal ratings-based approach for securitisation exposures	means the approach for calculating credit risk-weighted exposure amounts for securitisation exposures set out in Sub-division 5 of Division 6 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
IRBA(SE) exposure	means any securitisation exposure for which a Reporting Bank is using the IRBA(SE) to calculate its credit risk-weighted exposure amount;
IRC or incremental risk charge	means the capital charges on incremental default and credit migration risks of positions which are subject to specific risk;
ISDA	means the International Swaps and Derivatives Association;
IT	means information technology;
JTD or jump to default	means an event where a credit exposure defaults before the market has factored its increased default risk into its current credit spreads;
JTD01	means the estimated decline in the mark-to-market value associated with a JTD of an entity, assuming a zero recovery rate for the entity's liabilities;
LGD or loss given default	in relation to the IRBA, has the meaning in paragraph 3.1 of Annex 7Y of Part VII;
long settlement transaction	means any transaction where a counterparty undertakes to deliver a security, a commodity or a foreign exchange amount against cash, other financial instruments or commodities, or vice versa, at a settlement or delivery date which is contractually specified as more than the lower of the market standard for this particular transaction type and five business days after the date on which the Reporting Bank enters into the transaction;

loss	in relation to the IRBA, means any economic loss on an exposure as described in Annex 7Y of Part VII;
lower level client	in relation to a multi-level client structure, means the financial institution clearing through: (a) a client of a clearing member; or (b) a client of a client of a clearing member; [MAS Notice 637 (Amendment) 2016]
LR or leverage ratio	means the percentage calculated in accordance with paragraph 1.1 of Annex 4A; [MAS Notice 637 (Amendment) 2014]
M or effective maturity	in relation to the IRBA, means the maturity of an exposure, determined in the manner set out in Annex 7Z of Part VII;
major stake company	in relation to a Reporting Bank, means any company in which the Reporting Bank is deemed, by virtue of section 32(7) of the Banking Act, to hold a major stake;
margin agreement	means any contractual agreement or any terms and conditions of an agreement, where one counterparty has to supply collateral to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level;
margin lending transaction	means a transaction in which a Reporting Bank extends credit in connection with the purchase, sale, carrying or trading of securities, where the loan amount is collateralised by securities whose value is generally greater than the amount of the loan, and does not include other loans that happen to be collateralised by securities;
margin period of risk	means the time period from the last exchange of collateral covering a netting set of transactions with a defaulting counterparty until that counterparty is closed out and the resulting market risk is re-hedged;
margin threshold	means the largest amount of an exposure that remains outstanding until one party has the right to call for collateral;
market RWA	means the risk-weighted assets for market risks determined in the manner set out in Part VIII;
maturity mismatch	means a situation where the residual maturity of the credit risk mitigant is less than the residual maturity of the underlying credit exposure;
MDB	means a multilateral development bank;
multi-level client structure	means any structure in which clearing services are provided by a financial institution which is not a direct clearing member, but is

	itself a client of a clearing member or a client of a client of a clearing member; [MAS Notice 637 (Amendment) 2016]
n-th-to-default credit derivative	means a contract where – (a) the payoff is based on the n-th asset to default in a basket of underlying reference instruments; and (b) the transaction terminates and is settled once the n-th default occurs;
netting	means bilateral netting, including – (a) netting by novation, where obligations between two counterparties to deliver a given currency on a given value date under a transaction are automatically amalgamated with all other obligations under other transactions to deliver on the same currency and value date, thereby extinguishing former transactions with a single legally binding new transaction; and (b) close-out netting, where some or all of the ongoing transactions between two counterparties are terminated due to the default of either counterparty or upon the occurrence of a termination event as defined in the netting agreement, whereupon the values of such transactions are combined and reduced to a single payable sum, but excluding payments netting which is designed to reduce the operational cost of daily settlements, where the gross obligations of the counterparties are not in any way affected;
netting agreement	means any agreement which effects netting between two counterparties, or any other arrangement to effect netting, which does not contain a walkaway clause[1];
netting set	means a group of transactions between two counterparties that is subject to a qualifying bilateral netting agreement or a qualifying cross-product netting agreement, as the case may be; any transaction which is not subject to a qualifying bilateral netting agreement or a qualifying cross-product netting agreement shall be deemed a netting set;
NICA or net independent collateral amount	means the amount of segregated and unsegregated collateral posted by the counterparty less the unsegregated collateral posted by the Reporting Bank, and in relation to the Independent Amount defined in standard industry documentation, takes into account the differential of Independent Amount required for the Reporting Bank minus Independent Amount required for the counterparty[1A];

[1] "Walkaway clause" means any provision which permits a party to a netting agreement that is not in default to make limited payments or no payments at all, to a defaulting party under the same netting agreement, even if the party that is in default is a net creditor under the netting agreement.

[1A] For the avoidance of doubt, NICA represents the amount of collateral that a Reporting Bank may use to offset its exposure on the default of the counterparty, and does not include collateral that the Reporting Bank has posted to a segregated, bankruptcy remote account.

[MAS Notice 637 (Amendment) 2016]

non-controlled early amortisation provision	means an early amortisation provision where the requirements of a controlled early amortisation provision are not complied with;
OF	means object finance;
offsetting transaction	means the transaction leg between a clearing member and the CCP when the clearing member acts on behalf of a client, for example, when a clearing member clears or novates a client's trade; [MAS Notice 637 (Amendment) 2012]
operating entity	means an entity that is conducting business with the intention of earning a profit in its own right; [MAS Notice 637 (Amendment No. 2) 2014]
operational risk	means the risk of loss resulting from – (a) inadequate or failed internal processes; (b) actions or omissions of persons; (c) systems; or (d) external events, including legal risk[1A], but does not include strategic or reputational risk; [MAS Notice 637 (Amendment) 2016]
operational RWA	means the risk-weighted assets for operational risks determined in the manner set out in Part IX;
originator	means – (a) an entity which, either itself or through related entities, directly or indirectly, creates the exposure being securitised[2]; or (b) any entity which purchases or advises or causes an SPE to purchase the exposures of a third party, which are then used in a securitisation (for avoidance of doubt, selling credit protection such that the entity or the SPE has a long position in the credit risk of the obligor is equivalent to purchasing exposures)[3];

1B Legal risk includes exposures to fines, penalties, or punitive damages resulting from criminal prosecution, regulatory or supervisory actions, as well as such damages or other sums payable resulting from civil claims or settlements.

2 Where an entity lends to an SPE with a view to enabling that SPE to make loans which are then used in a securitisation, the entity will generally be deemed to be acting as an originator.

3 An entity which advises or causes an SPE to purchase the exposures of a third party, which are then used in a securitisation will generally not be deemed to be acting as an originator if –
(a) the entity has not advised or caused the SPE to purchase any exposures which are then used in a securitisation before the date of issue of securities effecting the transfer of credit risk of those exposures to the investors in the securitisation;
(b) the entity will not be liable for any losses incurred by the SPE arising from the exposures (for avoidance of doubt, the entity may still be liable for losses arising from a breach of its fiduciary duties); and
(c) the entity does not undertake to achieve a minimum performance for the exposures.

ORM framework or operational risk management and measurement framework	means the approach of a Reporting Bank in identifying, assessing, monitoring, controlling and mitigating operational risk and includes the operational risk management processes and measurement systems of the Reporting Bank;
ORMF	means the operational risk management function;
ORMS or operational risk measurement system	means a subset of the ORM framework and includes the systems and data of a Reporting Bank that are used to measure operational risk. Central to the ORMS is the AMA model that is used by the Reporting Bank to quantify its operational risk capital requirement;
OTC	means over-the-counter;
OTC derivative transaction	means an exchange rate contract, interest rate contract, equity contract, precious metal or other commodity contract or credit derivative contract which is not traded on an exchange; [MAS Notice 637 (Amendment) 2012]
own-estimate haircuts	means haircuts calculated using the internal estimates of the Reporting Bank of market price volatility and foreign exchange volatility, based on an approach that complies with the requirements and meets the guidelines set out in Section 3 of Annex 7J of Part VII;
parameterisation process	means the process by which a Reporting Bank derives estimates of IRBA parameters as set out in Section 5 of Annex 7AB of Part VII;
PD or probability of default	in relation to the IRBA, has the meaning in paragraph 2.1 of Annex 7Y of Part VII;
peak exposure	means a high percentile (typically 95% or 99%) of the distribution of exposures at any particular future date before the maturity date of the longest transaction in the netting set;
PE/VC investments	has the same meaning as defined in MAS Notice 630;
PF	means project finance;
preference share	has the same meaning as in section 4(1) of the Companies Act (Cap. 50);
PSE or public sector entity	means – (a) a regional government or local authority that is able to exercise one or more functions of the central government at the regional or local level; (b) an administrative body or non-commercial undertaking responsible to, or owned by, a central government, regional government or local authority, which performs regulatory or non-commercial functions;

	(c) a statutory board in Singapore (other than the Authority); or (d) a town council in Singapore established pursuant to the Town Councils Act (Cap. 392A);
QRRE	means qualifying revolving retail exposures;
qualifying bilateral netting agreement	means a bilateral netting agreement where the requirements set out in Annex 7N of Part VII are complied with;
qualifying cross-product netting agreement	means a cross-product netting agreement where the requirements set out in Annex 7N of Part VII are complied with;
qualifying MDB	means an MDB listed in Annex 7S of Part VII;
qualifying SFT	means an SFT where the requirements set out in Annex 7K of Part VII are complied with;
rating system	in relation to a class of exposures under the IRBA, means all of the methods, processes, controls, data collection and IT systems that support the assessment of credit risk, the assignment of exposures to grades or pools (internal risk ratings), and the parameterisation process for that class of exposures;
RBM or ratings-based method	means the method for calculating credit risk-weighted exposure amounts for securitisation exposures set out in Annex 7AE of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
recognised ECAI	means an ECAI recognised by the Authority pursuant to paragraph 7.3.53 and listed in Annex 7RA; [MAS Notice 637 (Amendment) 2014]
recognised group A exchange	has the same meaning as in regulation 2 of the Securities and Futures (Financial and Margin Requirements for Holders of Capital Markets Services Licenses) Regulations;
reference obligation	means any obligation specified under a credit derivative contract used for purposes of either determining cash settlement value or the deliverable obligation;
repo	means a repurchase transaction;
Reporting Bank	means a bank incorporated in Singapore;
regulated exchange	means an exchange approved, licensed or otherwise regulated by the Authority or by a financial services regulatory authority other than the Authority;
regulatory capital	means capital which is used to meet regulatory requirements;

[MAS Notice 637 (Amendment No. 2) 2014]

resecuritisation exposure	means a securitisation exposure in which the risk associated with an underlying pool of exposures is tranched and at least one of the underlying exposures is a securitisation exposure, and includes an exposure to one or more resecuritisation exposures;
retail exposure	in relation to the IRBA, means any exposure which falls within paragraph 7.4.16;
risk charge	in relation to a market risk position, means the percentage assigned to that position to derive the capital requirement; [MAS Notice 637 (Amendment No. 2) 2014]
risk weight	in relation to an exposure, means a degree of risk expressed as a percentage assigned to that exposure;
risk weight function	in relation to the IRBA, means the formula for calculating risk-weighted exposure amounts using estimates of IRBA parameters;
RRE	means residential real estate;
RWA	means risk-weighted assets;
RWE	means risk-weighted exposure;
SA-CCR or standardised approach for counterparty credit risk	means the method for calculating E or EAD, whichever is applicable, for any pre-settlement counterparty exposure arising from OTC derivative or exchange-traded derivative transactions, or long settlement transactions set out in Annex 7O of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements; [MAS Notice 637 (Amendment) 2016]
SA(CR) or standardised approach to credit risk	means the approach for calculating credit risk-weighted exposure amounts set out in Division 3 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
SA(CR) exposure	means any exposure for which a Reporting Bank is using the SA(CR) to calculate its credit risk-weighted exposure amount;
SA(EQ) or standardised approach for equity exposures	means the approach for calculating credit risk-weighted exposure amounts for equity exposures set out in Sub-division 3 of Division 5 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;

SA(EQ) exposure	means – (a) any equity exposure (excluding equity investments in funds held in the banking book) for which a Reporting Bank is using the SA(EQ) to calculate its credit risk-weighted exposure amount; or (b) in the case where the Reporting Bank uses SA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures, any equity investment in funds held in the banking book;
SA(MR) or standardised approach to market risk	means the approach for calculating market risk capital requirements set out in Division 2 of Part VIII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
SA(OR) or standardised approach to operational risk	means the approach for calculating operational risk capital requirements set out in Division 3 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
SA(SE) or standardised approach for securitisation exposures	means the approach for calculating credit risk-weighted exposure amounts for securitisation exposures set out in Sub-division 4 of Division 6 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, the equivalent under those requirements;
SA(SE) exposure	means any securitisation exposure for which a Reporting Bank is using the SA(SE) to calculate its credit risk-weighted exposure amount;
securities	has the same meaning as in section 2 of the Securities and Futures Act (Cap. 289);
securities exchange	has the same meaning as in section 2 of the Securities and Futures Act (Cap. 289);
securities firm	means – (a) any entity holding a capital markets services licence under section 84(1) of the Securities and Futures Act (Cap. 289); or (b) any entity that is approved, licensed, registered or otherwise regulated by a regulatory agency other than the Authority to carry out activities permitted under a capital markets services licence under section 84(1) of the Securities and Futures Act (Cap. 289);
securitisation	means any transaction or scheme involving the tranching of credit risk associated with an exposure or a pool of exposures and which has the following characteristics: (a) payments in the transaction or scheme depend on the performance of the exposure or pool of exposures;

(b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme; and
(c) junior tranches can absorb losses without interrupting contractual payments to more senior tranches;

securitisation exposure	means any exposure of a Reporting Bank to a securitisation, and includes - (a) any on-balance sheet exposure to securities issued pursuant to a securitisation (e.g. asset-backed securities, mortgage-backed securities and collateralised debt obligations); (b) any off-balance sheet exposure to a securitisation (e.g. through credit enhancements, liquidity facilities, credit derivatives, tranched cover, interest rate swap or currency swap), regardless of whether it was retained by the Reporting Bank at, or repurchased by the Reporting Bank after, the origination of the securitisation; and (c) reserve accounts (e.g. cash collateral accounts) recorded as an asset by the originating bank;
securitised exposure	means an exposure, securitised by a Reporting Bank in its capacity as originator or ABCP programme sponsor, that forms an underlying exposure of a securitisation;
segmentation	in relation to retail exposures, means the process by which a Reporting Bank aggregates retail exposures into homogenous pools;
servicer	means a Reporting Bank which carries out administrative functions relating to the cash flows of the underlying exposure or pool of exposures of a securitisation, including setting up and operating the mechanism for collecting payments of interest or principal derived from the underlying exposures and channeling these funds to the investors or the trustee representing them, customer service, cash management, maintenance of records and reporting duties;
SF or supervisory formula	means the method for calculating credit risk-weighted exposure amounts for securitisation exposures set out in Annex 7AG or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that method under those requirements;
SFT	means a securities or commodities financing transaction comprising any one of the following: (a) a repo or a reverse repo; (b) a securities or commodities lending transaction or securities or commodities borrowing transaction; (c) a margin lending transaction, for which the value of the transaction depends on market valuation and the transaction is often subject to margin agreements;

[MAS Notice 637 (Amendment) 2012]

SL	means specialised lending;
small business	means a corporation, partnership, limited liability partnership, sole proprietorship or trustee in respect of a trust with reported annual sales of less than $100 million; [MAS Notice 637 (Amendment) 2012]
SPE or special purpose entity	means a corporation, trust, or other entity established for a specific purpose, the activities of which are limited to those appropriate to accomplish that purpose, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures;
specific allowance	means loss allowance for credit exposures that fall within the definition of "credit-impaired financial asset" under FRS 109;
specific wrong-way risk	means the risk that arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with that counterparty; [MAS Notice 637 (Amendment) 2014]
structured note	has the same meaning as in Securities and Futures (Offers of Investments)(Shares and Debentures) Regulation 2005;
subsidiary	has the same meaning as in section 5 of the Companies Act (Cap. 50);
supervisory slotting criteria	in relation to the IRBA, means the method of calculating risk-weighted exposure amounts for exposures in the SL asset sub-class or the HVCRE asset sub-class in accordance with Sub-division 12 of Division 4 of Part VII and Annex 7V of Part VII;
supervisory validation	means the process by which the Authority examines the readiness of a Reporting Bank for adopting the IRBA or the AMA, as the case may be, for the purpose of deciding whether the Reporting Bank may begin a recognised parallel run;
synthetic securitisation	means a structure with at least two different tranches which reflect different degrees of credit risk, where credit risk of an underlying exposure or pool of exposures is transferred, in whole or in part, through the use of funded or unfunded credit derivatives or guarantees;
TEP or total eligible provisions	means the sum of all allowances, including specific allowances, partial write-offs, portfolio-specific general allowances such as country risk allowances and general allowances, which are attributed to credit exposures subject to the IRBA, and includes any discounts on defaulted assets, but excludes any CVA which has already been recognised by the Reporting Bank as an incurred write-down (i.e. a CVA loss);

the Authority	means the Monetary Authority of Singapore established under the Monetary Authority of Singapore Act (Cap. 186);
Tier 1 Capital	in relation to a Reporting Bank or subsidiary of the Reporting Bank, means the sum of CET1 Capital and AT1 Capital; [MAS Notice 637 (Amendment No. 2) 2014]
Tier 1 CAR	means Tier 1 capital adequacy ratio, calculated in accordance with paragraph 4.1.2;
Tier 2 Capital	means - (a) in relation to a Reporting Bank, the sum of the items set out in paragraph 6.3.1; and (b) in relation to a subsidiary of a Reporting Bank, the sum of items set out in paragraph 6.3.1, where a reference to "Reporting Bank" shall be construed as a reference to "the subsidiary of the Reporting Bank"; [MAS Notice 637 (Amendment No. 2) 2014]
Tier 2 capital instrument	means a capital instrument which complies with the requirements set out in paragraph 6.3.2;
Total CAR	means total capital adequacy ratio, calculated in accordance with paragraph 4.1.3;
trading book	has the meaning in Sub-division 3 of Division 1 of Part VIII;
traditional securitisation	means a structure where the cash flow from an underlying exposure or pool of exposures is used to service at least two different tranches reflecting different degrees of credit risk;
tranche	means a contractually established segment of the credit risk associated with an underlying exposure or pool of exposures, where a position in the segment entails a risk of credit loss greater than or less than a position of the same amount in each other such segment, without taking account of credit protection provided by third parties directly to the holders of positions in the segment or in other segments;
unconsolidated subsidiary	means a subsidiary whose assets and liabilities are not included in the consolidated financial statements of the banking group;
unconsolidated financial institution	means a financial institution whose assets and liabilities are not included in the consolidated financial statements of the banking group; [MAS Notice 637 (Amendment) 2016]

unconsolidated major stake company	means a major stake company whose assets and liabilities are not included in the consolidated financial statements of the banking group; [MAS Notice 637 (Amendment) 2016]
unfunded credit protection	means a CRM where the reduction of the credit risk of an exposure of a Reporting Bank is derived from the undertaking of a third party to pay an amount in the event of the default of a counterparty or on the occurrence of other specified events;
unrated	in relation to any exposure, means that the exposure does not have an external credit assessment from a recognised ECAI;
USD	means the United States dollar;
VaR or value-at-risk	means the maximum amount that can be lost from an investment or a portfolio of investments under normal market conditions over a given holding period at a particular confidence interval;
variation margin	in relation to exposures to a CCP, means funded collateral of a clearing member or a client of a clearing member posted on a daily or intraday basis to a CCP based on price movements of the transactions of the clearing member or the client of a clearing member; [MAS Notice 637 (Amendment) 2012] [MAS Notice 637 (Amendment) 2016]
wholesale exposure	in relation to the IRBA, means an exposure that falls within the definition in paragraph 7.4.15; and
written law	has the same meaning as in section 2 of the Interpretation Act.

Amendments to Part III

PART III: SCOPE OF APPLICATION

Amendments to Division 2

Division 2: ~~Calculation of~~ Leverage Ratio Requirements

Requirements to Apply at the Solo and Group Levels

3.2.1 A Reporting Bank shall ~~calculate its~~comply with the leverage ratio requirements in ~~accordance with~~ this Notice at two levels:

(a) the bank standalone ("Solo") level, which measures the leverage ratio of a Reporting Bank based on its standalone capital strength; and

(b) the consolidated ("Group") level, which measures the leverage ratio of a Reporting Bank based on its capital strength after consolidating the assets and liabilities of its banking group entities, taking into account –

(i) any exclusions of certain banking group entities provided for under paragraphs 3.2.2 and 3.2.3; and

(ii) any adjustments pursuant to Division 6 of Part VII.

Non-Consolidation of Certain Subsidiaries at the Group Level

3.2.2 A Reporting Bank shall –

(a) not consolidate its investment in an insurance subsidiary; and

(b) account for such investment at cost,

when preparing the consolidated financial statements of the banking group for the purpose of calculating its leverage ratio at the Group level.

3.2.3 Subject to paragraph 3.2.2 and Part VI, a Reporting Bank may exclude from consolidation its investment in any other subsidiary when preparing the consolidated financial statements of the banking group for the purpose of calculating its leverage ratio at the Group level only if such non-consolidation is permitted under the Accounting Standards. Notwithstanding the provisions set out in this paragraph, the exemption in paragraph 4(a) of Singapore Financial Reporting Standards 110 ("SFRS 110") Consolidated Financial Statements[3A] shall not apply for the purpose of complying with paragraph 3.2.1(b).

[MAS Notice 637 (Amendment) 2014]

Amendments to Part IV

PART IV: CAPITAL ADEQUACY RATIOS AND LEVERAGE RATIO

Amendments to Division 2

Division 2: Leverage Ratio[22]

4.2.1 A Reporting Bank shall calculate its leverage ratio as set out in Annex 4A of this Part.

4.2.2 [Deleted by MAS Notice 637 (Amendment) 2014]

4.2.3 [Deleted by MAS Notice 637 (Amendment) 2014]

4.2.4 A Reporting Bank shall, at all times, maintain at both the Solo and Group levels, a minimum leverage ratio of 3%.

[22] A Reporting Bank should refer to "Basel III leverage ratio framework and disclosure requirements" issued by the BCBS in January 2014 for an understanding of the objectives of the leverage ratio. ~~The BCBS may make any further adjustments to the definition and the final calibration of the leverage ratio by 2017, with a view to migrating to Pillar 1 treatment on 1 January 2018.~~

[MAS Notice 637 (Amendment) 2014]

Amendments to Part V

PART V: TRANSITIONAL ARRANGEMENTS

Capital Floors

5.1.1 For the first year from the date of adoption of the IRBA, a Reporting Bank which has adopted the IRBA shall, at both the Solo and Group levels, meet capital floors based on -

(a) the Total Capital Resources Requirement calculated using the approaches adopted by the Reporting Bank under this Notice; or

(b) 95% or such other percentage (in any case, not more than 100%) as the Authority may determine of the Total Capital Resources Requirement calculated using the rules in MAS Notice 637 in force immediately before 1 Jan 2008,

whichever will result in a higher amount of capital floors.

[MAS Notice 637 (Amendment) 2017]

5.1.2 For the second year from the date of adoption of the IRBA, a Reporting Bank which has adopted the IRBA shall, at both the Solo and Group levels, meet capital floors based on -

(a) the Total Capital Resources Requirement calculated using the approaches adopted by the Reporting Bank under this Notice; or

(b) 90% or such other percentage (in any case, not more than 100%) as the Authority may determine of the Total Capital Resources Requirement calculated using the rules in MAS Notice 637 in force immediately before 1 Jan 2008,

whichever will result in a higher amount of capital floors.

[MAS Notice 637 (Amendment) 2017]

5.1.3 For the third year and all subsequent years from the date of adoption of the IRBA, a Reporting Bank which has adopted the IRBA shall, at both the Solo and Group levels, meet capital floors based on -

(a) the Total Capital Resources Requirement calculated using the approaches adopted by the Reporting Bank under this Notice; or

(b) 80% or such other percentage (in any case, not more than 100%) as the Authority may determine of the Total Capital Resources Requirement calculated using the rules in MAS Notice 637 in force immediately before 1 Jan 2008,

whichever will result in a higher amount of capital floors.

[MAS Notice 637 (Amendment) 2017]

5.1.3A As an alternative to the use of the amounts referred to in paragraphs 5.1.1(b), 5.1.2(b) and 5.1.3(b), a Reporting Bank may use 80% or such other percentage (in any case, not more than 100%) as the Authority may determine of the Total Capital Resources Requirement calculated using the rules in this Notice, with RWA of the Reporting Bank comprising the sum of –

(a) its ~~– SA(CR) RWA, SA(EQ) RWA and SA(SE) RWA, assuming the Reporting Bank had not adopted IRBA~~

(i) SA(CR) RWA;

(ii) SA(EQ) RWA;

(iii) SEC-ERBA RWA;

(iv) SEC-SA RWA; and

(v) RWA from securitisation exposures to which the SEC-IRBA, SEC-ERBA and SEC-SA cannot be applied,

assuming the Reporting Bank had not adopted IRBA[29U];

(b) its RWA for investments referred to in para 6.1.3(p), calculated in accordance with paragraph 6.1.3(p)(iii); and

(c) its SA(MR) RWA.

[MAS Notice 637 (Amendment) 2017]

5.1.3B The Reporting Bank shall notify the Authority in advance if it intends to use the alternative approach referred to in paragraph 5.1.3A or if, having used the alternative approach, it intends to revert to using the amount referred to in paragraph 5.1.1(b), 5.1.2(b) or 5.1.3(b), as the case may be.

[MAS Notice 637 (Amendment) 2017]

5.1.3C If the amount calculated in paragraph 5.1.1(b), 5.1.2(b), 5.1.3(b) or 5.1.3A, as the case may be, is greater than the corresponding amount calculated in paragraph 5.1.1(a), 5.1.2(a) or 5.1.3(a), as the case may be, a Reporting Bank shall –

[29U] For the avoidance of doubt, a Reporting Bank shall calculate: ~~an SA(CR) RWA in respect of all its actual SA(CR) exposures and IRBA exposures, an SA(EQ) RWA in respect of all its actual SA(EQ) exposures and IRBA(EQ) exposures, and an SA(SE) RWA in respect of all its actual SA(SE) exposures and IRBA(SE) exposures.~~
(a) an SA(CR) RWA in respect of all its actual SA(CR) exposures and IRBA exposures;
(b) an SA(EQ) RWA in respect of all its actual SA(EQ) exposures and IRBA(EQ) exposures; and
(c) an SEC-ERBA RWA, SEC-SA RWA, or RWA from securitisation exposures to which the SEC-IRBA, SEC-ERBA and SEC-SA cannot be applied, as determined in accordance with the hierarchy of approaches set out in paragraphs 7.6.14 to 7.6.17, in respect of all its securitisation exposures.

(a) multiply the difference by the reciprocal of the minimum Total CAR requirement in paragraph 4.1.4; and

(b) add the figure obtained in sub-paragraph (a) (referred to as the "floor adjustment") to the Total RWA in the denominators of its capital adequacy ratios in paragraphs 4.1.1, 4.1.2 and 4.1.3 respectively.

[MAS Notice 637 (Amendment) 2017]

5.1.4 The Authority may impose additional bank-specific capital requirements, including extending the period of operation of the capital floors set out in paragraph 5.1.1, 5.1.2 and 5.1.3.

5.1.5 A Reporting Bank which has adopted the AMA shall meet capital floors that shall be calculated in a manner specified by the Authority.[30]

5.1.6 For the purposes of this Part, "Total Capital Resources Requirement" means –

(a) in the case where the Reporting Bank is using the rules in MAS Notice 637 in force immediately before 1 Jan 2008, ~~10% of~~ the RWA of the Reporting Bank multiplied by the minimum Total CAR applicable to the Reporting Bank, adjusted by adding deductions from Tier 1 Capital and deductions from Total Capital referred to in paragraphs 12 and 18 respectively, and deducting the general provisions referred to in paragraph 16(a), of that Notice; or

(b) in the case where the Reporting Bank is using the rules in this Notice, ~~10% of~~ the RWA of the Reporting Bank multiplied by the minimum Total CAR applicable to the Reporting Bank, adjusted by adding regulatory adjustments in CET1 Capital referred to in paragraph 6.1.3, regulatory adjustments in AT1 Capital referred to paragraph 6.2.3, and regulatory adjustments in Tier 2 Capital referred to in 6.3.3, and deducting the items referred to in paragraphs 6.3.1(d) and (e), subject to the transitional arrangements set out in Division 5 of Part VI.

[MAS Notice 637 (Amendment) 2017]

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30 Where the Reporting Bank has adopted the AMA before the adoption of the IRBA, the Reporting Bank shall meet capital floors as computed in paragraphs 5.1.1, 5.1.2 and 5.1.3 for respectively the first, second, and third and all subsequent years of adoption of the AMA.

Amendments to Part VI

PART VI: DEFINITION OF CAPITAL

Division 1: Common Equity Tier 1 Capital

Amendments to Paragraph 6.1.1

Components of CET1 Capital

6.1.1 CET1 Capital of a Reporting Bank shall be the sum of the following items, whether at the Solo or Group level, as the case may be:

[MAS Notice 637 (Amendment No. 2) 2014]

(a) paid-up ordinary shares of the Reporting Bank that comply with the requirements in paragraph 6.1.2;

(b) share premium, resulting from the issuance of ordinary shares which fall within sub-paragraph (a), if any;

[MAS Notice 637 (Amendment No. 2) 2014]

(c) retained earnings, after deducting any interim or final dividends which have been declared by the Board of the Reporting Bank or any banking group entity on any class of shares and any interim losses incurred since the end of the last financial reporting period and may include any interim profits earned since the end of the last financial reporting period where the following conditions are met:

(i) every quarterly financial statement is prepared using the same accounting policies and practices applied in the preparation of the year-end financial statements, unless the change in the accounting policy or practice is in accordance with any statutory requirement;

(ii) every quarterly financial statement and every significant transaction is reviewed in a timely manner by an external auditor; and

(iii) the external auditor of the Reporting Bank has not expressed a qualified opinion on any of the quarterly financial statements in the preceding 12 months of the end of the interim financial reporting period;

[MAS Notice 637 (Amendment No. 2) 2014]

(d) accumulated other comprehensive income and other disclosed reserves, other than revaluation surpluses on land and building assets ~~and~~, accumulated revaluation gains from investment properties and balances maintained in a non-distributable regulatory loss allowance reserve account pursuant to paragraph 6.3 of MAS Notice 612;

[MAS Notice 637 (Amendment No. 2) 2014]

(e) 45% of revaluation surpluses on land and building assets and accumulated revaluation gains from investment properties, where the following conditions pertaining to revaluations are satisfied:

(i) the valuation of any land and building asset or investment property is obtained from a qualified property valuer and the increase in value is recorded as a revaluation surplus or gain in the financial statements;

(ii) a new valuation from a qualified property valuer in respect of the land and building asset or investment property is obtained -

(A) at least once every 3 years; or

(B) where the value of the land and building asset or investment property has been substantially impaired by any event,

whichever is earlier;

(iii) impairment charges taken against any land and building asset or investment property are not netted against revaluation surplus or gain from any other asset; and

(iv) the external auditor of the Reporting Bank has not expressed a qualified opinion on the revaluation of any land and building asset or investment property;

[MAS Notice 637 (Amendment No. 2) 2014]

(f) paid-up ordinary shares issued by fully consolidated subsidiaries of the Reporting Bank and held by third party investors (i.e. minority interest) that meet the criteria for inclusion in CET1 Capital pursuant to paragraph 6.1.4; and

(g) regulatory adjustments set out in paragraph 6.1.3.

Amendments to Paragraph 6.1.3

[Amendments to Paragraph 6.1.3 are compared with the version of MAS Notice 637 as last revised on 29 November 2017]

Regulatory Adjustments Applied in the Calculation of CET1 Capital

6.1.3 A Reporting Bank shall apply the following regulatory adjustments in the calculation of CET1 Capital at the Solo or Group level, as the case may be:

[MAS Notice 637 (Amendment No. 2) 2014]

(a) goodwill, including any goodwill included in the valuation of investments in unconsolidated major stake companies, shall be deducted in the calculation of CET1 Capital.[33] The full amount representing goodwill shall be deducted, net of any associated deferred tax liability that would be extinguished if the goodwill becomes impaired or is derecognised under the Accounting Standards;

[MAS Notice 637 (Amendment No. 2) 2014]
[MAS Notice 637 (Amendment) 2016]

(b) intangible assets, including but not limited to copyright, patents and other intellectual property, shall be deducted in the calculation of CET1 Capital. The full amount representing intangible assets shall be deducted, net of any associated deferred tax liability that would be extinguished if the intangible assets become impaired or are derecognised under the Accounting Standards;

[MAS Notice 637 (Amendment No. 2) 2014]

(c) deferred tax assets that rely on the future profitability of the Reporting Bank or any banking group entity to be realised shall be deducted in the calculation of CET1 Capital.[34]

At the Solo level, deferred tax assets may be netted with associated deferred tax liabilities prior to being deducted in the calculation of CET1 Capital, only if offsetting is permitted by the relevant tax authority. The deferred tax liabilities permitted to be netted against deferred tax assets shall exclude amounts that have been netted against the deduction of goodwill, intangible assets and defined benefit pension assets pursuant to sub-paragraphs (a), (b) and (h) respectively of this paragraph.

The Reporting Bank shall not permit the following for the purposes of calculating CET1 CAR, Tier 1 CAR or Total CAR at the Group level:

(i) intra-entity netting of deferred tax assets against deferred tax liabilities for any banking group entity incorporated or established outside Singapore; and

(ii) inter-entity netting of deferred tax assets against deferred tax liabilities.

However, the Authority may permit sub-paragraphs (i) and (ii) above if the Reporting Bank confirms in writing to the Authority that the deferred tax assets and deferred tax liabilities relate to taxes levied by the same

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33 For the avoidance of doubt, goodwill included in the carrying amount of associates accounted for using the equity method shall be deducted from CET1 Capital at the Group level. Such goodwill shall be calculated by separating any excess of the acquisition cost over the Reporting Bank's share of the net fair value of the identifiable assets and liabilities of the entity.

34 An overinstallment of tax or current year tax losses carried back to prior years may give rise to a claim or receivable from the government or relevant tax authority. Such amounts are usually classified as current tax assets for accounting purposes. As the recovery of such a claim or receivable does not rely on the future profitability of the Reporting Bank or any banking group entity, it shall be assigned the relevant sovereign risk-weighting.

tax authority, and that it has received written opinions from external auditors and legal advisors that the relevant tax authorities allow or would allow, deferred tax assets to be offset against the deferred tax liabilities. For the avoidance of doubt, the deferred tax liabilities permitted to be netted against deferred tax assets shall exclude amounts that have been netted against the deduction of goodwill, intangible assets and defined benefit pension assets pursuant to sub-paragraphs (a), (b) and (h) respectively of this paragraph;

(d) the amount of cash flow hedge reserve that relates to the hedging of items that are not fair valued on the balance sheet, including projected cash flows, shall be derecognised in the calculation of CET1 Capital. In this regard, positive amounts shall be deducted, and negative amounts shall be added back[35];

(e) in the case where the Reporting Bank has adopted the IRBA, any shortfall of the TEP relative to the EL amount shall be deducted in the calculation of CET1 Capital. The full amount shall be deducted, and shall not be reduced by any tax effects that could be expected to occur if provisions were to rise to the level of EL amount;

(f) any increase in equity resulting from a securitisation transaction, such as that which is associated with expected future margin income resulting in a gain-on-sale, shall be deducted in the calculation of CET1 Capital;

[MAS Notice 637 (Amendment No. 2) 2014]

(fa) any exposures to credit-enhancing interest-only strips, net of:

(i) ~~individual impairment~~specific allowances attributable to such exposures; and

(ii) the amount that shall be deducted in the calculation of CET1 Capital under sub-paragraph (f) that is attributable to such exposures;

shall be deducted in the calculation of CET1 Capital;

[MAS Notice 637 (Amendment No. 2) 2017]

(g) all unrealised fair value gains or losses on financial liabilities arising from changes in the credit risk of the Reporting Bank or any banking group entity shall be derecognised in the calculation of CET1 Capital. In this regard, positive amounts shall be deducted, and negative amounts shall be added back. In addition, all accounting valuation adjustments on derivative liabilities arising from changes in the credit risk of the Reporting Bank or any banking group entity shall be derecognised in the calculation of CET1 Capital. The offsetting between valuation adjustments arising from changes in the credit risk of the Reporting Bank

[35] This adjustment specifically identifies and removes the element of the cash flow hedge reserve that gives rise to artificial volatility in common equity, as the reserve only reflects the fair value of the derivative, and not the change in the fair value of the hedged future cash flow.

or any banking group entity and those arising from changes in the credit risk of the counterparties shall not be allowed. In addition, any funding valuation adjustment applied by a Reporting Bank or any banking group entity shall not have the effect of offsetting or reducing its unrealised fair value gains or losses on financial liabilities or accounting valuation adjustments on derivative liabilities arising from changes in the credit risk of the Reporting Bank or any banking group entity, for the purpose of calculating the amount to be derecognised in the calculation of CET1 Capital;

[MAS Notice 637 (Amendment) 2016]

(h) any defined benefit pension fund liabilities, as included in the balance sheet, shall be fully recognised in the calculation of CET1 Capital. For each defined benefit pension fund that is an asset on the balance sheet, the asset shall be deducted in the calculation of CET1 Capital net of any associated deferred tax liabilities which would be extinguished if the asset becomes impaired or derecognised under the Accounting Standards. Assets in the fund to which the Reporting Bank has unrestricted and unfettered access may, with the prior approval of the Authority, offset the deduction. Such offsetting assets shall be given the risk weight they would receive if they were owned directly by the Reporting Bank[36];

(i) all investments in the Reporting Bank's own ordinary shares (including treasury shares, where applicable), whether held directly or indirectly[37] by the Reporting Bank or any of its banking group entities, shall be deducted in the calculation of CET1 Capital, unless already derecognised under the Accounting Standards.[38] If the Reporting Bank or any of its banking group entities is contractually obliged to purchase any of its own ordinary shares, the Reporting Bank shall deduct such ordinary shares in the calculation of CET1 Capital. This adjustment shall apply to exposures in both the banking book and trading book.[39]

Gross long positions may be deducted net of short positions in the same underlying exposure, only if the short positions involve no counterparty credit risk. The Reporting Bank shall look through holdings of index

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[36] This adjustment addresses the concern that assets arising from pension funds may not be capable of being withdrawn and used for the protection of depositors and other creditors of the Reporting Bank. The concern is that their only value stems from a reduction in future payments into the fund. The treatment allows the Reporting Bank to reduce the deduction of the assets if it can address these concerns and show that the assets can be easily and promptly withdrawn from the fund.

[37] Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the Reporting Bank substantially equivalent to the loss in value of the direct holding.

[38] This deduction is to avoid the double counting of the Reporting Bank's own capital that arises from direct holdings, indirect holdings via index funds and potential future holdings as a result of contractual obligations to purchase own shares.

[39] For the avoidance of doubt, this adjustment does not cover ordinary shares held by the Reporting Bank or any of its banking group entities where:
(a) the investments in the ordinary shares are funded by third parties other than the Reporting Bank or any of its banking group entities (e.g. life insurance policyholders or other third party investors);
(b) the risks and rewards associated with the investments in ordinary shares are borne primarily by the third parties; and
(c) decisions to transact in the ordinary shares are made independently from the issuer of the capital instruments and in the interests of the third parties.

securities to deduct exposures to its own ordinary shares.[40] However, gross long positions in its own ordinary shares resulting from holdings of index securities may be netted against short positions in its own ordinary shares, which result from short positions in the same underlying index[41];

[MAS Notice 637 (Amendment No. 2) 2014]

(j) reciprocal cross holdings in the ordinary share capital of financial institutions that are designed to artificially inflate the capital position of the Reporting Bank shall be deducted in the calculation of CET1 Capital;

(k) [Deleted by MAS Notice 637 (Amendment) 2016][42]

(l) PE/VC investments held beyond the relevant holding periods set out in MAS Notice 630 shall be deducted in the calculation of CET1 Capital, unless otherwise approved by the Authority;

(m) the full amount of capital deficits in subsidiaries that are financial institutions and that are subject to minimum prudential standards and supervision by a regulatory agency, and the pro-rata share of capital deficits in associates that are financial institutions and that are subject to minimum prudential standards and supervision by a regulatory agency, shall be deducted in the calculation of CET1 Capital. In the event that a recapitalisation plan is in place or an irrevocable commitment has been given by other shareholders to make up the capital deficit, the Authority may approve a corresponding reduction in the amount of deductions in respect of such capital deficits;

(n) valuation adjustments made in accordance with Annex 8N that exceed the valuation adjustments made under financial reporting standards shall be deducted in the calculation of CET1 Capital;

(o) certain investments in the ordinary shares of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake, shall be deducted in the calculation of CET1 Capital, in accordance with sub-paragraphs (i) and (ii) below:

(i) the amount of such investments to be deducted in the calculation of CET1 Capital shall be the proportion of ordinary share holdings to total capital holdings multiplied by the amount by which total capital holdings in aggregate exceed 10% of the Reporting Bank's common equity. In this sub-paragraph, the Reporting Bank's common equity for the purpose of calculating the 10% threshold shall be calculated after applying the regulatory adjustments set

40 If the Reporting Bank finds it operationally burdensome to look through and monitor its exact exposure to its own capital as a result of its holdings of index securities, the Reporting Bank may, with the prior approval of the Authority, use a conservative estimate. The methodology for the estimate should demonstrate that in no case will the actual exposure be higher than the estimated exposure.

41 In such cases, the short positions may involve counterparty credit risk, which will be subject to the relevant counterparty credit risk charge.

42 [Deleted by MAS Notice 637 (Amendment) 2016]

out in sub-paragraphs (a) to (n) above to the sum of the elements set out in paragraphs 6.1.1(a) to (f);

(ii) the total capital holdings and ordinary share holdings referred to in sub-paragraph (i) above shall be calculated as follows:

(A) direct, indirect[37] and synthetic holdings of capital instruments shall be included. For example, the Reporting Bank shall look through holdings of index securities to determine the underlying holdings of capital[43];

(B) the net long positions in both the banking book and trading book shall be included. In this regard, the gross long position can be offset against the short position in the same underlying exposure, if the maturity of the short position either matches the maturity of the long position, or has a residual maturity of at least one year[44,45,46];

(C) underwriting positions held for a period longer than five working days shall be included, while those positions held for five working days or less can be excluded;

(D) if the capital instrument of the entity in which the Reporting Bank has invested does not meet the criteria for CET1 Capital, AT1 Capital or Tier 2 Capital of the Reporting Bank, the capital instrument is to be considered as ordinary shares for the purpose of this regulatory adjustment[47];

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43 If the Reporting Bank finds it operationally burdensome to look through and monitor its exact exposure to the capital of such entities as a result of its holdings of index securities, the Reporting Bank may, with the prior approval of the Authority, use a conservative estimate. The methodology for the estimate should demonstrate that in no case will the actual exposure be higher than the estimated exposure.

44 For positions in the trading book, if the Reporting Bank has a contractual right or obligation to sell a long equity position at a specific point in time and the counterparty in the contract has an obligation to purchase the long equity position if the Reporting Bank exercises its right to sell, this point in time may be treated as the maturity of the long position, and the maturity of the long and short positions are deemed to be matched.

45 For a position hedged against market risk where the hedge does not qualify to offset the gross long position for the purpose of determining the amount to be deducted, the Reporting Bank may choose to include the long position in its calculation of market RWA, in addition to deducting the long position. Where the hedge qualifies to offset the gross long position, the Reporting Bank may choose to exclude both positions from its calculation of market RWA.

46 Where a Reporting Bank uses a short position in an index to hedge a long position, the portion of the index that is composed of the same underlying exposure that is being hedged may be used to offset the long position only if (a) both positions are held in the trading book; (b) the positions are accounted for at fair value; and (c) the hedge is recognised as effective under the Reporting Bank's internal control processes, as assessed by the Authority.

47 For the avoidance of doubt,

(a) a capital instrument would be deemed to have met the criteria for CET1 Capital, AT1 Capital or Tier 2 Capital of the Reporting Bank, if it satisfies the applicable regulatory capital criteria imposed by a bank regulatory agency that has implemented the Basel III standards;

(b) if the entity in which the Reporting Bank has invested is a financial institution that is subject to minimum prudential standards and supervision by a regulatory agency and the investment is not included as regulatory capital of the entity, the investment can be excluded for the purpose of this regulatory adjustment; and

[MAS Notice 637 (Amendment) 2016]

(c) if the entity in which the Reporting Bank has invested is a financial institution that is not a bank, the entity is subject to minimum prudential standards and supervision by a regulatory agency and the investment is not in the form of ordinary shares but is nevertheless recognised as Tier 1 capital (or its equivalent) or Tier 2 capital (or its equivalent) of the entity, the capital instrument shall be considered as an AT1 capital instrument or Tier 2 capital instrument, respectively, for the purpose of this regulatory

(E) the maximum amount that could be paid out on any guarantee or capital enhancement, through which capital support is provided by the Reporting Bank to a financial institution shall be included. The Reporting Bank shall consult the Authority if there is uncertainty whether such guarantee or capital enhancement is to be considered as ordinary shares for the purpose of the regulatory adjustment; and

(F) certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution may be temporarily excluded with the approval of the Authority; and

(iii) the amount of total capital holdings that do not exceed the 10% threshold calculated in accordance with sub-paragraph (i) above and are not deducted shall continue to be risk-weighted[48]. For the application of risk-weighting, the amount of the holdings shall be allocated on a pro rata basis between those below and those above the threshold;

[MAS Notice 637 (Amendment) 2016]

(p) certain investments in the ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries at the Solo and Group levels), shall be deducted in the calculation of CET1 Capital, in accordance with sub-paragraphs (i) and (ii) below, unless a deduction has been made pursuant to sub-paragraph (l) above:

(i) the amount of such investments to be deducted in the calculation of CET1 Capital shall be the amount by which such investments in aggregate exceed the threshold amount. In this sub-paragraph, the threshold amount is the lower of[49]:

(A) 10% of the Reporting Bank's common equity, calculated by applying the regulatory adjustments set out in sub-paragraphs (a) to (o) above to the sum of elements set out in paragraph 6.1.1(a) to (f); and

(B) 15% of the Reporting Bank's CET1 Capital[50];

(ii) the investments in aggregate referred to in sub-paragraph (i)

adjustment.

[MAS Notice 637 (Amendment) 2016]

[48] Capital instruments in the banking book and trading book will thus be subject to the appropriate capital treatment as set out in Part VII and Part VIII, respectively.

[49] For the period from 1 January 2013 to 31 December 2017, the threshold amount is based on sub-paragraph (A) only. The requirement to calculate the threshold amount based on the lower of sub-paragraph (A) and sub-paragraph (B) will take effect from 1 January 2018.

[50] This is equivalent to 17.65% of the Reporting Bank's common equity after (a) applying all regulatory adjustments set out in paragraphs 6.1.3(a) to (o); and (b) deducting in full such investments described in paragraph 6.1.3(p)(ii).

above shall be calculated as follows:

(A) direct, indirect[37] and synthetic holdings shall be included. For example, the Reporting Bank shall look through holdings of index securities to determine the underlying holdings of ordinary shares[43];

(B) the net long positions in both the banking book and trading book shall be included. In this regard, the gross long position can be offset against the short position in the same underlying exposure, if the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year[44,45,46];

(C) underwriting positions held for a period longer than five working days shall be included, while those positions held for five working days or less can be excluded;

(D) if the capital instrument of the entity in which the Reporting Bank has invested does not meet the criteria for CET1 Capital, AT1 Capital or Tier 2 Capital of the Reporting Bank, the capital instrument is to be considered as ordinary shares for the purpose of this regulatory adjustment[50A];

(E) the maximum amount that could be paid out on any guarantee or capital enhancement, through which capital support is provided by the Reporting Bank to a financial institution shall be included. The Reporting Bank shall consult the Authority if there is uncertainty whether such guarantee or capital enhancement is to be considered as ordinary shares for the purpose of the regulatory adjustment; and

(F) certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution may be temporarily excluded with the approval of the Authority; and

(iii) the amounts of such investments that do not exceed the thresholds

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[50A] For the avoidance of doubt,

(a) a capital instrument would be deemed to have met the criteria for CET1 Capital, AT1 Capital or Tier 2 Capital of the Reporting Bank, if it satisfies the applicable regulatory capital criteria imposed by a bank regulatory agency that has implemented the Basel III standards;

(b) if the entity in which the Reporting Bank has invested is a financial institution that is subject to minimum prudential standards and supervision by a regulatory agency and the investment is not included as regulatory capital of the entity, the investment can be excluded for the purpose of this regulatory adjustment; and

(c) if the entity in which the Reporting Bank has invested is a financial institution that is not a bank, the entity is subject to minimum prudential standards and supervision by a regulatory agency and the investment is not in the form of ordinary shares but is nevertheless recognised as Tier 1 capital (or its equivalent) or Tier 2 capital (or its equivalent) of the entity, the capital instrument shall be considered as an AT1 capital instrument or Tier 2 capital instrument, respectively, for the purpose of this regulatory adjustment.

[MAS Notice 637 (Amendment) 2016]

set out in sub-paragraph (i) above and are not deducted shall be risk-weighted at 250%;

[MAS Notice 637 (Amendment No. 2) 2014]
[MAS Notice 637 (Amendment) 2016]

(q) any other item or class of items which the Authority may specify in writing to the Reporting Bank for the purpose of this paragraph; and

(r) in the case where the Reporting Bank does not have enough AT1 Capital to satisfy the required deductions set out in paragraph 6.2.3, the shortfall shall be deducted in the calculation of CET1 Capital.

Division 3: Tier 2 Capital

Amendments to Paragraph 6.3.1 and Insertion of Paragraphs 6.3.1A – 6.3.1C

Components of Tier 2 Capital

6.3.1 Tier 2 Capital of a Reporting Bank shall be the sum of the following items, whether at the Solo or Group level, as the case may be:

[MAS Notice 637 (Amendment No. 2) 2014]

(a) capital instruments issued by the Reporting Bank that comply with the requirements in paragraph 6.3.2, and are not included in Tier 1 Capital;

(b) share premium, resulting from the issuance of capital instruments which fall within sub-paragraph (a), if any. Any share premium that is not eligible for inclusion in Tier 1 Capital shall be included in Tier 2 Capital only if the shares giving rise to the share premium comply with the requirements in paragraph 6.3.2;

[MAS Notice 637 (Amendment No. 2) 2014]

(c) capital instruments issued by fully consolidated subsidiaries of the Reporting Bank and held by third party investors that meet the criteria for inclusion in Tier 2 Capital pursuant to paragraphs 6.3.4 and 6.3.5, and are not included in Tier 1 Capital;

(d) subject to paragraph 6.3.1A, in the case where the Reporting Bank has adopted the SA(CR), SA(EQ), SEC-ERBA, SEC-SA, or the approach for securitisation exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied, general allowances ~~or loan-loss reserves (also referred to as collective impairment allowances)~~ that are held against future, presently unidentified losses, and that are freely available to meet losses which subsequently materialise.[69] Allowances ascribed to the identified deterioration of particular assets or known liabilities, whether individual or grouped, shall be excluded. The general allowances ~~or loan-loss reserves~~ eligible for inclusion shall not exceed 1.25% of the sum of (i) the credit RWA set out in paragraph 7.1.1(a), and (ii) its SEC-ERBA RWA, SEC-SA RWA, and RWA from securitisation exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied and which are set out in paragraph 7.1.1(ba)~~[70]~~;

(e) subject to paragraph 6.3.1A, in the case where the Reporting Bank has adopted the IRBA, any excess of the TEP maintained by the Reporting Bank over the EL amount calculated by the Reporting Bank. The amount eligible for inclusion shall not exceed 0.6% of the sum of (i) the credit RWA set out in paragraph 7.1.1(b) and (ii) its SEC-IRBA RWA set out in paragraph 7.1.1(ba)[69], ~~[70],~~[71],[72]; and

(f) regulatory adjustments set out in paragraph 6.3.3.

6.3.1A Paragraphs 6.3.1B and 6.3.1C shall apply in the case of a Reporting Bank that has adopted (a) the SA(CR), SA(EQ), SEC-SA, SEC-ERBA, or the approach for securitisation exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied for a portion of its credit exposures, and (b) the IRBA, IRBA(EQ) or SEC-IRBA for the remaining portion of its credit exposures.

6.3.1B For the purpose of determining the inclusion of general allowances in Tier 2 Capital under paragraph 6.3.1(d), a Reporting Bank referred to in paragraph 6.3.1A shall pro-rate the general allowances it maintains using the following formula:

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[69] For the avoidance of doubt, any deferred tax assets associated with these general allowances~~, loan-loss reserves~~ or TEP maintained by the Reporting Bank shall be deducted in the calculation of CET1 Capital, as set out in paragraph 6.1.3(c).

~~[70] In the case of a Reporting Bank that has adopted the SA(CR), SA(EQ)or SA(SE) for a portion of its credit exposures and the IRBA, IRBA(EQ) or IRBA(SE) for the remaining portion of its credit exposures, the allowances maintained by the Reporting Bank shall be pro-rated according to the proportions of the Reporting Bank's credit RWA that are attributable to the two portions respectively. The treatment of the allowances attributed to the SA(CR) exposures, SA(EQ) exposures and SA(SE) exposures shall be in accordance with sub-paragraph (d), while the treatment of the allowances attributed to the IRBA exposures, IRBA(EQ) exposures and IRBA(SE) exposures shall be in accordance with sub-paragraph (e). Alternatively, the Authority may allow the Reporting Bank to rely on its internal methods for allocating the allowances that are attributable to the two portions, subject to the prior approval of the Authority and such conditions as the Authority may impose.~~

[71] For the purpose of this sub-paragraph, in calculating the credit RWA, the 1.06 scaling factor set out in paragraph 7.1.1(b) does not apply.

[72] Where the Authority is not satisfied that the EL amount fully reflects the conditions in the market in which the Reporting Bank operates, such excess amounts shall not be included as Tier 2 Capital. This also applies where the excess amounts on defaulted assets are used to offset the EL amount on non-defaulted assets.

$$\text{Pro-rated general allowances} = \text{total general allowances} \times \frac{\text{the sum of the Reporting Bank's credit RWA set out in paragraph 7.1.1(a) and its SEC-ERBA RWA, SEC-SA RWA, and RWA from securitisation exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied, set out in paragraph 7.1.1(ba)}}{\text{the sum of the Reporting Bank's credit RWA set out in paragraphs 7.1.1(a), 7.1.1(b), and 7.1.1(ba)}}$$

Alternatively, subject to the prior approval of the Authority and such conditions as the Authority may impose, the Reporting Bank may rely on its internal methods for allocating general allowances for the purposes of determining their inclusion in Tier 2 Capital under paragraph 6.3.1(d).

6.3.1C For the purpose of determining the inclusion of general allowances in TEP under paragraph 6.3.1(e), a Reporting Bank referred to in paragraph 6.3.1A shall pro-rate the general allowances it maintains using the following formula:

$$\text{Pro-rated general allowances} = \text{total general allowances} \times \frac{\text{the Reporting Bank's IRBA RWA calculated in accordance with Sub-division 4 of Division 1 of Part VII, multiplied by 1.06}}{\text{the sum of the Reporting Bank's credit RWA set out in paragraphs 7.1.1(a), 7.1.1(b), and 7.1.1(ba)}}$$

Alternatively, subject to the prior approval of the Authority and such conditions as the Authority may impose, the Reporting Bank may rely on its internal models for allocating general allowances for the purposes of determining their inclusion in TEP under paragraph 6.3.1(e).

Amendments to Paragraphs 6.3.6 – 6.3.8

Requirements for PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions

6.3.6 PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions in the form of any of the following:

(a) ordinary shares;

(b) preference shares;

(c) investments classified as equity under the Accounting Standards;

(d) subordinated debt;

shall be subject to the following capital treatment, at both the Solo and Group levels:

(i) the portion of individual PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions, ~~and~~ which exceed 15% of the Reporting Bank's Eligible Total Capital, ~~the portion that exceeds 15%~~ shall be risk-weighted at 1250%; and

(ii) ~~individual~~ if the aggregate of a Reporting Bank's PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions, ~~which do not~~ exceed ~~15%~~60% of the Reporting Bank's Eligible Total Capital ~~but~~, the portion of the aggregate of ~~such~~ these investments which exceed 60% of the Reporting Bank's Eligible Total Capital~~, such portion that exceeds 60% of the Reporting Bank's Eligible Total Capital~~ shall be risk-weighted at 1250%.

6.3.7 Investments in unconsolidated major stake companies that are not financial institutions in the form referred to in sub-paragraphs (a) to (d) above shall be calculated as follows:

(a) direct, indirect[79AA] and synthetic holdings shall be included. For example, the Reporting Bank shall look through holdings of index securities to determine the underlying holdings of ordinary shares[79AB];

(b) the net long positions in both the banking book and trading book shall be included. In this regard, the gross long position can be offset against the short position in the same underlying exposure, if the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year[79AC,79AD,79AE];

(c) underwriting positions held for a period longer than five working days shall be included, while those positions held for five working days or less can be excluded; and

79AA Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the Reporting Bank substantially equivalent to the loss in value of the direct holding.

79AB If the Reporting Bank finds it operationally burdensome to look through and monitor its exact exposure to the capital of such entities as a result of its holdings of index securities, the Reporting Bank may, with the prior approval of the Authority, use a conservative estimate. The methodology for the estimate should demonstrate that in no case will the actual exposure be higher than the estimated exposure.

79AC For positions in the trading book, if the Reporting Bank has a contractual right or obligation to sell a long equity position at a specific point in time and the counterparty in the contract has an obligation to purchase the long equity position if the Reporting Bank exercises its right to sell, this point in time may be treated as the maturity of the long position, and the maturity of the long and short positions are deemed to be matched.

79AD For a position hedged against market risk where the hedge does not qualify to offset the gross long position for the purpose of determining the amount ~~to be deducted~~of investments in unconsolidated major stake companies that are not financial institutions, the Reporting Bank may choose to include the long position in its calculation of market RWA, in addition to ~~deducting~~ including the long position in determining the amount of investments in unconsolidated major stake companies that are not financial institutions. Where the hedge qualifies to offset the gross long position, the Reporting Bank may choose to exclude both positions from its calculation of market RWA.

79AE Where a Reporting Bank uses a short position in an index to hedge a long position, the portion of the index that is composed of the same underlying exposure that is being hedged may be used to offset the long position only if (a) both positions are held in the trading book; (b) the positions are accounted for at fair value; and (c) the hedge is recognised as effective under the Reporting Bank's internal control processes, as assessed by the Authority.

(d) ~~if the capital instrument of the entity in which the Reporting Bank has invested does not meet the criteria for CET1 Capital, AT1 Capital or Tier 2 Capital of the Reporting Bank, the capital instrument is to be considered as ordinary shares for the purpose of this regulatory adjustment;~~

(e) the maximum amount that could be paid out on any guarantee or capital enhancement, through which capital support is provided by the Reporting Bank to the major stake company shall be included.~~ The Reporting Bank shall consult the Authority if there is uncertainty whether such guarantee or capital enhancement is to be considered as ordinary shares for the purpose of the regulatory adjustment; and~~

(f) ~~certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution may be temporarily excluded with the approval of the Authority.~~

6.3.8 PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions which do not fall within paragraphs 6.3.6(i) and (ii) above, shall be ~~risk-weighted in accordance with~~subject to the appropriate capital treatment set out in Part VII or Part VIII[79AF].

[MAS Notice 637 (Amendment) 2016]

[79AF] For the application of the appropriate capital treatment in Part VII and Part VIII, the amount of the holdings shall be allocated on a pro rata basis between those below and those above the threshold.

Amendments to Part VII

PART VII: CREDIT RISK

Division 1: Overview of Credit RWA Calculation

Amendments to Sub-division 5

Sub-division 5: Calculation of Credit RWA for Equity Exposures

7.1.5 To calculate its SA(EQ) RWA, a Reporting Bank -

(a) shall apply the exposure measurement requirements in Division 2 of this Part to calculate E for any SA(EQ) exposure;

(b) shall calculate the credit risk-weighted exposure amount for that SA(EQ) exposure (excluding equity investments in funds held in the banking book) in accordance with Sub-division 3 of Division 5 of this Part; ~~and~~

(ba) shall calculate the credit risk-weighted exposure amount of any equity investment in funds held in the banking book in accordance with Sub-division 5 of Division 5 of this Part; and

(c) shall add the credit~~- risk-~~risk-weighted exposure amounts calculated in accordance with sub-paragraphs (b) and (ba) above ~~for all its SA(EQ) exposures~~.

7.1.5A A Reporting Bank using the SA(EQ) to calculate the credit risk-weighted exposure amounts for its equity exposures (excluding equity investments in funds held in the banking book) shall include the credit risk-weighted exposure amounts for its equity investments in funds held in the banking book in the calculation of its SA(EQ) RWA.

7.1.6 To calculate its IRBA(EQ) RWA, a Reporting Bank -

(a) shall apply the exposure measurement requirements in Division 2 of this Part to calculate EAD for any IRBA(EQ) exposure;

(b) shall calculate the credit risk-weighted exposure amount for that IRBA(EQ) exposure (excluding equity investments in funds held in the banking book) in accordance with Sub-division 4 of Division 5 of this Part; ~~and~~

(ba) shall calculate the credit risk-weighted exposure amount of any equity investment in funds held in the banking book in accordance with Sub-division 5 of Division 5 of this Part; and

(c) shall add the credit~~- risk-~~risk-weighted exposure amounts calculated in accordance with sub-paragraphs (b) and (ba) above ~~for all its IRBA(EQ) exposures~~.

7.1.7 ~~[This paragraph has been intentionally left blank.]~~A Reporting Bank using the IRBA(EQ) to calculate the credit risk-weighted exposure amounts for its equity exposures (excluding equity investments in funds held in the banking book) shall include the credit risk-weighted exposure amounts for its equity investments in funds held in the banking book in the calculation of its IRBA(EQ) RWA.

Division 2: Measurement of Exposures

Amendments to Sub-division 1

[Amendments to Sub-division 1 are compared with the version of MAS Notice 637 as last revised on 29 November 2017]

Sub-division 1: Introduction

7.2.1 A Reporting Bank shall apply the exposure measurement requirements set out in this Division and the standards for prudent valuation set out in Annex 8N of to calculate -

(a) E, or where applicable E*, for any SA(CR) exposure, SA(EQ) exposure, SEC-ERBA exposure or SEC-SA exposure; and

(b) EAD, or where applicable EAD*, for any IRBA exposure, IRBA(EQ) exposure or SEC-IRBA exposure.

[MAS Notice 637 (Amendment No. 2) 2017]

7.2.2 A Reporting Bank shall consult with the Authority on the appropriate treatment to apply in the measurement of E or EAD, whichever is applicable, for transactions that have not been addressed in this Division.

7.2.3 A Reporting Bank shall calculate -

(a) E, or where applicable E*, for any SA(CR) exposure, SA(EQ) exposure, SEC-ERBA exposure or SEC-SA exposure net of any

(i) ~~individual impairment~~specific allowance~~[104]~~ attributable to such SA(CR) exposure, SA(EQ) exposure, SEC-ERBA exposure or SEC-SA exposure, and

(ii) purchase price discount attributable to such SEC-ERBA exposure or SEC-SA exposure,

as determined in accordance with the Accounting Standards;

~~[104] Individual impairment allowance is also commonly known as specific allowance.~~

(b) EAD, or where applicable EAD*, for any IRBA exposure gross of any ~~individual impairment~~specific allowance or partial write-offs attributable to such IRBA exposure as determined in accordance with the Accounting Standards[104A]; and

(c) EAD, or where applicable EAD*, for any IRBA(EQ) exposure or SEC-IRBA exposure net of any

(i) ~~individual impairment~~specific allowance attributable to such IRBA(EQ) exposure or SEC-IRBA exposure, and

(ii) purchase price discount attributable to such SEC-IRBA exposure,

as determined in accordance with the Accounting Standards.

[MAS Notice 637 (Amendment No. 2) 2017]

Division 3: SA(CR)

Amendments to Paragraphs 7.3.31 – 7.3.35

Past Due Exposures

7.3.31 Subject to paragraphs 7.3.32 and 7.3.35, a Reporting Bank shall risk-weight the unsecured portion of any SA(CR) exposure that is past due for more than 90 days in accordance with Table 7-10.

Table 7-10: Risk Weights for Past Due Exposures

Condition	Risk Weight
Where ~~individual impairment~~specific allowances are less than 20% of the outstanding amount of the exposure	150%
Where ~~individual impairment~~specific allowances are no less than 20% of the outstanding amount of the exposure	100%

7.3.32 For the purposes of paragraph 7.3.31 above, a Reporting Bank shall calculate the unsecured portion of any SA(CR) exposure that is past due for more than 90 days as follows:

(a) for a Reporting Bank using the FC(SA),

Unsecured Portion = $E - P - C_f$

[104A] The EAD on drawn amounts shall not be less than the sum of (i) the amount by which a Reporting Bank's regulatory capital would be reduced if the exposure were written-off fully, and (ii) any ~~individual impairment~~specific allowances and partial write-offs. The difference between the EAD and the sum of (i) and (ii), where positive, is defined as a discount. For the avoidance of doubt, EAD, or where applicable EAD*, and the calculation of IRBA RWA is independent of any discounts.

where -

(i) E = E calculated in accordance with Division 2 of this Part;

(ii) P = notional amount of eligible credit protection received; and

(iii) C_f = fair value of eligible financial collateral received;

or

(b) for a Reporting Bank using the FC(CA),

Unsecured Portion = E*− P

where -

(i) E* = E* calculated in accordance with Division 2 of this Part; and

(ii) P = notional amount of eligible credit protection received.

7.3.33 *[This paragraph has been intentionally left blank.]*

7.3.34 *[This paragraph has been intentionally left blank.]* [137]

7.3.35 A Reporting Bank shall apply a 100% risk weight to any SA(CR) exposure in the residential mortgage asset class that is past due for more than 90 days.

Division 5: Equity Exposures

Amendments to Sub-division 3

Sub-division 3: Calculation of Credit Risk-Weighted Exposure Amount for Equity Exposures Using SA(EQ)

7.5.11 A Reporting Bank using the SA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures (excluding equity investments in funds held in the banking book), shall apply a risk weight of 100% to E, being the value of the equity exposure measured in accordance with Division 2 of this Part.[187A] ~~A Reporting Bank using the SA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures (excluding equity investments in funds held in the banking book) shall apply in a consistent manner, the treatment in accordance with Sub-division 5 of this Division to its equity investments in funds held in the banking book and shall include the credit risk-weighted exposure amount for equity investments in funds held in the banking book in its calculation of credit risk-weighted exposure amount for equity exposures.~~

[136] *[This footnote has been intentionally left blank.]*
[137] *[This footnote has been intentionally left blank.]*
[187A] The Authority may from time to time specify a higher risk weight for a particular exposure or group of exposures, taking into account, among other things, the risks of this type of exposures.

[MAS Notice 637 (Amendment) 2016]

7.5.12 A Reporting Bank shall treat short positions as if they are long positions, and apply a risk weight of 100% to the value of each position as measured in accordance with Division 2 of this Part.

7.5.12A The Authority may require a Reporting Bank to use the IRBA(EQ) pursuant to Sub-division 4 of this Division to calculate the credit risk-weighted exposure amount of its equity exposures, if the Authority is of the view that the equity exposures of the Reporting Bank are a significant part of the Reporting Bank's business, even though the Reporting Bank does not adopt the IRBA pursuant to Division 4 of this Part.

Treatment of Credit Protection Bought

7.5.13 A Reporting Bank which has bought eligible credit protection for an SA(EQ) exposure may recognise the effects of CRM of the eligible credit protection as follows:

(a) break down the SA(EQ) exposure into -

(i) a protected portion with E equal to the notional amount of the eligible credit protection[188]; and

(ii) an unprotected portion with E equal to the E of the SA(EQ) exposure less the notional amount of the eligible credit protection; and

(b) for the purposes of calculating the credit risk-weighted exposure amount pursuant to Sub-division 5 of Division 1 of this Part, use -

(i) for the protected portion, the risk weight that is applicable to the eligible protection provider[188A]; and

(ii) for the unprotected portion, ~~a risk weight of 100%~~the treatment applicable to the SA(EQ) exposure in this Division.

[MAS Notice 637 (Amendment No. 2) 2014]

7.5.14 Notwithstanding paragraph 7.5.13(b), a Reporting Bank shall apply a 1250% risk weight to any materiality threshold below which no payment will be made by the protection provider in the event of loss on an SA(EQ) exposure as such threshold is equivalent to a retained first loss position.

7.5.15 A Reporting Bank shall apply the relevant provisions in Annex 7H of this Part for the purpose of determining the protected portion in cases of proportional cover,

188 A Reporting Bank shall treat the protected portion of an SA(EQ) exposure which has a currency mismatch or a maturity mismatch in accordance with Annex 7F of this Part.

188A Where a Reporting Bank has bought from an eligible protection provider a credit default swap which is an eligible credit protection and cleared through a CCP, the Reporting Bank may apply a risk weight of 2% if the credit default swap constitutes a CCP trade exposure in accordance with paragraphs 2.1 or 2.5 of Annex 7AJ, or 4% if the credit default swap constitutes a CCP trade exposure in accordance with paragraph 2.6 of Annex 7AJ.

[MAS Notice 637 (Amendment No. 2) 2014]

principal-only cover, partially eligible credit derivatives, tranched cover and basket credit derivatives.

Treatment of Credit Protection Sold

7.5.16 A Reporting Bank which has sold unfunded credit protection acquires exposure to the reference asset. If such exposure is an SA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the exposure using ~~a risk weight of 100%~~the treatment applicable to the SA(EQ) exposure in this Division.

7.5.17 If the unfunded credit protection has more than one reference asset, the credit risk-weighted exposure amount for the credit protection is the sum of the credit risk-weighted exposure amounts in respect of each reference asset calculated using the risk weights that are applicable to the obligors of the respective reference assets.~~[189]~~

7.5.18 A Reporting Bank which has sold funded credit protection acquires exposure to both the reference asset and the protection buyer. Where the exposure to the reference asset is an SA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the credit protection as the sum of -

(a) the credit risk-weighted exposure amount for the exposure to the reference asset calculated ~~in accordance with paragraph 7.5.11 above~~using the treatment applicable to the SA(EQ) exposure in this Division; and

(b) the credit risk-weighted exposure amount for the exposure to the protection buyer, using -

(i) E = the carrying amount of the collateral placed with the protection buyer; and

(ii) the risk weight that is applicable to the protection buyer.

[MAS Notice 637 (Amendment) 2014]

7.5.19 The capital requirement for the credit protection calculated in accordance with paragraphs 7.5.17 and 7.5.18 shall not exceed the notional amount of the credit protection, i.e. the maximum possible payout under the credit protection.

7.5.20 Where a Reporting Bank has provided credit protection (whether funded or unfunded) through a proportionate structure, i.e. where the maximum possible payout in respect of any particular reference asset is capped at a pre-determined proportion of the notional amount of the credit protection, the Reporting Bank shall divide the exposure into individual sub-exposures equal to the proportionate amount of credit protection in respect of each reference asset for the purposes of calculating the credit risk-weighted exposure amount applicable to the credit protection sold.

Amendments to Sub-division 4

~~[189] The applicable risk weight is 100% if the reference asset is an SA(EQ) exposure.~~

Sub-division 4: Calculation of Credit Risk-Weighted Exposure Amount for Equity Exposures Using IRBA(EQ)

7.5.21 A Reporting Bank using the IRBA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures (excluding equity investments in funds held in the banking book) shall use one of the following methods:

(a) the simple risk weight method;

(b) the IMM; or

(c) the PD/LGD method.

7.5.22 A Reporting Bank may use different methods for different portfolios of equity exposures. The approach used shall -

(a) address the risks faced by the equity portfolio[190];

(b) be consistent with the amount and complexity of the equity holdings of the Reporting Bank; and

(c) be commensurate with the overall size and sophistication of the Reporting Bank.

7.5.23 A Reporting Bank shall be consistent[191] in its choice of methods for different portfolios of equity exposures under paragraph 7.5.22, and shall demonstrate to the satisfaction of the Authority, if so required, that its choice under paragraph 7.5.22 is not intended to avoid or reduce regulatory capital which the Reporting Bank would otherwise be required to maintain.

~~7.5.23A A Reporting Bank shall include in its calculation of the credit risk-weighted exposure amount for equity exposures using IRBA(EQ), the credit risk-weighted exposure amount for its equity investments in funds held in the banking book by applying, in a consistent manner, the treatment in accordance with Sub-division 5 of this Division to such exposures.~~

~~[MAS Notice 637 (Amendment) 2016]~~

Simple Risk Weight Method

7.5.24 A Reporting Bank using the simple risk weight method to calculate the credit risk-weighted exposure amount of its equity exposures shall do so using the following formula:

$$\text{Credit RWE} = \sum [\text{RW x EAD}]$$

190 The PD/LGD method aims to capture risks arising from credit-related losses while the simple risk weight method and the IMM aims to capture both systematic and idiosyncratic risks arising from various factors that can affect the volatility in value of and total return on an equity exposure.

191 The Reporting Bank shall establish clear and documented policies and procedures for determining the approach to be used. Justifications for changes in approaches shall be clearly documented.

where -

(a) "Credit RWE" refers to the credit risk-weighted exposure amount for the equity exposure;

(b) "RW" is -

(i) 300% for equity exposures that are listed or traded on any regulated exchange; and

(ii) 400% for all other equity exposures; and

(c) "EAD" is the value of an equity exposure measured in accordance with Division 2 of this Part.

7.5.25 A Reporting Bank may offset short cash positions and derivative instruments held in the banking book against long positions in the same individual stocks if these instruments have been explicitly designated as hedges of specific equity holdings and they have residual maturities of at least one year. A Reporting Bank should conduct a review of the effectiveness of the hedge at least quarterly. A Reporting Bank shall treat other short positions as if they are long positions with the relevant risk weights in paragraph 7.5.24(b) applied to the value of each position as measured in accordance with Division 2 of this Part.

7.5.26 A Reporting Bank using the simple risk weight method shall recognise the effects of credit protection bought and credit protection sold in accordance with paragraphs 7.5.13 to 7.5.20 in Sub-division 3 of this Division, except that the risk weight applicable to an IRBA(EQ) exposure shall be 300% or 400%, as the case may be, instead of 100%.

<u>IMM</u>

7.5.27 A Reporting Bank which intends to adopt the IMM to calculate the credit risk-weighted exposure amount of its equity exposures shall apply in writing to the Authority for approval. The application shall contain the following:

(a) a written confirmation from the executive officer responsible for risk management in the Reporting Bank that the Reporting Bank has conducted an internal assessment and has ascertained that it fulfils the requirements for the adoption of the IMM; and

(b) a written confirmation from the executive officer responsible for internal audit of the Reporting Bank that -

(i) he agrees with the confirmation by the executive officer responsible for risk management pursuant to sub-paragraph (a) above; and

(ii) the Reporting Bank has conducted an internal audit and has ascertained that it has the systems, processes and controls necessary for adopting the IMM.

7.5.28 The Authority may grant approval for a Reporting Bank to adopt the IMM, subject to such conditions or restrictions as the Authority may impose.

7.5.29 If a Reporting Bank becomes aware after it has received approval to adopt the IMM that any of the confirmations made pursuant to paragraph 7.5.27 above are no longer valid or that it no longer complies with any of the conditions or restrictions imposed by the Authority pursuant to paragraph 7.5.28 above, it shall -

(a) inform the Authority as soon as practicable;

(b) assess the effect of the situation in terms of the risk posed to the Reporting Bank;

(c) prepare a plan to rectify the situation and inform the Authority of its plan as soon as practicable and undertake prompt corrective action in accordance with the plan; and

(d) in the interim, calculate the credit risk-weighted exposure amount of its equity exposures using the simple risk weight method.

7.5.30 A Reporting Bank shall comply with the following requirements and should meet the following guidelines for the purpose of calculating its credit risk-weighted exposure amount of its equity exposures under the IMM:

(a) the regulatory capital requirement shall be no less than the potential loss on the equity exposures of the Reporting Bank derived using internal VaR models assuming an instantaneous shock equivalent to the 99^{th} percentile, one-tailed confidence interval of the difference between quarterly returns and an appropriate risk-free rate computed over a long term sample period;

(b) the estimated losses used in deriving K pursuant to paragraph 7.5.36 should be robust to adverse market movements relevant to the long-term risk profile of the equity exposures of the Reporting Bank. The data used to represent return distributions should reflect the longest sample period for which data are available and meaningful in representing the risk profile of the Reporting Bank's equity exposures. The data used should be sufficient to provide conservative, statistically reliable and robust loss estimates that are not based purely on subjective or judgemental considerations. The Reporting Bank shall demonstrate to the satisfaction of the Authority that the shock employed provides a conservative estimate of potential losses over a relevant long-term market or business cycle;

(c) the Reporting Bank shall combine empirical analysis of available data with adjustments based on a variety of factors in order to attain model outputs that achieve appropriate realism and conservatism. In constructing VaR models estimating potential quarterly losses, the Reporting Bank may use quarterly data or convert shorter horizon period data to a quarterly equivalent using an analytically appropriate method supported by empirical evidence. Such adjustments shall be applied through a well-developed and well-documented thought process and analysis and in a conservative and consistent manner over time. Where only limited data are available, or where technical limitations are such that estimates from any single method will be of uncertain quality, the Reporting Bank shall add appropriate margins of conservatism;

(d) the internal model of the Reporting Bank shall capture adequately all material risks embodied in equity returns including both the general market risk and specific risk exposure of the institution's equity exposures. Internal models shall adequately explain historical price variation, capture both the magnitude and changes in the composition of potential concentrations, and be robust to adverse market environments. The population of risk exposures represented in the data used for estimation shall be closely matched to or at least comparable with those of the equity exposures of the Reporting Bank;

(e) where the Reporting Bank uses modelling techniques such as historical scenario analysis, the Reporting Bank shall demonstrate to the satisfaction of the Authority that the methodology and its output can be quantified in the form of the loss percentile specified under sub-paragraph (a);

(f) the Reporting Bank shall use an internal model that is appropriate for the risk profile and complexity of its equity exposures. A Reporting Bank with material holdings in equity exposures with values that are highly non-linear in nature shall employ an internal model designed to capture appropriately the risks associated with such instruments;

(g) the Reporting Bank shall ensure that the mapping of individual positions to proxies, market indices, and risk factors is plausible, intuitive, and conceptually sound. The Reporting Bank shall demonstrate to the satisfaction of the Authority with both theoretical and empirical evidence that its mapping techniques and processes are appropriate for its equity exposures. Where professional judgement is combined with quantitative techniques in estimating the return volatility of an equity exposure, the judgement made shall take into account the relevant and material information not considered by the other techniques utilised;

(h) where factor models are used, the Reporting Bank shall ensure that the factors are sufficient to capture the risks inherent in the equity portfolio. Risk factors should correspond to the appropriate equity market characteristics (for example, public, private, market capitalisation, industry sectors and sub-sectors, operational characteristics) in which the Reporting Bank holds significant positions. The Reporting Bank shall demonstrate to the satisfaction of the Authority through empirical analyses the appropriateness of those factors, including their ability to cover both general and specific risk;

(i) the Reporting Bank shall ensure that estimates of the return volatility of equity exposures incorporate relevant and material available data, information and methods. The number of risk exposures in the sample, and the data period used for quantification shall be sufficient to provide the Reporting Bank with confidence in the accuracy and robustness of its estimates. A Reporting Bank shall take appropriate measures to limit the potential of both sampling bias and survivorship bias in estimating return volatilities; and

(j) the Reporting Bank shall have a rigorous and comprehensive stress-testing programme in place. The Reporting Bank shall subject its internal model and estimation procedures, including volatility computations, to either hypothetical or historical scenarios that reflect worst-case losses given underlying positions in both public and private equities. At a minimum, the Reporting Bank shall employ stress tests to provide information about the effect of tail events beyond the level of confidence assumed in sub-paragraph (a).

7.5.31 A Reporting Bank using the IMM shall have established policies, procedures and controls to ensure the integrity of the model and modelling process. These policies, procedures and controls shall include -

(a) full integration of the internal model of the Reporting Bank with its overall management information systems and in the management of its equity portfolio, and its risk management infrastructure including use in -

(i) establishing investment hurdle rates and evaluating alternative investments;

(ii) measuring and assessing equity portfolio performance (including the risk-adjusted performance); and

(iii) allocating capital to equity holdings and evaluating overall capital adequacy as required under Pillar 2.

The Reporting Bank shall, if required by the Authority, demonstrate that internal model output plays an essential role in the investment management process;

(b) established management systems, procedures and control functions for ensuring the periodic and independent review of all elements of the internal modeling process, including approval of model revisions, vetting of model inputs, and review of model results, such as direct verification of risk computations. Proxy and mapping techniques and other critical model components should receive special attention. These reviews should assess the accuracy, completeness, and appropriateness of model inputs and results and focus on both finding and limiting potential errors associated with known weaknesses and identifying unknown model weaknesses. Such reviews may be conducted as part of internal or external audit programmes, by an independent risk management unit, or by an external third party;

(c) adequate systems and procedures for monitoring investment limits and the risk exposures of its equity portfolio;

(d) the units responsible for the design and application of the model shall be functionally independent from the units responsible for managing individual equity exposures; and

(e) parties responsible for any aspect of the modelling process shall be adequately qualified. The Reporting Bank shall ensure that senior management allocate sufficient skilled and competent resources to the modelling function.

7.5.32 A Reporting Bank using the IMM shall have a robust system in place to validate the accuracy and consistency of its internal models and modelling processes. The Reporting Bank shall demonstrate to the satisfaction of the Authority that the internal validation process enables it to assess the performance of its internal model and processes consistently and meaningfully. At a minimum, the Reporting Bank shall ensure that the internal validation process comprises the following:

(a) regular backtesting by comparing actual return performance, computed using realised and unrealised gains and losses, with modelled estimates. The Reporting Bank shall, if required by the Authority demonstrate that actual returns are within the expected range for the equity portfolio and individual equity exposures. Such comparisons shall make use of historical data over as long a period as possible. The Reporting Bank shall clearly document the methods and data used in such comparisons. This analysis and documentation shall be updated at least annually;

(b) well-articulated model review standards for situations where actual results deviate significantly from expectations and where the validity of an internal model is called into question. These standards shall take account of business cycles and similar systematic variability in equity returns; and

(c) the construction and maintenance of appropriate databases on the actual quarterly performance of the equity exposures of the Reporting Bank as well as the estimates derived using its internal models to facilitate model validation through backtesting on an ongoing basis. A Reporting Bank shall also backtest the volatility estimates used within their internal models and the appropriateness of the proxies used in the model. The Authority may require the Reporting Bank to scale its quarterly forecasts to a different time horizon, store performance data for this time horizon and perform backtests on this basis.

7.5.33 A Reporting Bank using the IMM shall also make use of other quantitative validation tools and comparisons with external data sources. The Reporting Bank shall base its validation on data that is appropriate to the equity portfolio, that is updated regularly and that covers a relevant observation period. The Reporting Bank shall base its internal assessments of the performance of its internal models on long data histories, covering a range of economic conditions and where possible, one or more complete business cycles.

7.5.34 A Reporting Bank using the IMM shall demonstrate to the satisfaction of the Authority that its quantitative validation methods and data are consistent through time. The Reporting Bank shall clearly and thoroughly document any changes in estimation methods and data (both data sources and periods covered).

7.5.35 A Reporting Bank using the IMM shall ensure that all critical elements of an internal model and the modelling process, including the model design and operational details, are fully and adequately documented. The Reporting Bank shall ensure that the documentation demonstrates its compliance with the minimum quantitative and qualitative standards. The Reporting Bank should also address topics such as the application of the model to different segments of the portfolio, estimation methodologies, responsibilities of parties involved in the modelling, and the model approval and model review processes in its documentation. In particular, the Reporting Bank shall ensure that the documentation addresses the following:

(a) the rationale for its choice of internal modelling methodology and analyses demonstrating that the model and modeling procedures are likely to result in estimates that meaningfully identify the risk of its equity exposures. Internal models and procedures shall be periodically reviewed to determine whether they remain fully applicable to the current portfolio and to external conditions. In addition, the Reporting Bank shall document a history of major changes in the model over time and changes made to the modelling process subsequent to the last supervisory review. If changes have been made in response to the internal review standards of the Reporting Bank, it shall document these changes and ensure that they are consistent with its internal model review standards;

(b) in relation to its internal models -

   (i) provide a detailed outline of the theory, assumptions and mathematical and empirical basis of the parameters, variables, and data sources used to estimate the model;

   (ii) establish a rigorous statistical process (including out-of-time and out-of-sample performance tests) for validating the selection of explanatory variables; and

   (iii) indicate circumstances under which the model does not work effectively; and

(c) where proxies and mapping are employed, analyses demonstrating that all chosen proxies and mappings are sufficiently representative of the risk of the equity exposures to which they correspond[192]. The documentation

[192] A Reporting Bank shall demonstrate to the satisfaction of the Authority that the proxies and mappings employed -
(a) are adequately comparable to the underlying equity exposure or portfolio;
(b) are derived using historical economic and market conditions that are relevant and material to the underlying equity exposures or, where not, that an appropriate adjustment has been made; and
(c) are robust estimates of the potential risk of the underlying equity exposure.

shall show, for instance, the relevant and material factors (e.g. business lines, balance sheet characteristics, geographic location, company age, industry sector and sub-sector, operating characteristics) used in mapping individual equity exposures into proxies.

7.5.36 A Reporting Bank using the IMM to calculate the credit risk-weighted exposure amount of its equity exposures shall do so using the following formula:

$$\text{Credit Risk-Weighted Exposure Amount} = \sum [K \times 12.5]$$

where "K" represents the potential loss on its equity exposures as derived using internal VaR models subject to the 99th percentile, one-tailed confidence interval of the difference between quarterly returns and an appropriate risk-free rate computed over a long-term sample period.

7.5.37 At the individual exposure level, the credit risk-weighted exposure amount of an equity exposure for a Reporting Bank using the IMM shall be the higher of the credit risk-weighted exposure amount calculated under the IMM and the credit risk-weighted exposure amount that would have been calculated under the simple risk weight method using a 200% risk weight for equity exposures that meet the conditions in paragraph 7.5.24(b)(i) and 300% risk weight for all other equity exposures.

7.5.38 A Reporting Bank using the IMM which has bought eligible credit protection for an IRBA(EQ) exposure may recognise the effects of CRM of the eligible credit protection as follows:

(a) break down the IRBA(EQ) exposure into -

(i) a protected portion with E equal to the notional amount of the eligible credit protection[193]; and

(ii) an unprotected portion with E equal to the E of the IRBA(EQ) exposure less the notional amount of the eligible credit protection; and

(b) for the purposes of calculating the credit risk-weighted exposure amount pursuant to Sub-division 5 of Division 1 of this Part, use -

(i) for the protected portion, the risk weight that is applicable to the eligible protection provider[193A]; and

(ii) for the unprotected portion, the formula set out in paragraphs 7.5.36 and 7.5.37 above.

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[193] A Reporting Bank shall treat the protected portion of an IRBA(EQ) exposure which has a currency mismatch or a maturity mismatch in accordance with Annex 7F of this Part.

[193A] Where a Reporting Bank has bought from an eligible protection provider a credit default swap which is an eligible credit protection and cleared through a CCP, the Reporting Bank may apply a risk weight of 2% if the credit default swap constitutes a CCP trade exposure in accordance with paragraph 2.1 or 2.5 of Annex 7AJ, or 4% if the credit default swap constitutes a CCP trade exposure in accordance with paragraph 2.6 of Annex 7AJ.

[MAS Notice 637 (Amendment No. 2) 2014]

[MAS Notice 637 (Amendment No. 2) 2014]

7.5.39 Notwithstanding paragraph 7.5.38(b), a Reporting Bank shall apply a 1250% risk weight to any materiality threshold below which no payment will be made by the protection provider in the event of loss on an IRBA(EQ) exposure as such threshold is equivalent to a retained first loss position.

7.5.40 A Reporting Bank shall apply the relevant provisions in Annex 7H of this Part for the purpose of determining the protected portion in cases of proportional cover, principal-only cover, partially eligible credit derivatives, tranched cover and basket credit derivatives.

7.5.41 A Reporting Bank which has sold unfunded credit protection acquires exposure to the reference asset. If such exposure is an IRBA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the exposure pursuant to paragraphs 7.5.36 and 7.5.37 above.

7.5.42 If the unfunded credit protection has more than one reference asset, the credit risk-weighted exposure amount for the credit protection is the sum of the credit risk-weighted exposure amounts in respect of each reference asset calculated pursuant to paragraphs 7.5.36 and 7.5.37 above that are applicable to the obligors of the respective reference assets.

7.5.43 A Reporting Bank which has sold funded credit protection acquires exposure to both the reference asset and the protection buyer. Where the exposure to the reference asset is an IRBA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the credit protection as the sum of -

(a) the credit risk-weighted exposure amount for the exposure to the reference asset calculated in accordance with paragraphs 7.5.36 and 7.5.37 above; and

(b) the credit risk-weighted exposure amount for the exposure to the protection buyer, using -

(i) E = the carrying amount of the collateral placed with the protection buyer; and

(ii) the risk weight that is applicable to the protection buyer.

[MAS Notice 637 (Amendment) 2014]

7.5.44 The capital requirement for the credit protection calculated in accordance with paragraphs 7.5.42 and 7.5.43 shall not exceed the notional amount of the credit protection, i.e. the maximum possible payout under the credit protection.

7.5.45 Where a Reporting Bank has provided credit protection (whether funded or unfunded) through a proportionate structure, i.e. where the maximum possible payout in respect of any particular reference asset is capped at a pre-determined proportion of the notional amount of the credit protection, the Reporting Bank shall divide the exposure into individual sub-exposures equal to the proportionate amount of credit protection in respect of each reference asset for the purposes of calculating the credit risk-weighted exposure amount applicable to the credit protection sold.

PD/LGD Method

7.5.46 A Reporting Bank shall not use the PD/LGD method to calculate the credit risk-weighted exposure amount of its equity exposures (including equity exposures to companies that are included in the IRBA retail asset class) unless it has obtained approval from the Authority to use the IRBA for the corporate asset class. A Reporting Bank using the PD/LGD method shall comply with the requirements and should meet the guidelines in Annex 7AA and Annex 7AB of this Part that are applicable to the F-IRBA[194] for the wholesale asset class in respect of those equity exposures for which it is using the PD/LGD method.

7.5.47 A Reporting Bank using the PD/LGD method to calculate the credit risk-weighted exposure amount of its equity exposures shall do so using the following formula:

$$\text{Credit Risk-Weighted Exposure Amount} = \sum [K_{eq} \times 12.5 \times EAD]$$

$$\text{Correlation (R)} = 0.12 \times (1 - EXP(-50 \times PD)) / (1 - EXP(-50)) + 0.24 \times [1 - (1 - EXP(-50 \times PD))/(1 - EXP(-50))]$$

$$\text{Maturity adjustment (b)} = (0.11852 - 0.05478 \times \ln(PD))^{\wedge}2$$

$$\text{Capital requirement } (K_{eq}) = [LGD \times N[(1 - R)^{\wedge}{-0.5} \times G(PD) + (R / (1 - R))^{\wedge}0.5 \times G(0.999)] - PD \times LGD] \times (1 - 1.5 \times b)^{\wedge}{-1} \times (1 + (M - 2.5) \times b)$$

where -

(a) LGD = 90%;

(b) M = 5;

(c) "K_{eq}" represents the capital requirement for an equity exposure calculated in accordance with the formula above; and

(d) "EAD" is the value of an equity exposure measured in accordance with Division 2 of this Part.

7.5.47A For equity exposures to financial institutions that meet the criteria set out in paragraphs 7.4.21A and 7.4.22A, a Reporting Bank using the PD/LGD method to calculate the credit risk-weighted exposure amount of its equity exposures shall do so by using the formula in paragraph 7.5.47, but substituting the formula for calculating Correlation (R) in paragraph 7.5.47 with the following formula:

$$\text{Correlation (R\_FI)} = 1.25 \times [0.12 \times (1 - EXP(-50 \times PD)) / (1 - EXP(-50)) + 0.24 \times [1 - (1 - EXP(-50 \times PD))/(1 - EXP(-50))]]$$

194 There is no advanced approach for equity exposures.

7.5.48 Where a Reporting Bank does not hold debt of the corporation in whose equity it has invested, and does not have sufficient information on the position of that corporation to be able to use the applicable definition of default in Annex 7X of this Part, the Reporting Bank shall apply a 1.5 scaling factor to the calculation of K_{eq}, given the PD set by the Reporting Bank.

7.5.49 At the individual exposure level, the Reporting Bank shall ensure that the sum of the credit risk-weighted exposure amount calculated in accordance with paragraphs 7.5.47, 7.5.47A and 7.5.48 above and the EL amount[195] multiplied by 12.5 is -

(a) no less than the credit risk-weighted exposure amount that would have been calculated under the simple risk weight method using the minimum risk weights in paragraphs 7.5.50 and 7.5.51 below; and

(b) no more than the credit risk-weighted exposure amount that would have been calculated under the simple risk weight method using a risk weight of 1250%.

7.5.50 A Reporting Bank shall apply a minimum risk weight of 100% to -

(a) any equity exposure that meets the conditions in paragraph 7.5.24(b)(i) and where the investment is part of a long term customer-relationship, any capital gains are not expected to be realised in the short term and there is no anticipation of (above trend) capital gains in the long term. In general, it is expected that the Reporting Bank will hold the equity over the long term (at least five years); or

(b) any other equity exposure where the returns on the investment are based on regular and periodic cash flows not derived from capital gains and there is no expectation of future (above trend) capital gain or of realising any existing gain.

7.5.51 For all other equity exposures, including net short positions, a Reporting Bank shall apply a minimum risk weight of 200% for any equity exposure that meets the conditions in paragraph 7.5.24(b)(i) and a minimum risk weight of 300% for all other equity exposures.

7.5.52 As an alternative to calculating the credit risk-weighted exposure amount of an equity exposure, a Reporting Bank using the PD/LGD method may apply a 1250% risk weight to an equity exposure measured in accordance with Division 2 of this Part, provided the value of the equity exposure is equal to or exceeds the EL amount multiplied by 12.5.

7.5.53 A Reporting Bank which uses the PD/LGD method for its equity exposures shall apply a 1250% risk weight to the EL amount of those equity exposures. If the minimum risk weight set out in paragraphs 7.5.50 and 7.5.51 or the maximum risk weight set out in paragraph 7.5.49(b) is applied, then the EL amount of that equity exposure shall be zero.

[195] The EL amount is calculated using the following formula: PD x LGD x EAD.

7.5.54 A Reporting Bank using the PD/LGD method which has bought eligible credit protection for an IRBA(EQ) exposure may recognise the effects of CRM of the eligible credit protection as follows:

(a) break down the IRBA(EQ) exposure into -

(i) a protected portion with EAD equal to the notional amount of the eligible credit protection[195AA]; and

(ii) an unprotected portion with EAD equal to the EAD of the IRBA(EQ) exposure less the notional amount of the eligible credit protection; and

(b) calculate the credit risk-weighted exposure amount pursuant to Sub-division 4 of Division 1 of this Part as follows:

(i) for the protected portion–

(A) use the following:

(I) the formula for calculating K that is applicable to the eligible protection provider;

(II) the PD associated with the obligor grade to which the eligible protection provider is assigned or some grade between the obligor grades to which the underlying obligor and the eligible protection provider are assigned if the Reporting Bank considers appropriate, that is estimated in accordance with Annex 7AB of this Part; and

(III) an LGD of 90%; or

(B) in the case where the Reporting Bank has bought from an eligible protection provider a credit default swap which is an eligible credit protection and cleared through a CCP, apply a risk weight of 2% if the credit default swap constitutes a CCP trade exposure in accordance with paragraphs 2.1 or 2.5 of Annex 7AJ, or 4% if the credit default swap constitutes a CCP trade exposure in accordance with paragraph 2.6 of Annex 7AJ; and

[MAS Notice 637 (Amendment No. 2) 2014]

(ii) for the unprotected portion, use -

(A) the formula for calculating K in paragraph 7.5.47 above; and

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[195AA] A Reporting Bank shall treat the protected portion of an IRBA(EQ) exposure which has a currency mismatch or a maturity mismatch in accordance with Annex 7F of this Part.

[MAS Notice 637 (Amendment) 2012]

(B) the PD associated with the obligor grade to which the underlying obligor is assigned and estimated in accordance with Annex 7AB of this Part.

7.5.55 Notwithstanding paragraph 7.5.54(b), a Reporting Bank shall apply a 1250% risk weight to any materiality threshold below which no payment will be made by the protection provider in the event of loss on an IRBA(EQ) exposure as such threshold is equivalent to a retained first loss position.

7.5.56 A Reporting Bank shall apply the relevant provisions in Annex 7H of this Part for the purpose of determining the protected portion in cases of proportional cover, principal-only cover, partially eligible credit derivatives, tranched cover and basket credit derivatives.

7.5.57 A Reporting Bank which has sold unfunded credit protection acquires exposure to the reference asset. If such exposure is an IRBA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the exposure pursuant to paragraphs 7.5.47, 7.5.47A, 7.5.48, 7.5.49, 7.5.52 and 7.5.53 above.

7.5.58 If the unfunded credit protection has more than one reference asset, the credit risk-weighted exposure amount for the credit protection is the sum of the credit risk-weighted exposure amounts in respect of each reference asset that are applicable to the obligors of the respective reference assets calculated pursuant to paragraphs 7.5.47, 7.5.47A, 7.5.48, 7.5.49, 7.5.52 and 7.5.53.

7.5.59 A Reporting Bank which has sold funded credit protection acquires exposure to both the reference asset and the protection buyer. If the reference asset is an IRBA(EQ) exposure, the Reporting Bank shall calculate the credit risk-weighted exposure amount for the credit protection as the sum of -

(a) the credit risk-weighted exposure amount for the exposure to the reference asset calculated in accordance with paragraph 7.5.47, 7.5.47A, 7.5.48, 7.5.49, 7.5.52 and 7.5.53 above; and

(b) the credit risk-weighted exposure amount for the exposure to the protection buyer, using -

(i) EAD = the carrying amount of the collateral placed with the protection buyer; and

(ii) the formula for calculating K that is applicable to the protection buyer,

subject to the condition that the sum of the credit risk-weighted exposure amounts shall not exceed the credit risk-weighted exposure amount calculated applying a risk weight of 1250% to the notional amount of the credit protection.

[MAS Notice 637 (Amendment) 2014]

7.5.60 Where a Reporting Bank has provided credit protection (whether funded or unfunded) through a proportionate structure, i.e. where the maximum possible payout in respect of any particular reference asset is capped at a pre-determined proportion of the notional amount of the credit protection, the Reporting Bank shall divide the exposure into individual sub-exposures equal to the proportionate amount of credit protection in respect of each reference asset for the purposes of calculating the credit risk-weighted exposure amount applicable to the credit protection sold.

Amendments to Sub-division 5

Sub-division 5: Equity Investments in Funds

7.5.61 A Reporting Bank shall calculate the credit risk-weighted exposure amount of its equity investments in funds held in the banking book using the methods set out in paragraphs 7.5.62 to 7.5.70, which vary in their risk sensitivity and conservatism, and in accordance with the following hierarchy:

(a) the look-through approach ("LTA");

(b) the mandate-based approach ("MBA"); or

(c) the fall-back approach ("FBA").

7.5.61A For the purpose of this Sub-division, "funds" includes collective investment schemes and closed-end funds as defined in the Securities and Futures Act (Chapter 289), except for real estate investment trusts as defined under section 295A of the Securities and Futures Act (Chapter 289) and business trusts as defined under the Business Trust Act (Chapter 31A). A Reporting Bank's holdings of units in real estate investment trusts as defined under section 295A of the Securities and Futures Act (Chapter 289) and business trusts as defined under the Business Trust Act (Chapter 31A) shall be treated as holdings in a single equity security for the purpose of risk-weighting.

LTA

7.5.62 A Reporting Bank shall use the LTA to calculate the credit risk-weighted exposure amount of its equity investments in funds held in the banking book if the following conditions are satisfied:

(a) the Reporting Bank is provided sufficient and frequent information regarding the underlying exposures of the fund[195AB]; and

(b) the Reporting Bank has ensured that such information is verified by an independent third party, such as the depository or custodian bank, or where applicable, the management company.

7.5.63 A Reporting Bank using the LTA shall risk-weight all underlying exposures of a fund as if the exposures were directly held by the Reporting Bank in accordance with Divisions 2, 3, 4, 5 and 6 of this Part, whichever is applicable. This includes any underlying exposure arising from the fund's derivative transactions, where the underlying exposure

[195AB] The Reporting Bank shall ensure that the frequency of financial reporting of the fund is the same as, or more frequent than the frequency of financial reporting of the Reporting Bank and the granularity of the financial information of the fund is sufficient for the Reporting Bank to calculate the corresponding risk weights. For the purposes of this paragraph, an external audit of the information is not required.

is assigned a risk weight in accordance with Divisions 3, 4, 5 and 6 of this Part and Part VIII, whichever is applicable, and the associated pre-settlement counterparty exposures. For the exposure arising from a fund's derivative transactions, the Reporting Bank is not required to calculate the CVA risk capital requirements as set out in Annex 7AI. The Reporting Bank shall multiply the pre-settlement counterparty exposure amounts arising from a fund's derivative transactions by a factor of 1.5 before applying the risk weight assigned to the counterparty in accordance with Divisions 3, 4, 5 and 6 of this Part, except where the Reporting Bank is not required to calculate the CVA risk capital requirements as set out in Section 1 of Annex 7AI. An example of the calculation of the credit risk-weighted exposure amount of its equity investments in funds held in the banking book using the LTA is set out in Section 1 of Annex 7AK.

7.5.64 Where a Reporting Bank uses the SA(CR), SA(EQ) or SA(SE) to calculate the credit risk-weighted exposure amount for the underlying exposures of funds if the exposures were directly held by the Reporting Bank, the Reporting Bank using the LTA shall calculate the credit risk-weighted exposure amount of its equity investments in funds held in the banking book using the SA(CR), SA(EQ) or SA(SE) in accordance with Divisions 2, 3, 5 and 6 of this Part, whichever is applicable.

7.5.65 Where a Reporting Bank uses the IRBA, IRBA(EQ) or IRBA(SE) to calculate the credit risk-weighted exposure amount for the underlying exposures of funds if the exposures were directly held by the Reporting Bank, the Reporting Bank using the LTA shall:

(a) calculate the IRBA parameters i.e. PD and, where applicable, LGD and EAD, associated with the underlying exposures of funds and shall calculate the credit risk-weighted exposure amount of its equity investments in funds held in the banking book using the IRBA, IRBA(EQ), or IRBA(SE) in accordance with Divisions 2, 4, 5 and 6 of this Part[195AC], whichever is applicable;

(b) where the Reporting Bank is unable to calculate the IRBA parameters i.e. PD and, where applicable, LGD and EAD, associated with the underlying exposures of funds (e.g. where the Reporting Bank is unable to assign the necessary IRBA parameters to the underlying exposures in a manner consistent with its own underwriting criteria) -

(i) calculate the credit risk-weighted exposure amount of such underlying exposures in its equity investments in funds held in the banking book using the SA(CR) in accordance with Divisions 2 and 3 of this Part;

(ii) for underlying equity exposures of funds, calculate the credit risk-weighted exposure amount for such exposures using the simple risk weight method set out in paragraphs 7.5.24 to 7.5.26; and

[195AC] A Reporting Bank adopting the IRBA may, with the approval of the Authority, use the SA(CR), SA(EQ) or SA(SE) to calculate the credit risk-weighted exposure amounts for certain exposures in accordance with paragraphs 4.1 to 4.8 of Annex 7AC. For such underlying exposures in the fund, the Reporting Bank shall calculate the credit risk-weighted exposure amount using the SA(CR), SA(EQ) or SA(EQ) in accordance with Divisions 2, 3, 5 and 6 of this Part, whichever is applicable.

(i) for underlying securitisation exposures of funds, calculate the credit risk-weighted exposure amount for such exposures in accordance with the RBM as described in Annex 7AE.

7.5.66 A Reporting Bank may rely on third party calculations for determining the risk weights to be applied to its equity investments in funds held in the banking book, if it does not have adequate data or information to perform its own calculations, subject to the following conditions:

(a) the Reporting Bank shall ensure that the third party applies the risk weights under the SA(CR), SA(EQ) or SA(SE) in accordance with Divisions 3, 5 and 6 of this Part, whichever is applicable, to the underlying exposures of the funds;

(b) where the Reporting Bank is using the IRBA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures, the Reporting Bank shall ensure that the third party applies the credit risk-weighted exposure amount calculated in accordance with the simple risk weight method set out in paragraphs 7.5.24 to 7.5.26 to the underlying equity exposures of the funds;

(c) where the Reporting Bank is using the IRBA(SE) to calculate the credit risk-weighted exposure amounts for its securitisation exposures, the Reporting Bank shall ensure that the third party applies the credit risk-weighted exposure amount calculated in accordance with the RBM as set out in Division 6 of this Part and Annex 7AE to the underlying securitisation exposures of the funds; and

(d) the Reporting Bank shall ensure that, in all cases, the applicable risk weights applied by the third party are 1.2 times higher than the risk weights that would have been applicable if the exposures of the funds were held directly by the Reporting Bank.[195AD]

<u>MBA</u>

7.5.67 Where a Reporting Bank does not satisfy the conditions under paragraph 7.5.62 for the use of the LTA, the Reporting Bank may use the MBA to calculate the credit risk-weighted exposure amount of its equity investments in funds held in the banking book if it is able to determine the credit risk-weighted exposure amount in the manner set out in paragraph 7.5.68 below.

7.5.68 Under the MBA, the Reporting Bank shall determine the credit risk-weighted exposure amount for its equity investments in the fund by using the information contained in a fund's mandate, in the national regulations[195AE] governing such investment funds or in other disclosures of the fund.

[195AD] For instance, where the LTA is performed by a third party, the applicable risk weight applied by the third party to an exposure that is subject to a 20% risk weight under the SA(CR) if the exposures were held directly by the Reporting Bank, is 24% (i.e. 1.2*20%).

[195AE] For the purpose of this Sub-Division, "national regulations" refers to laws, regulations, rulings and treaties of a country.

7.5.69 A Reporting Bank using the MBA[195AF] shall calculate the credit risk-weighted exposure amount for its equity investment in a fund as the sum of –

(a) the credit risk-weighted exposure amount for the balance sheet exposures of the fund using the SA(CR), SA(EQ), or SA(SE) in accordance with Divisions 2, 3, 5 and 6 of this Part, whichever is applicable. The Reporting Bank shall assume that the fund first invests, to the maximum extent allowed under the fund's mandate, in the asset class attracting the highest capital requirement, and then continues making investments in descending order until the maximum total investment level is reached. If more than one risk weight can be applied to a given exposure, the Reporting Bank shall apply the maximum risk weight[195AG];

(b) the credit risk-weighted exposure amount for the exposures arising from the fund's derivative transactions or off-balance sheet exposures of the fund, calculated by applying the risk weights associated with the underlying of the fund's derivative transaction positions or the off-balance sheet exposures to their notional amounts, where the underlying risk of the fund's derivative transaction or off-balance sheet item receives a risk-weighting treatment in accordance with Divisions 3, 4, 5 and 6 of this Part and Part VIII[195AH], whichever is applicable;

(c) the credit risk-weighted exposure amount for the pre-settlement counterparty exposures associated with the fund's derivative transactions calculated in accordance with the SA-CCR set out in Annex 7O and by applying the risk weights under SA(CR) assigned for the counterparty in accordance with Division 3 of this Part. Where the replacement cost is unknown, the Reporting Bank shall calculate the pre-settlement counterparty exposure amount in a conservative manner by using the notional amount as a proxy for the replacement cost. Where the supervisory factor for the calculation of the amount for potential future exposure is unknown, the Reporting Bank shall apply the maximum supervisory factor set out in Annex 7O.[195AI,195AJ] The Reporting Bank shall apply the risk weight under SA(CR) assigned for the counterparty to the sum of the replacement cost and the amount for potential future exposure. For the underlying exposure arising from a fund's derivative transactions, the Reporting Bank is not required to calculate the CVA risk capital requirements as set out in Annex 7AI. The Reporting Bank shall multiply

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[195AF] To ensure that all underlying risks, including counterparty credit risk, are taken into account, and that the credit risk-weighted exposure amount calculated for the Reporting Bank's equity investments in funds held in the banking book using the MBA is not less than the credit risk-weighted exposure amount calculated using the LTA, the credit risk-weighted exposure amount for its equity investment in a fund calculated using the MBA is the sum of items in paragraphs 7.5.69 (a) to (e).

[195AG] For instance, a Reporting Bank shall apply a risk weight of 150% for underlying exposures of funds in corporate bonds, in the case where there are no ratings restrictions in the fund's mandate.

[195AH] The Reporting Bank shall use the full notional amount of the derivative position if the underlying is unknown. The Reporting Bank shall use the maximum notional amount of derivatives allowed under the mandate if the notional amount of the derivative position is unknown.

[195AI] This corresponds to the highest supervisory factor specified in Table 7O-1 of Annex 7O.

[195AJ] If both the replacement cost and add-on components are unknown, the Reporting Bank shall apply a total multiplication factor of 1.15 to the notional amount for the calculation of the pre-settlement counterparty exposures associated with the fund's derivative transactions.

the pre-settlement counterparty exposure amounts arising from a fund's derivative transactions by a factor of 1.5 before applying the risk weight assigned to the counterparty in accordance with Divisions 3, 4, 5 and 6 of this Part, whichever is applicable, except where the Reporting Bank is not required to calculate the CVA risk capital requirements as set out in Section 1 of Annex 7AI;

(d) where the Reporting Bank is using the IRBA(EQ) to calculate the credit risk-weighted exposure amount for its equity exposures, the Reporting Bank shall calculate the credit-risk weighted exposure amount by applying the simple risk weight method set out in paragraphs 7.5.24 to 7.5.26 to the underlying equity exposures of the fund; and

(e) where the Reporting Bank is using the IRBA(SE) to calculate the credit risk-weighted exposure amounts for its securitisation exposures, the Reporting Bank shall calculate the credit risk-weighted exposure amount applying the RBM as set out in Division 6 of this Part and Annex 7AE to the underlying securitisation exposures of the fund.

An example of the calculation of the credit risk-weighted exposure amount of its equity investments in funds held in the banking book using the MBA is set out in Section 2 of Annex 7AK.

FBA

7.5.70 Where a Reporting Bank is unable to use the LTA or MBA, the Reporting Bank shall use the FBA. Under the FBA, the Reporting Bank shall apply a 1250% risk weight to the amount of its equity investments in funds held in the banking book.

7.5.70A For the purpose of paragraph 7.5.70, "the amount of its equity investments in funds held in the banking book" refers to the E or EAD for the Reporting Bank's equity investments in funds calculated in accordance with Division 2 of this Part.

Treatment of funds that invest in other funds

7.5.71 Where a Reporting Bank has an investment in a fund (for example, Fund A), which it has identified using either the LTA or MBA, and that fund (that is, Fund A) itself has an investment in another fund (for example, Fund B), the Reporting Bank may apply the LTA, MBA or FBA to determine the credit risk-weighted exposure amount for the investment of the first fund in the other fund (that is, Fund A's investment in Fund B). For all subsequent layers (for example, Fund B's investments in Fund C and so forth), the Reporting Bank shall use the LTA to determine the credit risk-weighted exposure amount for the investment in the other funds (for example, Fund C), subject to the condition that the Reporting Bank also used the LTA to determine the credit risk-weighted exposure amount for its equity investment in the fund at the previous layer (for example, Fund B). In all other cases, the Reporting Bank shall use the FBA.

Partial use of an approach

7.5.72 A Reporting Bank may use any combination of the three methods i.e. LTA, MBA or FBA, when determining the credit risk-weighted exposure amount for an equity investment in an individual fund, provided that the conditions set out in paragraphs 7.5.61 to 7.5.71 are satisfied.

Leverage adjustment

7.5.73 Where the Reporting Bank uses the LTA or MBA to calculate the credit risk-weighted exposure amount of its equity investments in funds, the Reporting Bank shall apply a leverage adjustment to the average risk weight of each fund, subject to a cap of 1250%, using the following formula[195AK]:

Credit $RWE_{investment}$ = ~~max~~min[Avg RW_{fund} * Lvg, 1250%] * Equity Investment

where –

(a) "Credit $RWE_{investment}$" refers to the credit risk-weighted exposure amount for the equity investment in the fund;

(b) "Avg RW_{fund}" refers to the average risk weight of the fund, which is calculated by dividing the total credit risk-weighted exposure amount of the fund by the total assets of the fund;

(c) "Lvg" refers to the leverage of the fund, which is defined as the ratio of total assets to total equity, except in the case of a Reporting Bank using the MBA, where leverage will be taken into account by using the maximum financial leverage permitted in the fund's mandate or in the national regulation governing the fund; and

(d) "Equity Investment" ~~–refers to the value of the exposure amount of the equity investment in the fund under the LTA or MBA as determined in accordance with Sub-division 2 of Division 2 of this Part.~~

(i) in the case of LTA, refers to the proportion of shares held by the Reporting Bank in the fund, multiplied by the total equity of the fund (as reported in the balance sheet of the fund); or

(ii) in the case of MBA, refers to the E or EAD for the Reporting Bank's equity investment in funds calculated in accordance with Division 2 of this Part.

[MAS Notice 637 (Amendment) 2016]

Division 6: Securitisation

Amendments to Sub-division 4

[195AK] The effect of the leverage adjustments depends on the underlying riskiness of the portfolio (i.e. the average risk weight of the fund). The formula can therefore be re-written as: $RWA_{investment}$ = RWE_{fund} * percentage of shares. An example of the calculation of the leverage adjustment is set out in Section 3 of Annex 7AK.

[Amendments to Sub-division 4 are compared with the version of MAS Notice 637 as last revised on 29 November 2017]

Sub-division 4: Internal Ratings-Based Approach (SEC-IRBA)

7.6.18 A Reporting Bank using the SEC-IRBA to calculate capital requirements for a securitisation exposure to an IRB pool shall calculate the following inputs: K_{IRB}, tranche attachment point and detachment point, effective number of exposures and loss-given-default of the pool, in accordance with paragraphs 7.6.19 to 7.6.39.

$\underline{K_{IRB}}$

7.6.19 A Reporting Bank shall calculate K_{IRB} as the ratio of (a) the IRB capital requirement for the underlying exposures in the pool as if the exposures were held directly by the Reporting Bank, to (b) the exposure amount of the underlying pool, expressed as a decimal between zero and one. The IRB capital requirement includes the unexpected loss and expected loss of underlying exposures, including defaulted exposures, and where applicable, dilution risk in accordance with in paragraph 7.6.29. A Reporting Bank shall apply the scaling factor of 1.06 referenced in paragraph 7.1.1(b) to the unexpected loss portion of the calculation of K_{IRB}.

7.6.20 A Reporting Bank shall reflect the effects of CRM that is applied to the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures, in its calculation of K_{IRB} in paragraph 7.6.19.

7.6.21 For structures involving an SPE, a Reporting Bank shall treat all of the SPE's exposures related to the securitisation as exposures in the pool[195C]. Such exposures related to the securitisation include reserve accounts, such as cash collateral accounts, and claims against counterparties resulting from interest swaps or currency swaps[195D].

7.6.22 In the case of swaps other than credit derivatives, the Reporting Bank shall include, in the computation of the IRB capital requirement of the underlying pool used in calculating K_{IRB}, the positive current market value multiplied by the risk weight of the swap provider and by 8%. The Reporting Bank shall not include such swaps in the computation of the exposure amount of the underlying pool used in calculating K_{IRB}.

7.6.23 Notwithstanding paragraph 7.6.21, the Reporting Bank may exclude the SPE's exposures from the pool for capital calculation purposes if the Reporting Bank can demonstrate to the Authority that the risk associated with the exposures does not affect its particular securitisation exposure or that the risk is immaterial, for example, because it has been mitigated.

7.6.24 For funded synthetic securitisations, a Reporting Bank shall include in the calculation of K_{IRB} any proceeds of the issuances of credit-linked notes or any other funded obligations of the SPE which serve as collateral for the repayment of the securitisation exposure if -

(a) the Reporting Bank cannot demonstrate to the Authority that these are immaterial; and

(b) the default risk of such collateral is subject to the tranched loss allocation in the securitisation transaction.

7.6.25 The Reporting Bank shall include, in the computation of the IRB capital requirement of the underlying pool used in calculating K_{IRB}, the exposure amount of the collateral multiplied by its risk weight and 8%. The Reporting Bank shall not include such collateral in the computation of the exposure amount of the underlying pool used in calculating K_{IRB}.

7.6.26 A Reporting Bank shall meet all minimum requirements for the use of IRBA to calculate K_{IRB} for a securitisation exposure. Notwithstanding, a Reporting Bank may, subject to the Authority's approval, use the top-down approach as set out in Sub-division 9 of Division 4 of this Part, subject to the modifications set out in paragraph 7.6.27 to calculate K_{IRB} for a securitisation exposure if –

(a) for non-retail assets, it would be an undue burden on the Reporting Bank to assess the default risk of individual obligors; and

(b) for retail assets, the Reporting Bank is unable to primarily rely on internal data.

7.6.27 A Reporting Bank when applying the requirements in Sub-division 9 of Division 4 of this Part and Annex 7W to securitisation exposures using a top-down approach shall apply the requirements with the following modifications –

(a) "eligible purchased receivables" in Sub-division 9 of Division 4 of this Part and Annex 7W, is read as referring to securitised exposures;

(b) the requirement in paragraph 7.4.46(c) for the Reporting Bank to have a claim on all proceeds from the pool of receivables or a pro-rata interest in the proceeds does not apply. Instead, the Reporting Bank shall have a claim on all proceeds from the pool of securitised exposures that have been allocated to the Reporting Bank's exposure in the securitisation in accordance with the terms of the related securitisation documentation; and

(c) if the Reporting Bank cannot itself meet the requirements in paragraphs 2.2 to 2.9 of Annex 7W, it shall instead ensure that it meets these requirements through a party to the securitisation acting for and in the interest of the investors in the securitisation, in accordance with the terms of the related securitisation documents. In particular, the Reporting Bank shall ensure that requirements for effective control and ownership are met for all proceeds from the pool of securitised exposures that have been allocated to the Reporting Bank's exposure to the securitisation. The

[195C] The Reporting Bank may exclude the SPE's exposures from the pool for capital calculation purposes if the Reporting Bank can demonstrate to the Authority that the risk associated with the exposures does not affect its particular securitisation exposure or that the risk is immaterial, for example, because it has been mitigated.

[195D] In particular, in the case of swaps other than credit derivatives, the IRB capital requirement of the underlying pool used in calculating K_{IRB} shall include the positive current market value multiplied by the risk weight of the swap provider multiplied by 8%. In contrast, the sum of the exposure amounts of underlying exposures shall not take into account such a swap, as such a swap would not provide a credit enhancement to any tranche.

Reporting Bank shall ensure the securitisation itself (rather than the Reporting Bank) has the relevant policies, procedures, and where applicable, information systems referred to in paragraph 2.7(a) of Annex 7W.

7.6.28 Where a Reporting Bank has set aside an ~~individual impairment~~specific allowance or has a non-refundable purchase price discount on an exposure in the underlying pool, the Reporting Bank shall calculate K_{IRB} using the gross amount of the exposure without taking into account the ~~individual impairment~~specific allowance or the non-refundable purchase price discount.

7.6.29 A Reporting Bank shall recognise dilution risk[195E] in a securitisation in the calculation of K_{IRB} if the Reporting Bank is unable to demonstrate to the Authority that such dilution risk is immaterial.

7.6.30 Where default risk and dilution risk are treated in an aggregate manner (for example, where an identical reserve or overcollateralisation is available to cover losses for both risks), the Reporting Bank shall determine K_{IRB} for dilution risk and default risk respectively, and combine them into a single K_{IRB} prior to applying the SEC-IRBA. Where credit risk and dilution risk are subject to separate waterfalls, the Reporting Bank shall consult the Authority as to how K_{IRB} should be calculated.

Tranche Attachment Point and Detachment Point

7.6.31 The tranche attachment point, A, represents the threshold at which losses within the underlying pool are first allocated to securitisation exposures in that tranche, and is a decimal value between zero and one. A Reporting Bank shall calculate A as the greater of –

(a) zero; and

(b) the ratio of –

(i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches in the securitisation that rank senior or pari passu to the tranche that contains the securitisation exposure of the Reporting Bank (including the exposure itself); to

(ii) the outstanding balance of all underlying assets in the securitisation.

7.6.32 The tranche detachment point, D, represents the threshold at which losses within the underlying pool result in a total loss of principal for securitisation exposures in that tranche, and is a decimal value between zero and one. A Reporting Bank shall calculate D as the greater of –

(a) zero; and

(b) the ratio of –

[195E] Dilution risk is defined in footnote 166.

(i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches in the securitisation that rank senior to the tranche that contains the securitisation exposure of the Reporting Bank; to

(ii) the outstanding balance of all underlying assets in the securitisation.

7.6.33 In a Reporting Bank's calculation of A and D –

(a) overcollateralisation and the loss-absorbing part of funded reserve accounts that provide credit enhancement shall be recognised as tranches; and

(b) the assets forming the loss-absorbing part of such funded reserve accounts that provide credit enhancement shall be recognised as underlying assets.

7.6.34 A Reporting Bank shall not include in its calculation of A and D –

(a) unfunded reserve accounts (such as those to be funded from future receipts from the underlying exposures);

(b) assets that do not provide credit enhancement (such as pure liquidity support, currency or interest rate swaps); or

(c) cash collateral accounts related to instruments listed in sub-paragraphs (a) and (b) above.

7.6.35 In applying paragraphs 7.6.33 and 7.6.34, a Reporting Bank shall consider the economic substance of the credit enhancement provided by an asset or reserve account within the securitisation transaction to a tranche, for the purpose of determining whether the asset or reserve account should be included in the calculation of A and D for that tranche. Where the credit enhancement provided by an asset or reserve account referred to in paragraphs 7.6.33 and 7.6.34 to a tranche is uncertain, the Reporting Bank shall exclude the asset or reserve account in the calculation of A and D for that tranche.

N and LGD

7.6.36 A Reporting Bank shall calculate the effective number of exposures in the underlying pool, N, as –

$$N = \frac{(\sum_i EAD_i)^2}{\sum_i EAD_i^2}$$

where EAD_i represents the exposure-at-default associated with the i^{th} instrument in the pool. Multiple exposures to the same obligor shall be consolidated and treated as a single instrument.

7.6.37 A Reporting Bank shall calculate the exposure-weighted average loss-given-default of the underlying pool ("LGD") as –

$$LGD = \frac{\sum_i (LGD_i \cdot EAD_i)}{\sum_i EAD_i}$$

where LGD_i represents the average LGD associated with all exposures to the i^{th} obligor represented in the underlying pool. Where default risk and dilution risk are treated in an aggregate manner (for example, where an identical reserve or overcollateralisation is available to cover losses for both risks) within a securitisation transaction, the LGD input shall be calculated as a weighted average of the LGD for default risk and the 100% LGD for dilution risk. The weights to be applied are the stand-alone IRB capital requirements for default risk and dilution risk respectively.

7.6.38 If the largest exposure in the underlying pool constitutes not more than 3% of the underlying exposures, a Reporting Bank may, for the purposes of the SEC-IRBA, apply a simplified method for computing N and LGD as follows –

$$N = \left(C_1 \cdot C_m + \left(\frac{C_m - C_1}{m - 1}\right) \cdot \max\{1 - m \cdot C_1, 0\}\right)^{-1}$$

$$LGD = 0.5$$

where C_m is the proportion of the underlying exposures constituted by the sum of the largest m exposures in the underlying pool, with the value of m determined by the Reporting Bank, and C_1 is the proportion of the underlying exposures constituted by the largest exposure in the underlying pool.

7.6.39 For the purpose of paragraph 7.6.38, if only C_1 is available and this amount is no more than 0.03, a Reporting Bank may compute N as $1/C_1$ and LGD as 0.5.

Supervisory Parameter

7.6.40 A Reporting Bank shall calculate the supervisory parameter p under the SEC-IRBA as –

$$p = \max [0.3, (A + B*(1/N) + C*K_{IRB} + D*LGD + E*M_T)]$$

where –

(a) 0.3 is the floor of the supervisory parameter p;

(b) N is the effective number of exposures in the underlying pool calculated in accordance with paragraphs 7.6.36, 7.6.38 and 7.6.39;

(c) K_{IRB} is the IRB capital requirement of the entire portfolio of underlying exposures per dollar value of exposure calculated in accordance with paragraphs 7.6.19 to 7.6.30;

(d) LGD is the exposure-weighted average loss-given-default of the underlying pool calculated in accordance with paragraphs 7.6.37 to 7.6.39;

(e) M_T is the tranche maturity calculated in accordance with Section 6 of Annex 7Z; and

(f) the parameters A, B, C, D and E are determined according to Table 7-20.

Table 7-20: Parameters for Calculation of Supervisory Parameter under SEC-IRBA

Characteristics of Securitisation Exposure and Underlying Pool		A	B	C	D	E
Wholesale	Senior, granular (N ≥ 25)	0	3.56	-1.85	0.55	0.07
	Senior, non-granular (N < 25)	0.11	2.61	-2.91	0.68	0.07
	Non-senior, granular (N ≥ 25)	0.16	2.87	-1.03	0.21	0.07
	Non-senior, non-granular (N < 25)	0.22	2.35	-2.46	0.48	0.07
Retail	Senior	0	0	-7.48	0.71	0.24
	Non-senior	0	0	-5.78	0.55	0.27

7.6.41 If the underlying pool consists of both retail and wholesale exposures, a Reporting Bank shall divide the pool into one retail sub-pool and one wholesale sub-pool, and calculate a separate p-parameter for each sub-pool. Subsequently, the Reporting Bank shall calculate a weighted average p-parameter for the transaction based on the p-parameters of each sub-pool and the exposure amount in each sub-pool.

7.6.42 If a Reporting Bank applies the SEC-IRBA to a mixed pool as described in Sub-division 7 of this Division, the Reporting Bank shall calculate the p-parameter based on the IRB underlying assets only.

Capital Requirements and Risk Weights under SEC-IRBA

7.6.43 A Reporting Bank using the SEC-IRBA shall calculate the capital requirement per dollar value of securitisation exposure using the following formula –

$$K_{SSFA(K_{IRB})} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u-l)}$$

where e is the base of the natural logarithms (approximately equal to 2.71828) and the variables a, u, and l are defined as follows –

(a) $a = -(1 / (p*K_{IRB}))$;

(b) $u = D - K_{IRB}$; and

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

7.6.44 A Reporting Bank using the SEC-IRBA shall calculate the risk weight assigned to a securitisation exposure as follows, subject to a floor of 15% for the resultant risk weight and paragraph 7.6.45 -

(a) When the tranche detachment point, D, for a securitisation exposure is less than or equal to K_{IRB}, the risk weight is 1,250%;

(b) When the tranche attachment point, A, for a securitisation exposure is greater than or equal to K_{IRB}, the risk weight of the exposure, expressed as a percentage, is $\boldsymbol{K_{SSFA(K_{IRB})}}$ multiplied by 12.5;

(c) When K_{IRB} is more than A but less than D, the risk weight is the weighted average of 1,250% and $\boldsymbol{K_{SSFA(K_{IRB})}}$ multiplied by 12.5 according to the following formula –

$$RW = \left[\left(\frac{K_{IRB} - A}{D - A}\right) \times 12.5\right] + \left[\left(\frac{D - K_{IRB}}{D - A}\right) \times 12.5 \times K_{SSFA(K_{IRB})}\right]$$

A Reporting Bank shall infer the risk weight for market risk hedges such as currency or interest rate swaps from a securitisation exposure that is pari passu to the hedge instrument or, if such an exposure does not exist, from the next subordinated tranche.

Amendments to Sub-division 6

[Amendments to Sub-division 6 are compared with the version of MAS Notice 637 as last revised on 29 November 2017]

Sub-division 6: Standardised Approach (SEC-SA)

7.6.52 A Reporting Bank using the SEC-SA to calculate capital requirements for a securitisation exposure to an SA pool shall calculate the following inputs: K_{SA}, ratio of total delinquent underlying exposures to total underlying exposures in the pool (W), and tranche attachment point (A) and detachment point (D), in accordance with paragraphs 7.6.53 to 7.6.69.

K_{SA}

7.6.53 K_{SA} is the weighted-average capital requirement of the entire portfolio of underlying exposures per dollar value of exposure, calculated by applying the SA(CR) as if the underlying exposures had not been securitised, multiplied by 8%.

7.6.54 A Reporting Bank shall calculate K_{SA} according to the following formula, expressed as a decimal between zero and one –

$$K_{SA} = \frac{SA(CR)\ RWA_{Underlying}}{SA(CR)\ Exposure_{\ Underlying}} \cdot 8\%$$

The SA(CR) RWA is calculated according to paragraph 7.1.3.

7.6.55 The Reporting Bank shall reflect the effects of CRM that is applied to the underlying exposures (either individually or to the entire pool) in its calculation of K_{SA}.

7.6.56 For structures involving an SPE, a Reporting Bank shall treat all of the SPE's exposures related to the securitisation as exposures in the pool. Exposures related to the securitisation include reserve accounts, cash collateral accounts and claims against counterparties resulting from interest rate swaps or currency swaps. In the case of swaps other than credit derivatives, the Reporting Bank shall include, in the computation of $\boldsymbol{SA(CR)\ RWA_{Underlying}}$ used in calculating K_{SA}, the positive current market value multiplied by the risk weight of the swap provider and by 8%. The Reporting Bank shall not include such swaps in the computation of $\boldsymbol{SA(CR)\ Exposure_{Underlying}}$ used in calculating K_{SA}, as such a swap would not provide a credit enhancement to any tranche. The Reporting Bank may exclude the SPE's exposures from the pool for capital calculation purposes if the Reporting Bank can demonstrate to the Authority that the risk associated with the exposures does not affect its particular securitisation exposure or that the risk is not material, for example, because it has been mitigated.

7.6.57 For funded synthetic securitisations, a Reporting Bank shall include in the calculation of K_{SA} any proceeds of the issuances of credit-linked notes or other funded obligations of the SPE which serve as collateral for the repayment of the securitisation exposure if –

(a) the Reporting Bank cannot demonstrate to the Authority that these are not material; and

(b) the default risk of the collateral is subject to the tranched loss allocation in the securitisation transaction.

7.6.58 For the purposes of paragraph 7.6.54, the Reporting Bank shall include in the computation of $\boldsymbol{SA(CR)\ RWA_{Underlying}}$ used in calculating K_{SA} the exposure amount of the collateral multiplied by its risk weight and by 8%. The Reporting Bank shall not include such collateral in the computation of $\boldsymbol{SA(CR)\ Exposure_{Underlying}}$ used in calculating K_{SA}.

7.6.59 Where a Reporting Bank has set aside ~~an individual impairment~~a specific allowance or has a non-refundable purchase price discount on an exposure in the underlying pool, the Reporting Bank shall calculate K_{SA} using the gross amount of the exposure without taking into account the ~~individual impairment~~specific allowance or the non-refundable purchase price discount.

W

7.6.60 A Reporting Bank shall calculate W, the ratio of the sum of the nominal amount of delinquent underlying exposures to the total nominal amount of underlying exposures in the pool. Delinquent underlying exposures are 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, where default is defined within the securitisation deal documents.

Tranche Attachment Point and Detachment Point

7.6.61 A Reporting Bank shall calculate the tranche attachment point, A, and the tranche attachment point, D, in accordance with paragraphs 7.6.31 to 7.6.35.

7.6.62 Where the only difference between exposures to a transaction is related to maturity, A and D are the same.

Capital Requirements and Risk Weights under SEC-SA

7.6.63 A Reporting Bank shall calculate K_A, using the inputs K_{SA} and W, as follows –

$$K_A = (1 - W) \times K_{SA} + W \times 0.5$$

7.6.64 If a Reporting Bank does not know the delinquency status, as defined in paragraph 7.6.60, for no more than 5% of underlying exposures in the pool (calculated by E, as defined in Division 2 of this Part), the Reporting Bank may use the SEC-SA by adjusting its calculation of K_A as follows –

$$K_A = \left(\frac{E_{Subpool\ 1\ where\ W\ is\ known}}{E_{Total}} \times K_A^{Subpool\ 1\ where\ W\ is\ known}\right) + \frac{E_{Subpool\ 2\ where\ W\ is\ unknown}}{E_{Total}}$$

If a Reporting Bank does not know the delinquency status for more than 5% of underlying exposures in the pool (calculated by E, as defined in Division 2 of this Part), the Reporting Bank shall risk-weight the securitisation exposure at 1250%.

7.6.65 A Reporting Bank using the SEC-SA shall calculate the capital requirement per dollar value of securitisation exposure using the following formula –

$$K_{SSFA(K_A)} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}$$

where e is the base of the natural logarithms (approximately equal to 2.71828) and the variables a, u, and l are defined as follows –

(a) $a = -(1 / (p*K_A))$;

(b) $u = D - K_A$; and

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

7.6.66 The supervisory parameter p under the SEC-SA is 1 for a securitisation exposure that is not a resecuritisation exposure.

7.6.67 Subject to paragraph 7.6.69, a Reporting Bank shall risk-weight any securitisation exposure for which it is using the SEC-SA in accordance with sub-paragraphs (a), (b), and (c), and paragraph 7.6.68. The Reporting Bank shall subject the resulting risk weight to a floor of 15%.

(a) when the tranche detachment point, D for a securitisation exposure is less than or equal to K_A, the risk weight is 1250%;

(b) when the tranche attachment point, A for a securitisation exposure is greater than or equal to K_A, the risk weight of the exposure, expressed as a percentage, is $K_{SSFA(K_A)}$ multiplied by 12.5;

(c) when K_A is more than A but less than D, the risk weight is the weighted average of 1250% and $K_{SSFA(K_A)}$ multiplied by 12.5 according to the following formula –

$$RW = \left[\left(\frac{K_A - A}{D - A}\right) \times 12.5\right] + \left[\left(\frac{D - K_A}{D - A}\right) \times 12.5 \times K_{SSFA(K_A)}\right]$$

7.6.68 A Reporting Bank shall infer the risk weight for market risk hedges such as currency or interest rate swaps from a securitisation exposure that is pari passu to the hedge instrument or, if such an exposure does not exist, from the next subordinated tranche.

7.6.69 When a Reporting Bank applies the SEC-SA to an unrated non-senior exposure in a transaction where the relatively more senior exposures (i.e. securitisation exposures with precedence in claims on the cash flows from the underlying exposures) are rated, the Reporting Bank shall not apply a risk weight under SEC-SA for the unrated non-senior exposure which is lower than the risk weight for the immediately preceding more senior rated exposure.

Amendments to Annex 7F

Annex 7F

CRM

Section 4: Recognition of Credit Derivatives

Types of Credit Derivatives

4.1 A Reporting Bank may recognise the effects of CRM of only the following types of credit derivatives that provide credit protection equivalent to guarantees:

(a) credit default swaps;

(b) total return swaps[246]; and

(c) instruments that are composed of, or are similar in economic substance, to one or more of the credit derivatives in sub-paragraphs (a) and (b) above.

Requirements for Recognition of Credit Derivatives

4.2 A Reporting Bank shall ensure that the following requirements are complied with before it recognises the effects of CRM of any credit derivative:

(a) the terms and conditions of any credit protection obtained via a credit derivative shall be set out in writing by both the Reporting Bank and the provider of credit protection;

(b) the credit derivative shall represent a direct claim on the provider of credit protection;

(c) explicitly referenced to specific exposure or pool of exposures so that the extent of the credit protection cover is clearly defined and incontrovertible;

(d) other than in the event of non-payment by the Reporting Bank of money due in respect of the credit derivative, there is an irrevocable obligation on the part of the provider of the credit protection to pay out a pre-determined amount upon the occurrence of a credit event, as defined under the credit derivative contract;

(e) the credit derivative contract shall not contain any clause, the fulfillment of which is outside the direct control of the Reporting Bank, that -

(i) would allow the provider of credit protection to unilaterally cancel the credit protection cover;

[246] A Reporting Bank shall not recognise the effects of CRM of a total return swap if it purchases credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the underlying asset that is protected (either through reductions in its marked-to-market value or by an addition to reserves).

(i) would increase the effective cost of the credit protection cover as a result of deteriorating credit quality of the underlying exposure;

(ii) could prevent the provider of credit protection from being obliged to pay out in a timely manner in the event that the underlying obligor fails to make any payment due[247]; or

(iii) could allow the maturity of the credit protection agreed ex-ante to be reduced ex-post by the provider of credit protection;

(f) the credit events specified by the contracting parties shall at a minimum cover -[248]

(i) failure to pay the amounts due under terms of the underlying exposure that are in effect at the time of such failure (with a grace period, if any, that is closely in line with the grace period in the underlying exposure);

(ii) bankruptcy, insolvency or inability of the underlying obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and

(iii) restructuring of the underlying exposure involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, ~~individual impairment~~specific allowance or other similar debit to the profit and loss account);

(g) the credit derivative shall not terminate prior to the maturity of the underlying exposure or expiration of any grace period required for a default on the underlying exposure to occur as a result of a failure to pay, subject to paragraph 6.2 of this Annex;

(h) a robust valuation process shall be in place in order to estimate loss reliably for any credit derivative that allows for cash settlement. There shall be a clearly specified period for obtaining post-credit event valuations of the underlying obligation[249];

(i) where the right or ability of the Reporting Bank to transfer the underlying exposure to the credit protection provider is required for settlement, the terms of the underlying exposure shall provide that any required consent to such transfer may not be unreasonably withheld;

(j) the identity of the parties responsible for determining whether a credit event has occurred shall be clearly defined. This determination shall not be the sole responsibility of the credit protection provider. The Reporting Bank shall

247 This does not preclude an obligation by the buyer of credit protection to satisfy requirements relating to providing a Notice of Publicly Available Information, as is the case for the triggering of credit protection under standard credit default swap contracts.

248 *[This footnote has been intentionally left blank.]*

249 The Authority would generally consider the cash settlement methodology provided in the ISDA Credit Derivatives Definitions as satisfying this requirement.

have the right or ability to inform the credit protection provider of the occurrence of a credit event;

(k) the underlying obligation and the reference obligation specified in the credit derivative contract for the purpose of determining the cash settlement value or the deliverable obligation or for the purpose of determining whether a credit event has occurred may be different only if -

(i) the reference obligation ranks *pari passu* with or is junior to the underlying obligation; and

(ii) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place; and

(l) the credit derivative shall not expose the Reporting Bank to specific wrong-way risk.

Amendments to Annex 7X

Annex 7X

DEFINITION OF DEFAULT UNDER THE IRBA

Section 1: Application of Definition of Default under IRBA

1.1 Subject to paragraph 1.2 below, a Reporting Bank shall use the definition of default under Section 2 below for deriving estimates of PD, and where relevant LGD and EAD.

1.2 In deriving estimates of PD, and where relevant LGD and EAD, a Reporting Bank may use external data available to it that is not itself consistent with the definition of default in this Annex.[314] In such cases, the Reporting Bank shall demonstrate to the satisfaction of the Authority that appropriate adjustments to the data are made to achieve broad equivalence with the definition of default in this Annex. This also applies to any internal data used by the Reporting Bank up to 1 January 2008. Beyond 1 January 2008, internal data and any pooled data used by the Reporting Bank to derive estimates of IRBA parameters shall be consistent with the definition of default in this Annex.

Section 2: Definition of Default

2.1 A Reporting Bank shall record a default on any IRBA exposure to a particular obligor if -

(a) it considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the Reporting Bank or any of its banking group entities to actions such as realising ~~security, if held, in accordance with paragraph 2.3(c) below~~collateral; or

(b) the obligor is past due more than 90 days on any credit obligation to the banking group.[315]

2.2 If the Reporting Bank considers that paragraph 2.1 above no longer applies to a previously defaulted exposure, the Reporting Bank shall assign a new obligor and facility grade to the exposure using the applicable borrower and facility rating system, and where relevant estimate LGD and EAD as it would for a non-defaulted exposure. Should the definition of default in this Annex subsequently be triggered, a second default shall be deemed to have occurred.

Indications of Unlikeliness to Pay in Full

2.3 A Reporting Bank shall consider a default to have occurred with regard to a particular obligor if any of the following indicators of default is present:

[314] A Reporting Bank which uses external data shall meet the requirements in paragraph 5.2(d) of Annex 7AB of Part VII.

[315] The Authority may permit an extension of days past due beyond 90 days for a foreign PSE obligor, of up to 180 days, if a Reporting Bank requests such permission and provides strong justification for the extension.

(a) the Reporting Bank puts any credit obligation of the obligor on non-accrued status;

(b) the Reporting Bank makes a charge-off or account-specific allowance resulting from a significant perceived decline in credit quality of the obligor subsequent to the Reporting Bank taking on the exposure[316];

(c) the Reporting Bank sells the credit obligation at a material credit-related economic loss. For the purposes of this sub-paragraph, the Reporting Bank shall implement internal policies to determine when a material credit-related economic loss has been incurred and track the performance of such policies over time[317];

(d) the Reporting Bank consents to a distressed restructuring[317A] of the credit obligation where this is likely to result in a diminished financial obligation of the obligation due to the material forgiveness or postponement of principal, interest or where relevant fees[318]. A Reporting Bank shall implement internal policies on the above criteria (and any other factors it considers appropriate) and internal procedures to ensure that restructured exposures are classified appropriately;

(e) the Reporting Bank or any banking group entity has filed for the bankruptcy of the obligor or a similar order in respect of the credit obligation of the obligor to the banking group;

(f) the obligor has sought or has been placed in bankruptcy or similar protection which would enable the obligor to avoid or delay repayment of the credit obligation to the banking group;

(g) any facility to that particular obligor has been accelerated;

(h) where the obligor is a bank, the bank's authorisation to operate has been revoked[319];

(i) where the obligor is a central government, there has been an announcement of a downgrade to a default rating by a recognised ECAI;

(j) a default by the obligor on credit obligations to other financial creditors, for example, financial institutions or bondholders, has occurred based on publicly available information; or

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316 ~~Individual impairment~~Specific allowances on equity exposures may be set aside for price risk and do not signal default.

317 These internal policies are examined by the Authority in connection with a Reporting Bank's application to adopt the IRBA.

317A This includes situations where the intention of the restructuring is to accommodate a deterioration in the obligor's financial position or the obligor's inability to meet the original repayment schedule or where the revised repayment terms of the credit obligation are of "non-commercial" nature, i.e. where the interest rate, fees or repayment period are not what would normally be granted by the Reporting Bank to a new obligor of similar creditworthiness.

318 This includes distressed restructuring of any equity exposure using the PD/LGD method.

319 This indication of default does not include the voluntary surrender of licenses, for example, in the course of a business combination.

(k) the Reporting Bank, in its judgement, deems that the default of a related obligor is an indication of default of that particular obligor (as described in paragraphs 2.6 and 2.7 below).

2.4 ~~For the purposes of paragraph 2.1(a) above and subject to paragraph 2.5 below, it shall be presumed that a Reporting Bank considers that a particular obligor is unlikely to pay its credit obligations to the banking group in full without recourse by the Reporting Bank or any of its banking group entities to actions such as realising security, if the Reporting Bank liquidates collateral to satisfy any of the credit obligations. Accordingly, the Reporting Bank shall record a default when that occurs.~~For cases where a Reporting Bank liquidates collateral to satisfy any of the credit obligation and does not consider a default to have occurred with regard to the obligor, the Reporting Bank shall put in place internal processes, independent of the credit risk control and origination functions, to review and validate, on a regular basis, that the classification of the exposure as a non-default exposure is in accordance with paragraphs 2.1 to 2.3 above. Such internal processes shall include validating that the liquidation of the collateral is not due to a deterioration of the creditworthiness of the obligor. [319A]

~~2.5 In recognition that the presumption under paragraph 2.4 above may not hold for certain types of facilities, for example, securities financing, where collateral is liquidated not owing to a deterioration of the creditworthiness of an obligor but to a fall in the value of the collateral, a Reporting Bank may choose not to record a default, notwithstanding paragraph 2.4 above, if the following requirements are complied with:~~

~~(a) the facility was granted to finance the position of a customer in a financial instrument that qualifies as eligible financial collateral under the FC(CA) and the collateral comprises that financial instrument or that financial instrument and other eligible financial collateral; and~~

~~(b) the collateral was liquidated to restore an agreed collateral coverage ratio after a fall in the value of the collateral, in accordance with the standard practice for facilities of the same type and where such practice has been disclosed to the customer in writing at the inception of the facility.~~

Related Obligor Default

2.6 When a default is recorded for any obligor for IRBA purposes, a Reporting Bank shall review all ratings of obligors related to that particular obligor[320] to determine if that default is an indication that any other related obligor is unlikely to fulfill its obligations.

[319A] For example, for certain types of facilities such as securities financing, collateral is liquidated not due to a deterioration of the creditworthiness of an obligor but due to a fall in the value of the collateral. For such facilities, the collateral may be liquidated to restore an agreed collateral coverage ratio after a fall in the value of the collateral, in accordance with the standard practice for facilities of the same type and where such practice has been disclosed to the customer in writing at the inception of the facility.

[320] For example, any obligor that is treated as a related group entity under section 29(1)(a) of the Banking Act, or any obligor that is linked to the particular obligor in the rating process of the Reporting Bank.

2.7 The Reporting Bank should ensure that such determination be based on the judgement of the Reporting Bank of the degree of economic interdependence and integration between the obligors concerned. There is no presumption that related entities would necessarily default together. This would depend on the credit judgement of the Reporting Bank expressed in its internal ratings systems, in particular –

(a) where a Reporting Bank rates a group of obligors together as a single economic unit, a default by any obligor in the group shall be considered a default by all the obligors in the group; and

(b) where the ratings of individual obligors in a group are stand-alone ratings or "notched" ratings, a default by any obligor in the group need not be considered a default by all the obligors in the group. However, it should be noted that this principle should not override the result of any ratings review.

Calculation of Days Past Due for Any Facility

2.8 For the purposes of determining whether an obligor is past due more than 90 days on any credit obligation to the banking group, a Reporting Bank shall include all components of amounts due, including principal, accrued interest and fees related to the credit obligation, in making that determination (e.g. in the case of corporate exposures, annual facility fees, or in the case of retail exposures, annual card fees[321]) inasmuch as they form part of the return that the Reporting Bank receives on the credit risk it underwrites.

2.9 A Reporting bank shall record a default when –

(a) for an overdraft, the approved limit (i.e. advised limit) remains breached for more than 90 days[322];

(b) for a revolving corporate exposure, an amount is overdue for more than 90 days;

(c) for a revolving retail exposure (e.g. credit card), the minimum monthly payment is not paid in full by the due date nor within the 90 days thereafter, and subsequent minimum monthly payments billed are also not paid in full; and

(d) for a loan with periodic principal instalments, interest payments, or both, an amount due and payable is not paid in full within 90 days of the instalment or payment due date.

Re-ageing

321 For avoidance of doubt, an obligor is not normally considered by the Authority to be in default only by virtue of annual fees payable to the Reporting Bank where the Reporting Bank has already commenced steps to reverse or waive such fees.

322 This includes where the obligor has been advised of a limit smaller than current outstandings and the lower limit remains breached for more than 90 days. A Reporting Bank shall also have adequate internal policies for assessing the creditworthiness of obligors who are offered overdraft accounts.

2.10 For the purposes of paragraph 2.9 above, a Reporting Bank shall have clearly articulated and documented policies in respect of the counting of days past due, in particular in respect of the re-ageing of the facilities and the granting of extensions, deferrals, renewals and rewrites to existing accounts.

2.11 A Reporting Banks shall ensure that the re-ageing policy includes clear prescriptions on –

(a) the approval authorities and reporting requirements on re-aging;

(b) the minimum age of a facility before it is eligible for re-ageing;

(c) the delinquency levels of facilities that are eligible for re-ageing;

(d) the maximum number of re-ageings per facility; and

(e) the associated reassessments of the capacity of the obligor to repay should re-aging take place.

2.12 A Reporting Bank shall apply its internal policies on re-aging consistently over time, and such policies shall support the 'use requirements' under paragraph 2.7 of Annex 7AB of Part VII.[323]

2.13 Subject to paragraphs 2.11 and 2.12 above, a Reporting Bank may only re-age when –

(a) in the case of an overdraft, the outstanding amount is reduced to or below the approved limit;

(b) in the case of a revolving corporate exposure, the amount overdue is repaid in full;

(c) in the case of a revolving retail exposure where an unpaid minimum monthly payment is rolled into the following month's minimum payment, the latest minimum monthly payment is paid in full; and

(d) in the case of a loan with periodic instalments, interest payments, or both, the longest overdue amount is repaid in full, inclusive of accrued interest and penalties, in which case the start date of the days past due count is then reset to the due date of the remaining instalment or payment that is longest overdue.

2.14 When granting extensions, deferrals, renewals and rewrites, a Reporting Bank shall consider if these are in fact distressed restructurings under paragraph 2.3(d) above. If so, the Reporting Bank shall record a default in respect of the exposure.

Treatment of overdrafts

[323] If a Reporting Bank treats a re-aged exposure in a similar fashion to exposures which are in default, this exposure shall be recorded as in default for IRBA purposes.

2.15 Authorised overdrafts shall be subject to a credit limit set by the Reporting Bank and brought to the knowledge of the obligor. The Reporting Bank shall monitor any break of the credit limit. The Reporting Bank shall record a default on such overdrafts if the account is not brought under the credit limit for more than 90 days. Non-authorised overdrafts shall be associated with a zero limit for IRB purposes by the Reporting Bank. The days past due commence once any credit is granted to an unauthorised customer. The Reporting Bank shall record a default on such overdrafts if such credit is not repaid for more than 90 days. The Reporting Bank shall have in place rigorous internal policies for assessing the creditworthiness of obligors who are offered overdraft accounts.

Section 3: Exclusion from Obligor-level Application of Definition of Default

3.1 Notwithstanding paragraph 2.1 above, a Reporting Bank may, for exposures categorised under the IRBA retail asset class, apply the definition of default in this Annex at the level of a particular facility, rather than at the level of the obligor. Therefore, a default by an obligor on one credit obligation does not require a Reporting Bank to treat all other credit obligations of the same obligor to the banking group as defaulted.

Amendments to Annex 7Y

Annex 7Y

DEFINITION OF IRBA PARAMETERS

Section 3: Definition of LGD

3.1 The LGD attached to any particular facility grade or retail pool of exposures is a statistic that measures the long-run rate of economic loss[325] associated with any facility grade or retail pool of exposures should a default occur.

3.2 A Reporting Bank shall comply with the following requirements and should meet the following guidelines when calculating historical LGDs and deriving forward-looking estimates of LGD:

(a) all relevant factors which could affect the costs of holding or collecting on a defaulted facility should be taken into account when calculating LGD. This shall include material discount effects and material direct and indirect costs associated with collecting on the exposure. For avoidance of doubt, the Reporting Bank shall not simply measure the loss recorded in accounting records, although it shall be able to compare accounting and economic losses;

(b) subject to (a) above, economic loss may be calculated using EAD, loss of principal, interest, and fees, and the present value of subsequent recoveries and related expenses discounted at a suitable rate. The Reporting Bank should discount the streams of recoveries received after a facility goes into default in order to compare the net present value of recovery streams as of a default date with a measure of EAD;

(c) the discount rate used to calculate economic loss should reflect the costs of holding defaulted assets over a workout period, including an appropriate risk premium. In establishing an appropriate discount rate, the Reporting Bank should take into account the following:

(i) when recovery streams are uncertain and involve risks which cannot be diversified away, net present value calculations should reflect the time value of money and risk premiums appropriate to such risks. In establishing appropriate risk premiums for the estimation of LGDs consistent with economic downturn conditions, the Reporting Bank should focus on the uncertainties in recovery cash flows associated with defaults which arise during economic downturn conditions; and

(ii) when there is no uncertainty in recovery streams (e.g. recoveries derived from cash collateral), net present value calculations need only reflect the time value of money, and a risk-free discount rate may be appropriate;

[325] As specified in paragraph 5.6 of Annex 7AB of Part VII.

(d) the Reporting Bank may estimate the present values of recovery rates by –

(i) discounting the stream of recoveries and the stream of workout costs by a risk-adjusted discount rate which is the sum of the risk-free rate and a spread appropriate for the risk of the recovery and cost cash flows;

(ii) converting the stream of recoveries and the stream of workout costs to certainty-equivalent cash flows[326] and discounting these by the risk-free rate; or

(iii) using a combination of adjustments to the discount rate and the stream of recoveries and the stream of workout costs which are consistent with sub-paragraphs (i) and (ii) above[327];

(e) workout costs which can be clearly attributed to certain facilities or types of facilities should be reflected in the LGD assignments of the Reporting Bank for those exposures. When such allocation is not practical, the Reporting Bank may assign those costs using factors based on broad averages. The allocation of recovery costs may require judgement, but the process should be carefully designed to ensure that all true recovery costs are reasonably allocated;

(f) if a Reporting Bank chooses to close the period of observation before final resolution of the facility, for example, at a point in time when most costs have been incurred and when recoveries are substantially complete, it should have a well-founded process for estimating the additional costs and recoveries which would likely occur beyond that point in time and include them in its LGD estimates; and

(g) the Reporting Bank should not adjust its LGD estimates to take into account its own workout and collection expertise unless it has sufficient internal empirical evidence of the impact of its expertise on recovery rates and any adjustment is made in consultation with the Authority.

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[326] A certainty-equivalent cash flow is defined as the cash payment required for a risk averse investor to be indifferent between receiving the cash payment with certainty at the payment date and holding an asset which would yield an uncertain payout at the payment date.

[327] A Reporting Bank may use an "effective interest rate" in accordance with FRS ~~39~~ 109 as the discount rate, but in that case should adjust the stream of net recoveries in a way which is consistent with sub-paragraphs (i) and (ii).

Amendments to Annex 7AB

Annex 7AB

IRBA VALIDATION STANDARDS

5.6 Standards on Estimation of LGD

(a) A Reporting Bank adopting the IRBA for the retail asset sub-class or the A-IRBA shall estimate an LGD for each facility or retail pool that aims to reflect economic downturn conditions. Appropriate downturn conditions for any IRBA asset sub-class are those in which the relevant drivers of default rates are consistent with conditions where credit losses for that IRBA asset sub-class are expected to be substantially higher than average. At a minimum, separate downturn conditions should be identified for each IRBA asset sub-class. The following examples are considered by the Authority as acceptable methods of identifying appropriate economic downturn conditions:

(i) periods of negative GDP growth and high unemployment rates (for a well-diversified wholesale portfolio);

(ii) periods in which observed historical default rates have been high for a portfolio of exposures that is representative of the Reporting Bank's current portfolio; and

(iii) periods where common risk drivers (e.g. collateral values) that influence default and recovery rates are expected to be distressed.

In addition, a Reporting Bank shall take into account the potential for the LGD estimate of a facility to be higher than the long-run default-weighted average loss rate given default, during a period when credit losses are substantially higher than average.[363A]

(b) The Reporting Bank should have a rigorous and well documented process for assessing the effects, if any, of economic downturn conditions on recovery rates and for producing LGD estimates consistent with downturn conditions.

(c) A Reporting Bank should identify downturn conditions at a granular level. Where recovery rates of exposures are sensitive to local economic conditions, a Reporting Bank should identify separate downturn conditions for each jurisdiction at the IRBA asset sub-class level.[364] Where recovery rates of exposures are not sensitive to local economic conditions (e.g. exposures to internationally diversified borrowers), a Reporting Bank may identify downturn conditions appropriate to the exposures, which may span national boundaries.

[363A] For certain facilities, the cyclical variability in loss severities may be important and will need to be incorporated by a Reporting Bank in the LGD estimates. For this purpose, a Reporting Bank may use averages of loss severities observed during periods of high credit losses or forecasts based on appropriately conservative assumptions, or other similar methods. Appropriate estimates of LGD during periods of high credit losses may be formed using either internal or external data.

[364] In those cases where a Reporting Bank can demonstrate that exposures in the same asset sub-class in different jurisdictions exhibit strong co-movement in recovery rates, the Reporting Bank can group those jurisdictions together for the purpose of defining downturn conditions.

(d) The Reporting Bank should identify adverse dependencies between default and recovery rates. For example, the Reporting Bank may use some or all of the following techniques:

(i) a comparison of average recovery rates with recovery rates observed during appropriate downturn periods;

(ii) a statistical analysis of the relationship between observed default and recovery rates over a complete economic cycle;

(iii) for secured exposures where default is shown to be highly (negatively) correlated with collateral values, the Reporting Bank may compare –

(A) the recovery rate forecasts derived from robust statistical models that use "typical" assumptions about collateral value changes with those under conditions identified according to paragraph 5.6(a); or

(B) observed recovery rates for defaulted exposures given typical collateral values with those under conditions identified according to paragraph 5.6(a) where collateral values are depressed; and

(iv) an identification of the underlying factors (risk drivers) that determine recovery rates and analysis of the relationship between those factors and default rates, combined with an assessment of the net impact of those factors on recovery rates under downturn conditions.

(e) A Reporting Bank should incorporate adverse dependencies, if any, between default and recovery rates so as to produce LGD estimates for its exposures which are consistent with identified downturn conditions.

(f) For those exposures for which adverse dependencies between default and recovery rates have been identified through analysis consistent with paragraph 5.6(d), a Reporting Bank may derive LGD estimates by –

(i) basing them on averages of observed loss rates during downturn periods identified according to paragraph 5.6(a); or

(ii) deriving them from forecasts based on stressing appropriate risk drivers in a manner consistent with downturn conditions identified according to paragraph 5.6(a).

(g) If there are no material adverse dependencies between default and recovery rates, a Reporting Bank may derive its LGD estimates by –

(i) basing them on long-run default-weighted averages of observed loss rates; or

(ii) deriving them from forecasts that do not involve stressing appropriate risk drivers.

(h) A Reporting Bank shall establish internal policies on the determinants of high dependency between the risk of the borrower and the collateral or collateral provider, such as the existence of a legal connection or economic considerations. These policies shall also determine the actions to take when there is a significant dependency, with respect to terms of business, exposure and limit measurement, capital requirements and other forms of risk mitigation (e.g. through the use of guarantees or credit derivatives). In such cases, the dependence shall be addressed in a conservative manner. A Reporting Bank shall consider any currency mismatch between the underlying obligation and the collateral and ensure that they are treated conservatively in the Reporting Bank's assessment and process of deriving LGD estimates.

(i) A Reporting Bank shall derive LGD estimates on the basis of historical recovery rates and not solely based on the collateral's estimated market value in order to account for the potential inability of the Reporting Bank to gain control of collateral and liquidate it expeditiously. If internal historical recovery rates are insufficient for a Reporting Bank to make meaningful statistical inferences, the Reporting Bank may consider whether external data would be appropriate. To the extent that LGD estimates take into account the existence of collateral, a Reporting Bank shall establish internal requirements for collateral management, operational procedures, legal certainty and risk management processes that are at least consistent with the requirements set out in Annex 7F of Part VII.

(j) A Reporting Bank should not adjust its LGD estimates to take into account its own workout and collection expertise unless it has sufficient internal empirical evidence of the impact of its expertise on recovery rates, and a Reporting Bank shall ensure that such an adjustment to its LGD estimates is made in consultation with the Authority.

(k) The estimate of the LGD associated with any facility grade or retail pool of a Reporting Bank shall not be less than the long-run default weighted average loss rate given default calculated based on the average economic loss of all observed defaults within the data source for that type of facility or retail pool.

(l) The LGD assigned by a Reporting Bank to a defaulted exposure should reflect the possibility of recognising additional, unexpected losses during the recovery period as realised losses can at times systematically exceed expected levels. A Reporting Bank shall construct its best estimates of the expected loss for each defaulted exposure based on current economic circumstances and facility status. The amount, if any, by which the LGD on a defaulted exposure is greater than the best estimate of expected loss on that exposure represents the capital requirement for that exposure as set out in paragraph 7.4.63 of Sub-division 11 of Division 4 of this Part. If the sum of ~~individual impairment~~specific allowances and partial charge-offs on a defaulted exposure is greater than the best estimate of expected loss on that exposure, the Reporting Bank has to provide to the Authority the justification for such difference.

365 *[This footnote has been intentionally left blank.]*

Amendments to Part IX

PART IX: OPERATIONAL RISK

Deletion of Footnote 606

9.2.2 A Reporting Bank shall calculate its gross income[602] as the sum of its net interest income[603] and non-interest income[604], taking into account the following adjustments:

(a) gross of any allowances (including for unpaid interest);

(b) gross of operating expenses, including any fees paid for outsourced services[605],

but excluding –

(i) any realised profits or losses arising from the sale of securities in the banking book~~[606]~~;

(ii) any income or expense item not derived from the ordinary activities of the Reporting Bank and not expected to recur frequently or regularly[607]; and

(iii) any income derived from any insurance recoveries.

An example of the calculation of gross income is set out in Annex 9A of this Part.

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602 Audited gross income figures shall be used where available. Where audited figures are not available, unaudited gross income figures may be used, provided that the Reporting Bank shall reconcile, on a timely basis, such unaudited gross income figures with its audited financial statements (as well as any quarterly and half-yearly financial statement which has been reviewed by external auditors, where available), and use the latest reconciled numbers for future calculations. If a Reporting Bank does not have sufficient income data to meet all or part of the three-year requirement, the Reporting Bank shall, with the approval of the Authority, use an appropriate method, which considers gross income estimates, for calculating the operational risk capital requirement.

603 Net interest income is defined as interest income less interest expense.

604 Non-interest income includes fees and commissions income after deducting fees and commissions expense.

605 In contrast to fees paid for outsourced services, any fee received by any Reporting Bank for its outsourcing services shall be included in the definition of gross income.

~~606 Securities which constitute items of the banking book are typically classified as "held to maturity" or "available for sale", in accordance with FRS 39.~~

607 Such items may include income or expenses arising from – (a) the sale of fixed assets; (b) expropriation of assets; or (c) earthquakes or other natural disasters.

Amendments to Part XI

PART XI: PUBLIC DISCLOSURE REQUIREMENTS

[MAS Notice 637 (Amendment) 2016 (Replacement of this Part in its entirety)]

Division 2: General Requirements

Amendments to Sub-division 2 [Effective from 31 Dec 2017]

Sub-division 2: Frequency and Timing of Disclosures

11.2.3 A Reporting Bank shall make the disclosures required under –

(a) Sub-divisions 2 to 7 and 10 to 13 of Division 3 of this Part according to the frequency of disclosure for each disclosure requirement set out in Table 11-1, except for the disclosures required under Table 11-45 which a Reporting Bank shall make on a quarterly basis;

(b) Sub-divisions 8 ~~and 10~~ of Division 3 of this Part on an annual basis; and

(c) Sub-division 9 of Division 3 of this Part at least on an annual basis and where such disclosures are made only on an annual basis, explain why this is appropriate. To enhance market discipline, the Reporting Bank is encouraged to make more frequent quantitative disclosures, e.g. on a semi-annual basis~~; and~~.

~~(d) Sub-divisions 11 and 12 of Division 3 of this Part on a quarterly basis[800].~~

11.2.4 For disclosures required to be made on a quarterly or semi-annual basis in this Part, a Reporting Bank which issues quarterly financial statements shall publish the information concurrently with the publication of its quarterly financial statements, and no later than 45 days after the end of each quarter. A Reporting Bank which does not issue quarterly financial statements shall publish the information no later than 45 days after the end of each quarter.

11.2.5 For disclosures required to be made annually in this Part, a Reporting Bank which issues an annual report shall publish the information concurrently with the publication of its annual report, and no later than 4 months after the end of each financial year. A Reporting Bank which does not issue an annual report shall publish the information no later than 4 months after the end of each financial year.

~~[800] The disclosures required from a Reporting Bank under Sub-divisions 11 and 12 of Division 3 of this Part (other than paragraph 11.3.35 and Table 11-45) may, with the prior approval of the Authority, be made with at least the same frequency as the publication of the Reporting Bank's financial statements.~~

11.2.6 A Reporting Bank shall make the disclosures required under Sub-divisions 2 to 7 and 10 to 13 of Division 3 of this Part ~~in Tables 11-2 to 11-41,~~ with effect from the corresponding implementation date set out in Table 11-1.

Amendments to Sub-division 3 [Effective from 31 Dec 2017]

Sub-division 3: Location and Form of Disclosures

11.2.7 Subject to paragraphs 11.3.18 and 11.3.33, a Reporting Bank shall disclose the information required in Division 3 of this Part, in a standalone document ("standalone Pillar 3 report"), which may be appended to, or form a discrete section of its annual report or periodic financial statements. The Reporting Bank shall ensure that the standalone Pillar 3 report is easily identifiable to users. A Reporting Bank shall make available on its website, an archive of a minimum of five years, of information disclosed pursuant to this Part relating to prior reporting periods.

11.2.8 A Reporting Bank may disclose items set out in the tables marked as having a flexible format in Division 3 of this Part in a separate document from the standalone Pillar 3 report, provided that –

(a) the level of assurance on the reliability of data in the separate document is equivalent to, or greater than, the internal assurance level required for the standalone Pillar 3 report, as set out in paragraphs 11.2.16 to 11.2.18; and

(b) it includes in the standalone Pillar 3 report, the following information –

(i) the title and the number of the disclosure requirement;

(ii) the full name of the separate document in which the disclosure requirement has been published;

(iii) a URL to such disclosure of information on its website, where relevant; and

(iv) the page and paragraph number of the separate document where the disclosure requirement can be located.

11.2.9 A Reporting Bank shall complete the quantitative data required under the tables in Sub-divisions 2 to 7 and 10 to 13 of Division 3 of this Part in accordance with the definitions provided. A Reporting Bank shall present narrative commentaries to supplement such required quantitative disclosures in a format at the Reporting Bank's discretion and to explain any significant changes between reporting periods and any other issues of interest to market participants.

Tables with a fixed format in Sub-divisions 2 to 7, 11 and 12 of Division 3 of this Part

11.2.10 Where the format of a table in Sub-divisions 2 to 7, 11 and 12 of Division 3 of this Part is described as fixed, a Reporting Bank shall complete the fields in accordance with the instructions given in the table. Subject to paragraph 11.2.14, a Reporting Bank may delete rows or columns from the table but shall not alter the numbering of subsequent rows and columns. A Reporting Bank may add additional sub-rows and sub-columns to the table to provide additional details to a disclosure requirement. However, the Reporting Bank shall not alter the numbering of prescribed rows and columns in the table.

Tables with a flexible format in Sub-divisions 2 to 7, 10, 11 and 13 of Division 3 of this Part

11.2.11 Where the format of a table in Sub-divisions 2 to 7, 10, 11 and 13 of Division 3 of this Part is described as flexible, a Reporting Bank may present the required information either in the format provided in the table, or in one that is more suitable for the Reporting Bank. However, where a customised presentation of the information is used, the Reporting Bank shall provide information that is comparable (i.e. at a similar level of granularity) with the disclosure requirements set out in the table.

Disclosure requirements in Table 11-45 and Sub-divisions 8 ~~to 10~~ and 9 of Division 3 of this Part

11.2.12 For the disclosure requirements in Table 11-45 and Sub-divisions 8 ~~to 10~~and 9 of Division 3 of this Part, a Reporting Bank has the discretion to determine the form of the disclosures required in this Part, and may choose to use either graphical or such other forms or both, that the Reporting Bank deems appropriate to assist users in forming an opinion on the risk profile and capital adequacy of the Reporting Bank.

Amendments to Sub-division 4 [Effective from 31 Dec 2017]

Sub-division 4: Omissions

11.2.13 A Reporting Bank may omit certain disclosures in this Part if the omitted item is proprietary or confidential in nature, where "*proprietary*" and "*confidential*" are defined, respectively, as follows:

(a) proprietary information refers to information that if shared with the public would undermine the competitive position of the Reporting Bank; and

(b) confidential information refers to information that if shared with the public would cause the Reporting Bank to breach the terms of a legal agreement.

11.2.13A The Reporting Bank shall identify the specific information that it has omitted to disclose in the narrative commentary to the disclosure requirement and provide a reason for the omission. The Reporting Bank shall also disclose general qualitative information about the subject matter of the requirement.

11.2.14 In line with the principle set out in paragraph 11.1.2(c), a Reporting Bank may omit part or all of the disclosures in the tables in Sub-divisions 2 to 7 and 10 to 13 of Division 3 of this Part, if the information required to be disclosed is assessed not to provide meaningful or relevant information to users. In particular, a Reporting Bank shall assess if the information required to be disclosed in Tables 11-13, 11-14, 11-15, 11-16, 11-20, 11-25, 11-26, 11-37, 11-38 and 11-41 would provide meaningful or relevant information to users in accordance with the requirements set out in the scope of application fields in these tables. A Reporting Bank which omits disclosures in the tables in Sub-divisions 2 to 7 and 10 to 13 of Division 3 of this Part on the basis that the disclosure of the information is not meaningful or relevant shall state clearly in a narrative commentary why such information is considered not to be meaningful or relevant to users. ~~The~~ Where applicable, the Reporting Bank shall describe the portfolios excluded from the disclosures and the aggregate total RWA of those portfolios.

11.2.15 A Reporting Bank may omit disclosures required under any item in this Part, marked as qualitative disclosures, if -

(a) the ultimate holding company as defined under section 5A of the Companies Act (Cap. 50) of the Reporting Bank is incorporated, formed or established outside Singapore and disclosure requirements similar to those set out in this Part apply to the ultimate parent company on a consolidated basis that is inclusive of the operations of the Reporting Bank; and

(b) the Reporting Bank makes clear reference in the standalone Pillar 3 report to the location of the relevant disclosures made by the ultimate parent company.

Division 3: Specific Disclosure Requirements

Amendments to Sub-division 1 [Effective from 31 Dec 2017]

Sub-division 1: Introduction

11.3.1 Table 11-1 presents a summary of the disclosure requirements set out in Sub-divisions 2 to 7 and 10 to 13 of this Division.

11.3.2 Sub-divisions 8 ~~to 12~~and 9 of this Division set out the disclosure requirements in the following areas -

(a) Operational Risk in Sub-division 8 of this Division; and

(b) Interest Rate Risk in the Banking Book in Sub-division 9 of this Division~~;~~.

~~(c) Remuneration in Sub-division 10 of this Division;~~

~~(d) Composition of Capital in Sub-division 11 of this Division; and~~

~~(e) Leverage Ratio in Sub-division 12 of this Division.~~

Table 11-1: Summary of disclosure requirements

	Tables	Fixed format	Flexible format	Quarterly	Semi-annually	Annually	Implementation date
Sub-division 2: Overview of key prudential metrics, risk management and RWA	Table 11-1A: Key Metrics	✓		✓			1 January 2018
	Table 11-2: Risk Management Approach		✓			✓	1 January 2017
	Table 11-3: Overview of RWA	✓		✓			1 January 2017
	Table 11-3B: Overview of RWA	✓		✓			31 December 2018
Sub-division 3: Linkages between financial statements and regulatory exposures	Table 11-4: Differences between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statement Categories with Regulatory Risk Categories		✓			✓	1 January 2018
	Table 11-5: Main Sources of Differences between Regulatory Exposure Amounts and Carrying Amounts in Financial Statements		✓			✓	1 January 2018
	Table 11-6: Qualitative Disclosure of Differences between Carrying Amounts in Financial Statements and Regulatory Exposure Amounts		✓			✓	1 January 2018
	Table 11-6A: Prudent Valuation Adjustments	✓				✓	31 December 2018
Sub-division 4: Credit Risk	Table 11-7: General Qualitative Disclosures on Credit Risk		✓			✓	1 January 2017
	Table 11-8: Credit Quality of Assets	✓			✓		1 January 2017
	Table 11-9: Changes in Stock of Defaulted Loans and Debt Securities	✓			✓		1 January 2017
	Table 11-10: Additional Disclosures related to the Credit Quality of Assets		✓			✓	1 January 2017
	Table 11-11: Qualitative Disclosures related to CRM Techniques		✓			✓	1 January 2017
	Table 11-12: Overview of CRM Techniques	✓			✓		1 January 2018

	Tables	Fixed format	Flexible format	Quarterly	Semi-annually	Annually	Implementation date
	Table 11-13: Qualitative Disclosures on the use of external credit ratings under the SA(CR)		✓			✓	1 January 2017
	Table 11-14: SA(CR) and SA(EQ) - Credit Risk Exposure and CRM Effects	✓			✓		1 January 2017
	Table 11-15: SA(CR) and SA(EQ) – Exposures by Asset Classes and Risk Weights	✓			✓		1 January 2017
	Table 11-16: Qualitative Disclosures for IRBA Models		✓			✓	1 January 2017
	Table 11-17: IRBA - Credit Risk Exposures by Portfolio and PD Range	✓			✓		1 January 2017
	Table 11-18: IRBA - Effect on RWA of Credit Derivatives used as CRM	✓			✓		1 January 2017
	Table 11-19: IRBA– RWA Flow Statement for Credit Risk Exposures	✓		✓			1 January 2018
	Table 11-20: IRBA – Backtesting of PD per Portfolio		✓			✓	1 January 2017
	Table 11-21: IRBA - Specialised Lending and Equities under the Simple Risk Weight Method		✓		✓		1 January 2017
Sub-division 5: CCR	Table 11-22: Qualitative Disclosures related to CCR		✓			✓	1 January 2017
	Table 11-23: Analysis of CCR Exposure by Approach	✓			✓		1 January 2017
	Table 11-24: CVA Risk Capital Requirements	✓			✓		1 January 2017
	Table 11-25: Standardised Approach - CCR Exposures by Portfolio and Risk Weights	✓			✓		1 January 2017
	Table 11-26: IRBA - CCR Exposures by Portfolio and PD Range	✓			✓		1 January 2017
	Table 11-27: Composition of Collateral for CCR Exposure		✓		✓		1 January 2018
	Table 11-28: Credit Derivative Exposures		✓		✓		1 January 2017

	Tables	Fixed format	Flexible format	Quarterly	Semi-annually	Annually	Implementation date
	Table 11-29: RWA Flow Statements under the CCR Internal Models Method	✓		✓			1 January 2017
	Table 11-30: Exposures to Central Counterparties	✓			✓		1 January 2018
Sub-division 6: Securitisation	Table 11-31: Qualitative Disclosures related to Securitisation Exposures		✓			✓	1 January 2017
	Table 11-32: Securitisation Exposures in the Banking Book		✓		✓		1 January 2017
	Table 11-33: Securitisation Exposures in the Trading Book		✓		✓		1 January 2017
	Table 11-34: Securitisation Exposures in the Banking Book and associated Regulatory Capital Requirements – A Reporting Bank acting as Originator or as Sponsor	✓			✓		1 January 2017
	Table 11-35: Securitisation Exposures in the Banking book and associated Regulatory Capital Requirements – A Reporting Bank acting as Investor	✓			✓		1 January 2017
Sub-division 7: Market Risk	Table 11-36: Qualitative Disclosures related to Market Risk		✓			✓	1 January 2017
	Table 11-37: Qualitative Disclosures related to IMA		✓			✓	1 January 2017
	Table 11-38: Market Risk under Standardised Approach	✓			✓		1 January 2017
	Table 11-39: RWA Flow Statements of Market Risk Exposures under IMA	✓		✓			1 January 2017
	Table 11-40: IMA Values for Trading Portfolios	✓			✓		1 January 2017
	Table 11-41: Comparison of VaR Estimates with Gains or Losses		✓		✓		1 January 2017
	Table 11-44: Remuneration Policy		✓			✓	31 December 2017

	Tables	Fixed format	Flexible format	Quarterly	Semi-annually	Annually	Implementation date
Sub-division 10: Remuneration	Table 11-44A: Remuneration Awarded during the Financial Year		✓			✓	31 December 2017
	Table 11-44C: Special Payments		✓			✓	31 December 2017
	Table 11-44E: Deferred Remuneration		✓			✓	31 December 2017
Sub-division 11: Composition of Capital	Table 11B-1: Composition of Regulatory Capital	✓			✓		1 January 2018
	Table 11C-1: Reconciliation of Regulatory Capital to Balance Sheet		✓		✓[800A]		31 December 2017
	Table 11D-1: Main Features of Regulatory Capital Instruments		✓		✓		31 December 2017
Sub-division 12: Leverage Ratio	Table 11F-1: Leverage Ratio Summary Comparison Table	✓		✓[800B]			31 December 2017
	Table 11G-1: Leverage Ratio Common Disclosure Template	✓		✓			31 December 2017
Sub-division 13: Macroprudential Supervisory Measures	Table 11-46: Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer		✓		✓		31 December 2017

[800A] The frequency of disclosure may, with the prior approval of the Authority, be made with at least the same frequency as the publication of the Reporting Bank's financial statements.

[800B] The frequency of disclosure may, with the prior approval of the Authority, be made with at least the same frequency as the publication of the Reporting Bank's financial statements.

Amendments to Sub-division 2 [Effective from 31 Dec 2017]

Sub-division 2: Overview of key prudential metrics, risk management and RWA

11.3.3 A Reporting Bank shall disclose all items set out in ~~Table 11-2 and Table 11-3.~~the following tables –

(a) Table 11-1A for reporting periods ending on or after 1 January 2018;

(b) Table 11-2 for reporting periods ending on or after 1 January 2017;

(c) Table 11-3 for reporting periods ending prior to 31 December 2018; and

(d) Table 11-3B for reporting periods ending on or after 31 December 2018.

Table 11-1A: Key Metrics

Purpose	To provide an overview of a Reporting Bank's prudential regulatory metrics.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Key prudential metrics related to regulatory capital, leverage ratio and liquidity standards. Reporting Banks are required to disclose each metric's value using the corresponding standard's specifications for the reporting period-end (designated by T in the template below) as well as the four previous quarter-end figures (T-1 to T-4).
Frequency	Quarterly
Format	Fixed. If Reporting Banks wish to add rows to provide additional regulatory or financial metrics, they must provide definitions for these metrics and a full explanation of how the metrics are calculated (including the scope of consolidation and the regulatory capital used if relevant). The additional metrics must not replace the metrics in this disclosure requirement.
Accompanying narrative	A Reporting Bank shall supplement the template with a narrative commentary to explain any significant change in each metric's value compared with previous quarters, including the key drivers of such changes.[800C]

		(a)	(b)	(c)	(d)	(e)
		T	T-1	T-2	T-3	T-4
	Available capital (amounts)					
1	CET1 capital					
2	Tier 1 capital					
3	Total capital					
	Risk weighted assets (amounts)					
4	Total RWA					

[800C] For example, whether the changes are due to changes in the regulatory framework, or the group structure or business model of the Reporting Bank.

	Risk-based capital ratios as a percentage of RWA					
5	CET1 ratio (%)					
6	Tier 1 ratio (%)					
7	Total capital ratio (%)					
	Additional CET1 buffer requirements as a percentage of RWA					
8	Capital conservation buffer requirement (2.5% from 2019) (%)					
9	Countercyclical buffer requirement (%)					
10	Bank G-SIB and/or D-SIB additional requirements (%)					
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)					
12	CET1 available after meeting the Reporting Bank's minimum capital requirements (%)					
	Leverage Ratio					
13	Total Leverage Ratio exposure measure					
14	Leverage Ratio (%) (row 2 / row 13)					
	Liquidity Coverage Ratio					
15	Total High Quality Liquid Assets					
16	Total net cash outflow					
17	Liquidity Coverage Ratio (%)					
	Net Stable Funding Ratio					
18	Total available stable funding					
19	Total required stable funding					
20	Net Stable Funding Ratio (%)					

Table 11-1B: Explanatory Notes to Key Metrics

Definitions	
(a)	*CET1 available after meeting the Reporting Bank's minimum capital requirements (in row 12)*: This is to be calculated as the CET1 of the Reporting Bank (as a percentage of floor-adjusted risk weighted assets), less any CET1 capital used to meet the Reporting Bank's CET1, Tier 1 and total capital requirements. See Explanatory Notes in Table 11B-2, row 68.
(b)	*Total Leverage Ratio exposure measure (in row 13)*: This is in accordance with Sub-division 12 of Division 3 of this Part.
(c)	*Liquidity Coverage Ratio metrics: (in rows 15, 16 and 17)*: A Reporting Bank shall disclose the total adjusted values in accordance with MAS Notice 651.
(d)	*Net Stable Funding Ratio metrics (in rows 18, 19 and 20)*: These are in accordance with MAS Notice 653.
Linkages across tables	

(e)	Amount in [Table 11-1A:1/a] is equal to [Table 11B-1:29/a]
(f)	Amount in [Table 11-1A:2/a] is equal to [Table 11B-1:45/a]
(g)	Amount in [Table 11-1A:3/a] is equal to [Table Table 11B-1:59/a]
(h)	Amount in [Table 11-1A:4/a] is equal to [Table 11B-1:60/a]
(i)	Amount in [Table 11-1A:5/a] is equal to [Table 11B-1:61/a]
(j)	Amount in [Table 11-1A:6/a] is equal to [Table 11B-1:62/a]
(k)	Amount in [Table 11-1A:7/a] is equal to [Table 11B-1:63/a]
(l)	Amount in [Table 11-1A:8/a] is equal to [Table 11B-1:65/a]
(m)	Amount in [Table 11-1A:9/a] is equal to [Table 11B-1:66/a]
(n)	Amount in [Table 11-1A:10/a] is equal to [Table 11B-1:67/a]
(o)	Amount in [Table 11-1A:12/a] is equal to [Table 11B-1:68/a]
(p)	Amount in [Table 11-1A:13/a] is equal to [Table 11G-1:21/a]
(q)	Amount in [Table 11-1A:14/a] is equal to [Table 11G-1:22/a]
(r)	Amount in [Table 11-1A:15/a] is equal to [LCR Disclosure Template under Appendix 1 of MAS Notice 651:21/b]
(s)	Amount in [Table 11-1A:16/a] is equal to [LCR Disclosure Template under Appendix 1 of MAS Notice 651:22/b]
(t)	Amount in [Table 11-1A:17/a] is equal to [LCR Disclosure Template under Appendix 1 of MAS Notice 651:23/b]
(u)	Amount in [Table 11-1A:18/a] is equal to [NSFR Disclosure Template under Annex 1 of MAS Notice 653:14/e]
(v)	Amount in [Table 11-1A:19/a] is equal to [NSFR Disclosure Template under Annex 1 of MAS Notice 653:33/e]
(w)	Amount in [Table 11-1A:20/a] is equal to [NSFR Disclosure Template under Annex 1 of MAS Notice 653:34/e]

Table 11-2: Risk Management Approach

Purpose	To provide a description of the Reporting Bank's strategy and how senior management and the Board assess and manage risks, enabling users to gain a clear understanding of the Reporting Bank's risk tolerance or risk appetite in relation to its main activities and significant risks.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Qualitative information
Frequency	Annually
Format	Flexible

A Reporting Bank shall provide a description of its risk management objectives and policies, in particular, a description of -	
(a)	(i) How the business model determines and interacts with the overall risk profile (e.g. key risks related to the business model and how each of these key risks is reflected and described in the risk disclosures); and (ii) How the risk profile of the Reporting Bank interacts with the risk tolerance approved by the Board.
(b)	Its risk governance structure: (i) the responsibilities attributed throughout the Reporting Bank (e.g. oversight and delegation of authority, breakdown of responsibilities by risk type and business unit etc.); and (ii) the relationships between the structures involved in risk management processes (e.g. the Board, senior management, the Board Risk Committee, risk management structure, compliance function, IA function).
(c)	Channels that communicate, decline and enforce the risk culture within the Reporting Bank (e.g. code of conduct; manuals containing operating limits or procedures to deal with violations or breaches of risk thresholds; procedures to raise and share risk issues between business lines and risk functions).
(d)	Scope and main features of risk measurement systems.
(e)	The process of risk information reporting provided to the Board and senior management, including the scope and main content of reporting on risk exposure.
(f)	Stress testing (e.g. portfolios subject to stress testing, scenarios adopted and methodologies used, and the use of stress testing in risk management).
(g)	(i) Strategies and processes to manage, hedge and mitigate risks that arise from its business model; and (ii) Processes for monitoring the continuing effectiveness of hedges and mitigants.

Table 11-3: Overview of RWA

Purpose	To provide an overview of total RWA and further breakdowns of RWA.
Scope of application	This table is mandatory for all Reporting Banks.
Content	RWA and capital requirements under Pillar 1
Frequency	Quarterly
Format	Fixed
Accompanying narrative	A Reporting Bank shall identify and explain the drivers behind differences in current and prior quarterly reporting periods, where such differences are significant. The Reporting Bank shall explain the adjustments made where minimum capital requirements in column (c) do not correspond to ~~10% of~~ the RWA in column (a) multiplied by the minimum Total CAR requirement applicable to the Reporting Bank as defined in paragraph 4.1.4. If the Reporting Bank uses the IMM to calculate the credit risk-weighted exposure amount of its equity exposures, the Reporting Bank shall provide a description of the main characteristics of its internal model annually.

		(a)	(b)	(c)
		RWA		Minimum capital requirements
		As at end of current quarter	As at end of prior quarter	As at end of current quarter
1	Credit risk (excluding CCR)			
2	of which: SA(CR) and SA(EQ)			
3	of which: IRBA and IRBA(EQ) for equity exposures under the PD/LGD method			
4	CCR			
5	of which: SA-CCR*			
6	of which: CCR Internal Models Method			
7	IRBA(EQ) for equity exposures under the simple risk weight method or the IMM			
8	Equity investments in funds – look through approach			
9	Equity investments in funds – mandate-based approach			
10	Equity investments in funds – fall back approach			
10a	Equity investment in funds –partial use of an approach			

11	Unsettled transactions			
12	Securitisation exposures in the banking book			
13	of which: ~~IRBA(SE) - RBM and IAM~~ SEC-IRBA			
14	of which: ~~IRBA(SE) -~~ SEC-ERBA, including IAA			
15	of which: ~~SA(SE)~~ SEC-SA			
16	Market risk			
17	of which: SA(MR)			
18	of which: IMA			
19	Operational risk			
20	of which: BIA			
21	of which: SA(OR)			
22	of which: AMA			
23	Amounts below the thresholds for deduction (subject to 250% risk weight)			
24	Floor adjustment			
25	**Total**			

*Depending on the approach used for Pillar 1, the Reporting Bank shall choose either "SA-CCR" or "Current Exposure Method" for the heading of row 5.

Table 11-3A: Explanatory Notes to Overview of RWA

Definitions	
(a)	*Minimum capital requirements:* Pillar 1 capital requirements (based on the minimum Total CAR requirement applicable to the Reporting Bank as defined in paragraph 4.1.4~~10% RWA~~) at the reporting date, after taking into account applicable capital floors and adjustments.
(b)	*Credit risk (excluding CCR):* This excludes capital requirements for securitisation exposures (which are reported in row 12) and for CCR (which are reported in row 4), i.e. capital requirements for pre-settlement counterparty exposures arising from OTC derivative transactions, long settlement transactions and SFTs, capital requirements for exposures to CCPs included in the calculation of CCP RWA, and capital requirements for CVA risk.
(c)	*Credit risk (excluding CCR) of which: IRBA and IRBA(EQ):* This includes the capital requirements for equities in the banking book calculated in accordance with the PD/LGD method.
(d)	*CCR:* Row 4 relates to capital requirements for CCR (including CVA RWA and CCP RWA). A Reporting Bank shall report in row 5 of this table, information corresponding to CCR exposures calculated using the SA-CCR in accordance with Annex 7O. CVA RWA and CCP RWA are excluded in rows 5 and 6.
(e)	*Equity investments in funds – look-through approach:* This is in accordance with paragraphs 7.5.62 to 7.5.66 and 7.5.73.
(f)	*Equity investments in funds – mandate-based approach:* This is in accordance with paragraphs 7.5.67 to 7.5.69 and 7.5.73.
(g)	*Equity investments in funds – fall-back approach:* This is in accordance with paragraphs 7.5.70.
(h)	*Equity investment in funds – partial use of an approach:* This is in accordance with paragraph 7.5.72.
(i)	*Settlement risk:* This is in accordance with paragraphs 7.3.36 to 7.3.40 and paragraphs 7.4.70 to 7.4.74.
(j)	*Securitisation exposures in the banking book*: The RWA amounts do not systematically correspond to the RWA reported in Tables 11-34 and 11-35, which are before application of the cap.
(k)	*Market risk*: This includes capital requirements for securitisation exposures booked in the trading book but excludes capital requirements for CCR.
(l)	*Amounts below the thresholds for deduction (subject to 250% risk weight)*: The amounts correspond to items as defined under paragraph 6.1.3(p)(iii), subject to a 250% risk weight.
(m)	*Floor adjustment:* This is the impact of any Pillar 1 floor adjustment on total RWA and total capital such that the total row reflects the total RWA and total capital requirements, after including such an adjustment. A Reporting Bank shall not disclose Pillar 2 adjustments in this row. The Reporting Bank shall reflect floor or adjustments at a more granular level (e.g. at risk category level) in the capital requirements reported for the risk category. The floor adjustment on total RWA shall be calculated as

	(*total capital requirement with capital floor* – *total capital requirement without floor*) x the reciprocal of the *minimum Total CAR requirement applicable to the Reporting Bank*~~(1/0.10)~~ where – *total capital requirement with capital floor* = the floored Total Capital Resources Requirement of the Reporting Bank, calculated in accordance with Part V of this Notice; *total capital requirement without floor* = Total Capital Resources Requirement calculated using the approaches adopted by the Reporting Bank under this Notice; and *Total Capital Resources Requirement* is as defined in paragraph 5.1.6. *Minimum Total CAR requirement applicable to the Reporting Bank* is as defined in paragraph 4.1.4. For column (c), the minimum capital requirements attributed to the floor adjustment shall be calculated as ~~10% of~~ the floor adjustment on total RWA multiplied by the minimum Total CAR requirement applicable to the Reporting Bank.
(n)	*Total*: This is the sum of rows 1, 4, 7, 8, 9, 10, 10a, 11, 12, 16, 19, 23 and 24.
Linkages across tables	
(o)	Amount in [Table 11-3:2/a] is equal to [Table 11-14:14/e].
(p)	Amount in [Table 11-3:3/a] is equal to the sum of [Table 11-17: Total (all portfolios)/i] + [Table 11-21: Specialised lending total RWA for HVCRE and other than HVCRE].
(q)	Amount in [Table 11-3:4/a] is equal to the sum of [Table 11-23:6/f + Table 11-24:4/b + Table 11-30:1/b + Table 11-30:11/b].
(r)	Amount in [Table 11-3:7/a] is equal to the sum of [Table 11-21/Equities exposures: Simple risk weight method/Total RWA] + the RWA corresponding to the IMM in accordance with paragraphs 7.5.30 to 7.5.45.
(s)	Amount in [Table 11-3:12/c] is equal to the sum of [Table 11-34:1/n + Table 11-34:1/o + Table 11-34:1/p + Table 11-34:1/q] + [Table 11-35:1/n + Table 11-35:1/o + Table 11-35:1/p + Table 11-35:1/q].
(t)	Amount in [Table 11-3:17/a] is equal to [Table 11-38:9/a].
(u)	Amount in [Table 11-3:18/a] is equal to [Table 11-39:8/f].

Table 11-3B: Overview of RWA

Purpose	To provide an overview of total RWA and further breakdowns of RWA.
Scope of application	This table is mandatory for all Reporting Banks.
Content	RWA and capital requirements under Pillar 1.
Frequency	Quarterly
Format	Fixed
Accompanying narrative	A Reporting Bank shall supplement the table with a narrative commentary identifying and explaining the drivers behind differences in current and prior quarterly reporting periods, where such differences are significant. The Reporting Bank shall explain in the narrative commentary the adjustments made where minimum capital requirements in column (c) do not correspond to the RWA in column (a) multiplied by the minimum Total CAR requirement applicable to the Reporting Bank as defined in paragraph 4.1.4. If the Reporting Bank uses the IMM to calculate the credit risk-weighted exposure amount of its equity exposures, the Reporting Bank shall provide a description of the main characteristics of its internal model annually in the accompanying narrative.

		(a)	(b)	(c)
		RWA		Minimum capital requirements
		As at end of current quarter	As at end of prior quarter	As at end of current quarter
1	Credit risk (excluding CCR)			
2	of which: Standardised Approach			
3	of which: F-IRBA			
4	of which: supervisory slotting approach			
5	of which: A-IRBA			
6	CCR			
7	of which: SA-CCR*			
8	of which: CCR internal models method			
9	of which: other CCR			
9a	of which: CCP			
10	CVA			
11	Equity exposures under the simple risk weight method			
11a	Equity exposures under the IMM			
12	Equity investments in funds – look through approach			
13	Equity investments in funds – mandate-based approach			

14	Equity investments in funds – fall back approach			
14a	Equity investment in funds – partial use of an approach			
15	Unsettled transactions			
16	Securitisation exposures in the banking book			
17	of which: SEC-IRBA			
18	of which: SEC-ERBA, including IAA			
19	of which: SEC-SA			
20	Market risk			
21	of which: SA(MR)			
22	of which: IMA			
23	Operational risk			
24	Amounts below the thresholds for deduction (subject to 250% risk weight)			
25	Floor adjustment			
26	**Total**			

* Depending on the approach used for Pillar 1, the Reporting Bank shall choose either "SA-CCR" or "Current Exposure Method" for the heading of row 7.

Table 11-3C: Explanatory Notes to Overview of RWA

Definitions	
(a)	*RWA in columns (a) and (b)*: Risk-weighted assets, including the 1.06 scaling factor under paragraph 7.1.1(b).
(b)	*Minimum capital requirements in column (c)*: Pillar 1 capital requirements (based on the minimum Total CAR requirement applicable to the Reporting Bank as defined in paragraph 4.1.4) at the reporting date.
(c)	*Credit risk (excluding CCR)*: This excludes capital requirements for – (i) securitisation exposures (which are reported in row 16); (ii) CVA (which is reported in row 10); and (iii) CCR (which is reported in row 6), i.e. capital requirements for pre-settlement counterparty exposures arising from OTC derivative transactions, long settlement transactions and SFTs and capital requirements for exposures to CCPs included in the calculation of CCP RWA.
(d)	*Credit risk (excluding CCR) of which: Standardised Approach*: This comprises SA(CR) exposures and SA(EQ) exposures (excluding equity investments in funds held in the banking book, which are reported in rows 12 to 14a).
(e)	*Credit risk (excluding CCR) of which: F-IRBA*: This comprises IRBA exposures for which the Reporting Bank is using the F-IRBA to calculate credit-risk weighted exposure amounts, and IRBA(EQ) exposures for which the Reporting Bank is using the PD/LGD method under paragraphs 7.5.46 to 7.5.60 to

	calculate credit risk-weighted exposure amounts (excluding equity investments in funds held in the banking book, which are reported in rows 12 to 14a).
(f)	*Supervisory slotting approach*: This is in accordance with Sub-division 12 of Division 4 of Part VII.
(g)	*Credit risk (excluding CCR) of which: A-IRBA*: This comprises IRBA exposures for which the Reporting Bank is using the A-IRBA or the IRBA for the IRBA retail asset class to calculate credit risk-weighted exposure amounts.
(h)	*CCR*: Row 6 relates to capital requirements for CCR (excluding CVA RWA and including CCP RWA). A Reporting Bank shall report in row 7 of this table, information corresponding to CCR exposures calculated using the SA-CCR in accordance with Annex 7O. CVA RWA and CCP RWA are excluded in rows 7 and 8.
(i)	*CCR of which: other CCR*: Row 9 relates to capital requirements for CCR calculated using a method other than the SA-CCR or CCR internal models method and excludes CVA RWA and CCP RWA, which are reported in rows 10 and 9a respectively.
(j)	*CCR of which: CCP:* Row 9a relates to capital requirements for CCP exposures.
(k)	*CVA*: Row 10 relates to capital requirements for CVA calculated in accordance with Annex 7AI.
(l)	*Equity exposures under the simple risk weight method*: IRBA(EQ) exposures for which the Reporting Bank is using the simple risk weight method under paragraphs 7.5.24 to 7.5.26 to calculate credit risk-weighted exposure amounts (excluding equity investments in funds held in the banking book, which are reported in rows 12 to 14a).
(m)	*Equity exposures under the IMM*: IRBA(EQ) exposures for which the Reporting Bank is using the IMM under paragraphs 7.5.27 to 7.5.45 to calculate credit risk-weighted exposure amounts (excluding equity investments in funds held in the banking book, which are reported in rows 12 to 14a).
(n)	*Equity investments in funds – look-through approach*: This is in accordance with paragraphs 7.5.62 to 7.5.66 and 7.5.73.
(o)	*Equity investments in funds – mandate-based approach*: This is in accordance with paragraphs 7.5.67 to 7.5.69 and 7.5.73.
(p)	*Equity investments in funds – fall-back approach*: This is in accordance with paragraphs 7.5.70 and 7.5.70A.
(q)	*Equity investment in funds – partial use of an approach*: This is in accordance with paragraph 7.5.72.
(r)	*Unsettled transactions*: This is in accordance with paragraphs 7.3.36 to 7.3.40 and paragraphs 7.4.70 to 7.4.74.
(s)	*Securitisation exposures in the banking book*: The RWA amounts do not systematically correspond to the RWA reported in Tables 11-34 and 11-35, which are before application of the cap.
(t)	*Market risk*: This includes capital requirements for securitisation exposures booked in the trading book but excludes capital requirements for CCR.
(u)	*Operational risk*: This is in accordance with Part IX.
(v)	*Amounts below the thresholds for deduction (subject to 250% risk weight)*: The amounts correspond to items as defined under paragraph 6.1.3(p)(iii), subject to a 250% risk weight.

(w)	*Floor adjustment*: This is the impact of any Pillar 1 floor adjustment on total RWA and total capital such that the total row reflects the total RWA and total capital requirements, after including such an adjustment. A Reporting Bank shall not disclose Pillar 2 adjustments in this row. The floor adjustment on total RWA shall be calculated as (*Floored total capital resources requirement - total capital requirement without floor*) x the reciprocal of the *minimum Total CAR requirement applicable to the Reporting Bank* where – *Floored total capital resources requirement* = the Total Capital Resources Requirement of the Reporting Bank when the total capital floor is binding, calculated in accordance with Part V of this Notice; *total capital requirement without floor* = Total Capital Resources Requirement calculated using the approaches adopted by the Reporting Bank under this Notice; and *Total Capital Resources Requirement* is as defined in paragraph 5.1.6. *Minimum Total CAR requirement applicable to the Reporting Bank* is as defined in paragraph 4.1.4. For column (c), the minimum capital requirements attributed to the floor adjustment shall be calculated as the floor adjustment on total RWA multiplied by the minimum Total CAR requirement applicable to the Reporting Bank.
(x)	*Total*: This is the sum of rows 1, 6, 10, 11, 11a, 12, 13, 14, 14a, 15, 16, 20, 24, 25 and 26.
Linkages across tables	
(y)	Amount in [Table 11-3B:2/a] is equal to [Table 11-14:14/e].
(z)	Amount in [Table 11-3B:3/a] is equal to the sum of [Table 11-17: Total (all portfolios)/i] + [Table 11-21: Specialised lending total RWA for HVCRE and other than HVCRE].
(aa)	Amount in [Table 11-3B:6/a] is equal to the sum of [Table 11-23:6/f + Table 11-30:1/b + Table 11-30:11/b].
(ab)	Amount in [Table 11-3B: 11/a] is equal to [Table 11-21/Equities exposures: Simple risk weight method/Total RWA].
(ac)	Amount in [Table 11-3B: 16/c] is equal to the sum of [Table 11-34:1/n + Table 11-34:1/o + Table 11-34:1/p + Table 11-34:1/q] + [Table 11-35:1/n + Table 11-35:1/o + Table 11-35:1/p + Table 11-35:1/q].
(ad)	Amount in [Table 11-3B:21/a] is equal to [Table 11-38:9/a].
(ae)	Amount in [Table 11-3B:22/a] is equal to [Table 11-39:8/f].

Amendments to Sub-division 3 [Effective from 31 Dec 2017]

Sub-division 3: Linkages between financial statements and regulatory exposures

11.3.4 A Reporting Bank shall disclose all items set out in Tables 11-4, 11-5, ~~to~~ 11-6 and 11-6A.

11.3.5 For the purposes of Tables 11-4 to 11-33, 'carrying amounts' refer to values of items as reported in financial statements but according to the scope of regulatory consolidation, unless otherwise specified in Sub-divisions 3 to 6 in this Division.

Table 11-4: Differences between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statement Categories with Regulatory Risk Categories

Purpose	Columns (a) and (b) enable users to identify the differences between a Reporting Bank's accounting scope of consolidation and its regulatory scope of consolidation. Columns (c) to (g) break down the amount reported in a Reporting Bank's financial statements by regulatory risk categories. The sum of amounts in columns (c) to (g) may not be equal to the amount in column (b) as some items may be subject to regulatory capital requirements in more than one risk category.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Carrying amounts
Frequency	Annually
Format	Flexible
Accompanying narrative	A Reporting Bank shall provide qualitative explanation on items that are subject to regulatory capital requirements in more than one risk category.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Carrying amounts as reported in balance sheet of published financial statements	Carrying amounts under regulatory scope of consolidation	Carrying amounts of items -				
			subject to credit risk requirements	subject to CCR requirements	subject to securitisation framework	subject to market risk requirements	not subject to capital requirements or subject to deduction from regulatory capital
Assets							
Cash and balances at central banks							

Items in the course of collection from other banks							
Trading portfolio assets							
Financial assets designated at fair value							
Derivative financial instruments							
Loans and advances to banks							
Loans and advances to customers							
Reverse repos and other similar secured lending							
~~Available for sale~~ Fair value through other comprehensive income financial investments							
Current and deferred tax assets							
Prepayments, accrued income and other assets							
Investments in associates and joint ventures							
Goodwill and intangible assets							
Property, plant and equipment							

Total assets							
Liabilities							
Deposits from banks							
Items in the course of collection due to other banks							
Customer accounts							
Repos and other similar secured borrowings							
Trading portfolio liabilities							
Financial liabilities designated at fair value							
Derivative financial instruments							
Debt securities in issue							
Accruals, deferred income and other liabilities							
Current and deferred tax liabilities							
Subordinated liabilities							
Provisions							
Retirement benefit liabilities							
Total liabilities							

Table 11-4A: Explanatory Notes to Differences between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statement Categories with Regulatory Risk Categories

Instructions	
(a)	The Reporting Bank shall strictly follow the balance sheet presentation in its financial reporting.
(b)	Columns (a) and (b) should be merged if a Reporting Bank's accounting scope of consolidation is the same as its regulatory scope of consolidation.
(c)	Column (g) includes amounts not subject to capital requirements or subject to deductions from regulatory capital.
(d)	Where an item is subjected to capital requirements from more than one risk category framework, the item shall be reported in all columns that it is subjected to capital requirements. Therefore, the sum of amounts reported in columns (c) to (g) may be greater than the amount reported in column (b).

Table 11-5: Main Sources of Differences between Regulatory Exposure Amounts and Carrying Amounts in Financial Statements

Purpose	To provide information on the main sources of differences, other than due to the difference in scope of consolidation, between regulatory exposure amounts and carrying amounts in financial statements.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Carrying amounts for rows 1 to 3 and exposure amounts considered for regulatory purposes for row 9.
Frequency	Annually
Format	Flexible. Row headings are provided for illustrative purposes only and the rows should be adapted by the Reporting Bank to describe the most meaningful or relevant drivers for differences between regulatory exposure amounts and carrying amounts in financial statements.
Accompanying narrative	Set out in Table 11-6

		(a)	(b)	(c)	(d)	(e)
		Total	Items subject to -			
			credit risk requirements	CCR requirements	securitisation framework	market risk requirements
1	**Asset carrying amount under regulatory scope of consolidation (as per Table 11-4)**					
2	Liabilities carrying amount under regulatory scope of consolidation (as per Table 11-4)					
3	Total net amount under regulatory scope of consolidation					
4	Off-balance sheet amounts					
5	Differences in valuations					
6	Differences due to different netting rules, other than those already included in row 2					

7	Differences due to consideration of provisions					
8	Differences due to prudential filters					
9	**Exposure amounts considered for regulatory purposes**					

Table 11-5A: Explanatory Notes to Main Sources of Differences between Regulatory Exposure Amounts and Carrying Amounts in Financial Statements

Instructions	
(a)	*Off-balance sheet amounts:* This includes notional amounts of off-balance sheet items in column (a) and the amounts subject to regulatory framework, after application of the CCFs in columns (b) to (e), where relevant.
(b)	*Exposure amounts considered for regulatory purposes*: This refers to the aggregate amount considered as a starting point of the RWA calculation for each risk category.
Linkages across tables	
(c)	Amounts in rows 1 and 2 of columns (b) to (e) correspond to amounts in columns (c) to (f) of Table 11-4.

Table 11-6: Qualitative Disclosure of Differences between Carrying Amounts in Financial Statements and Regulatory Exposure Amounts

Purpose	To provide qualitative explanation on the differences between carrying amounts in financial statements and regulatory exposure amounts under each framework.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Qualitative information
Frequency	Annually
Format	Flexible

<table>
<tr><td colspan="2">A Reporting Bank shall explain the sources of the differences between accounting amounts as reported in financial statements and regulatory exposure amounts, as disclosed in Tables 11-4 and 11-5. A Reporting Bank shall provide a description of -</td></tr>
<tr><td>(a)</td><td>The sources of any significant differences between the amounts in columns (a) and (b) in Table 11-4.</td></tr>
<tr><td>(b)</td><td>The sources of differences between accounting amounts as reported in financial statements and exposure amounts considered for regulatory purposes shown in Table 11-5.</td></tr>
<tr><td>(c)</td><td>The systems and controls to ensure that the valuation adjustments are prudent and reliable, in accordance with the standards for a prudent valuation framework set out in Annex 8N. It shall include a description of -
(i) valuation methodologies, including a description of the extent that mark-to-market and mark-to-model methodologies are used;
(ii) independent price verification process; and
(iii) procedures for valuation adjustments or reserves, including a description of the process and the methodology for valuing trading positions by type of instrument.</td></tr>
</table>

Table 11-6A: Prudent Valuation Adjustments

Purpose	To provide a breakdown of the constituent elements of a Reporting Bank's prudent valuation adjustments in accordance with paragraphs 1.17 to 1.21 in Annex 8N. A Reporting Bank shall take into account the guidance set out in *Supervisory Guidance for Assessing Banks' Financial Instrument Fair Value Practices* issued by the BCBS in April 2009, in particular Principle 10 in providing the breakdown.
Scope of application	This table is mandatory for all Reporting Banks.
Content	Prudent valuation adjustments for all assets measured at fair value (marked to market or marked to model) and for which valuation adjustments are required. Assets can be non-derivative or derivative instruments.
Frequency	Annual
Format	Fixed. The row numbers cannot be altered. Rows which are not applicable to a Reporting Bank should be filled with "0" and the reason why they are not applicable should be explained in the accompanying narrative.
Accompanying narrative	A Reporting Bank shall supplement the table with a narrative commentary to explain any significant changes over the reporting period and the key drivers of such changes. In particular, Reporting Banks must provide details on other prudent valuation adjustments in row 11, where significant, and define them in the narrative commentary when they are not listed in Annex 8N. Reporting Banks must also explain the types of financial instruments for which high amounts of valuation adjustments are observed.

		(a)	(b)	(c)	(d)	(e)	**(f)**	(g)	(h)
		Equity	Interest rates	FX	Credit	Commodities	**Total**	of which: in the trading book	of which: in the banking book
1	Closeout uncertainty								
2	of which: Mid-market value								
3	of which: Closeout cost								
4	of which: Concentration								
5	Early termination								
6	Model risk								
7	Operational risk								
8	Investing and funding costs								
9	Unearned credit spreads								
10	Future administrative costs								

11	Other								
12	**Total adjustment**								
13	of which: exceeds the valuation adjustment under financial reporting standards								

Table 11-6B: Explanatory Notes to Prudent Valuation Adjustments

Definitions	
(a)	*Closeout cost (in row 3)*: Valuation adjustments required to take account of the valuation uncertainty to adjust for the fact that the position level valuations calculated do not reflect an exit price for the position or portfolio.[800D]
(b)	*Concentration (in row 4)*: Valuation adjustments over and above market price and closeout costs that would be required to get to a prudent exit price for positions that are larger than the size of positions for which the valuation has been calculated i.e. cases where the aggregate position held by the institution is larger than normal traded volume or larger than the position sizes on which observable quotes or trades that are used to calibrate the price or inputs used by the core valuation model are based.
(c)	*Early termination (in row 5)*: Valuation adjustments to take into account the potential losses arising from contractual or non-contractual early terminations of customer trades that are not reflected in the valuation.
(d)	*Model risk (in row 6)*: Valuation adjustments to take into account valuation model risk which arises due to: (i) the potential existence of a range of different models or model calibrations which are used by users of Pillar 3 data; (ii) the lack of a firm exit price for the specific product being valued; (iii) the use of an incorrect valuation methodology; (iv) the risk of using unobservable and possibly incorrect calibration parameters; or (v) the fact that market or product factors are not captured by the core valuation model.
(e)	*Operational risk (in row 7)*: Valuation adjustments to take into account the potential losses that may be incurred as a result of operational risk related to valuation processes.
(f)	*Investing and funding costs (in row 8)*: Valuation adjustments to reflect the valuation uncertainty in the funding costs that other users of Pillar 3 data would factor into the exit price for a position or portfolio. It includes funding valuation adjustments on derivatives exposures.
(g)	*Unearned credit spreads (in row 9)*: Valuation adjustments to take account of the valuation uncertainty in the adjustment necessary to include the current value of expected losses due to counterparty default on derivative positions, including the valuation uncertainty on CVAs.
(h)	*Future administrative costs (in row 10)*: Valuation adjustments to take into account the administrative costs and future hedging costs over the expected life of the exposures for which a direct exit price is not applied for the closeout costs.

[800D] For example, where such valuations are calibrated to a mid-market price.

	This valuation adjustment has to include the operational costs arising from hedging, administration and settlement of contracts in the portfolio. The future administrative costs are incurred by the portfolio or position but are not reflected in the core valuation model or the prices used to calibrate inputs to that model.
(i)	*Other (in row 11)*: Valuation adjustments which are required to take into account factors that will influence the exit price but which do not fall in any of the categories listed in paragraph 1.19 in Annex 8N. These should be described by Reporting Banks in the narrative commentary that supports the disclosure.
Linkages across tables	
(j)	[Table 11-6A:13/f] is equal to [11B-1:7/a].

Amendments to Sub-division 10 [Effective from 31 Dec 2017]

Sub-division 10: Remuneration

11.3.16 A Reporting Bank shall disclose all items set out in Tables 11-44, 11-44A, 11-44C and 11-44E. ~~A Reporting Bank should, articulate, as far as possible, how the following items complement and support their overall risk management framework.~~

~~11.3.17 A Reporting Bank shall, for the purposes of Table 11-44, include quantitative disclosures that only cover senior management and material risk takers and which are broken down between these two categories.~~

Table 11-44: Remuneration Policy

~~Qualitative Disclosures~~	~~(a)~~	~~A description of the following:~~ ~~name, composition and mandate of the main body overseeing remuneration;~~ ~~(i) external consultants whose advice has been sought, the body by which they have been commissioned, and the areas of the remuneration process they have been providing advice on;~~ ~~(ii) a description of the scope of the Reporting Bank's remuneration policy (e.g. by regions, business lines), including the extent to which it is applicable to foreign subsidiaries and branches; and~~ ~~(iii) a description of the types of employees considered as senior management and material risk takers including the number of employees in each group.~~
	~~(b)~~	~~A description of the design and structure of remuneration processes, including:~~ ~~(i) an overview of the key features and objectives of remuneration policy;~~ ~~(ii) where the remuneration committee reviewed the Reporting Bank's remuneration policy during the past year, an overview of any changes that were made; and~~ ~~(iii) a discussion of how the Reporting Bank ensures that risk and compliance employees are remunerated independently of the businesses they oversee.~~
	~~(c)~~	~~A description of the ways in which current and future risks are taken into account in the remuneration processes, including:~~ ~~(i) an overview of the key risks that the Reporting Bank takes into account when implementing remuneration measures;~~ ~~(ii) an overview of the nature and type of the key measures used to take account of these risks, including risks that are difficult to measure (values need not be disclosed);~~

		~~(iii) a discussion of the ways in which these measures affect remuneration; and~~ ~~(iv) a discussion of how the nature and type of these measures has changed over the past year, reasons for the change, as well as the impact of changes on remuneration.~~
	~~(d)~~	~~A description of the ways in which the Reporting Bank seeks to link performance during a performance measurement period with levels of remuneration, including:~~ ~~(i) an overview of main performance metrics for the Reporting Bank, top-level business lines and individuals;~~ ~~(ii) a discussion of how amounts of individual remuneration are linked to bank-wide and individual performance; and~~ ~~(iii) a discussion of the measures the Reporting Bank will implement to adjust remuneration in the event that performance metrics are weak[805].~~
	~~(e)~~	~~A description of the ways in which the Reporting Bank seeks to adjust remuneration to take account of longer-term performance, including:~~ ~~(i) a discussion of the Reporting Bank's policy on deferral and vesting of variable remuneration and, if the fraction of variable remuneration that is deferred differs across employees or groups of employees, a description of the factors that determine the fraction and their relative importance; and~~ ~~(ii) a discussion of the Reporting Bank's policy and criteria for adjusting deferred remuneration before vesting and after vesting through clawback arrangements.~~
	~~(f)~~	~~A description of the different forms of variable remuneration that the Reporting Bank utilises and the rationale for using these different forms, including:~~ ~~(i) an overview of the forms of variable remuneration offered (i.e. cash, shares and share-linked instruments and other forms of remuneration[806]); and~~ ~~(ii) a discussion of the use of the different forms of variable remuneration and, if the mix of different forms of variable remuneration differs across employees or groups of employees, a description of the factors that determine the mix and their relative importance.~~

[805] ~~This should include the Reporting Bank's criteria for determining "weak" performance metrics.~~

[806] ~~A description of the elements corresponding to other forms of variable remuneration (if any) should be provided.~~

~~Quantitative Disclosures~~	~~(g)~~	~~The number of meetings held by the main body overseeing remuneration during the financial year and remuneration paid to its members.~~
	~~(h)~~	~~For each financial year,~~ ~~(i) the number of employees that have received a variable remuneration award;~~ ~~(ii) the number and total amount of guaranteed bonuses awarded;~~ ~~(iii) the number and total amount of sign-on awards made; and~~ ~~(iv) the number and total amount of severance payments made.~~
	~~(i)~~	~~The total amount of:~~ ~~(i) outstanding deferred remuneration, broken down into cash, shares and share-linked instruments and other forms of remuneration; and~~ ~~(ii) deferred remuneration paid out in the financial year.~~
	~~(j)~~	~~A breakdown of the amount of remuneration awards for the financial year to include:~~ ~~(i) fixed and variable remuneration;~~ ~~(ii) deferred and non-deferred remuneration; and~~ ~~(iii) the different forms of remuneration used (i.e. cash, shares and share-linked instruments and other forms of remuneration).~~ ~~Table 11A-1 of Annex 11A of this Part illustrates how the breakdown of remuneration awards should be presented for each financial year.~~
	~~(k)~~	~~A description of employees' exposure to implicit adjustments (e.g. fluctuations in the value of shares or performance units) and explicit adjustments (e.g. malus, clawbacks or similar reversals or downward revaluations of awards) of deferred remuneration and retained remuneration. This should include the total amount of:~~ ~~(i) outstanding deferred remuneration and retained remuneration exposed to ex-post explicit and/or implicit adjustments;~~ ~~(ii) reductions during the financial year due to ex-post explicit adjustments; and~~ ~~(iii) reductions during the financial year due to ex-post implicit adjustments.~~

Purpose	Describe a Reporting Bank's remuneration policy as well as key features of the remuneration system to allow meaningful assessments by users of Pillar 3 data of banks' compensation practices.
Scope of application	The template is mandatory for all Reporting Banks.
Content	Qualitative information
Frequency	Annual. If it is not possible to disclose the table together with annual financial statements, it should be disclosed as soon as possible thereafter and no later than 4 months after the end of each financial year.
Format	Flexible

Reporting Banks must describe the main elements of their remuneration system and how they develop this system. In particular, the following elements, where relevant, must be described:	
(a)	Information relating to the bodies that oversee remuneration. Disclosures must include: (i) the name, composition and mandate of the main body overseeing remuneration; (ii) the external consultants whose advice have been sought, the body by which they were commissioned, and in what areas of the remuneration process; (iii) a description of the scope of the bank's remuneration policy[806A], including the extent to which it is applicable to foreign subsidiaries and branches; and (iv) a description of the types of employees considered as material risk-takers and as senior managers.
(b)	Information relating to the design and structure of remuneration processes. Disclosures must include: (i) the key features and objectives of remuneration policy; (ii) whether the remuneration committee reviewed the firm's remuneration policy during the past year, and if so, an overview of any changes that were made, the reasons for those changes and their impact on remuneration; and (iii) a description of how the bank ensures that risk and compliance employees are remunerated independently of the businesses they oversee.
(c)	Description of the ways in which current and future risks are taken into account in the remuneration processes. Disclosures must include a description of the key risks, their measurement and how these measures affect remuneration.
(d)	Description of the ways in which the bank seeks to link performance during a performance measurement period with levels of remuneration. Disclosures should include: (i) a description of main performance metrics for bank, top-level business lines and individuals; (ii) a description of how amounts of individual remuneration are linked to bank-wide and individual performance; and

[806A] For example, by regions or business lines.

	(iii) a description of the measures the bank will implement to adjust remuneration in the event that performance metrics are weak, including the bank's criteria for determining "weak" performance metrics.
(e)	Description of the ways in which the bank seeks to adjust remuneration to take account of longer-term performance. Disclosures should include: (i) a description of the bank's policy on deferral and vesting of variable remuneration and, if the fraction of variable remuneration that is deferred differs across employees or groups of employees, a description of the factors that determine the fraction and their relative importance; and (ii) a description of the bank's policy and criteria for adjusting deferred remuneration before vesting and after vesting through clawback arrangements.
(f)	Description of the different forms of variable remuneration that the bank utilises and the rationale for using these different forms. Disclosures should include: (i) a description of the forms of variable remuneration offered (i.e. cash, shares and share-linked instruments and other forms); and (ii) a description of the use of the different forms of variable remuneration and, if the mix of different forms of variable remuneration differs across employees or groups of employees), a description of the factors that determine the mix and their relative importance.

Table 11-44A: Remuneration Awarded during the Financial Year

Purpose	Provide quantitative information on remuneration for the financial year.
Scope of application	The template is mandatory for all Reporting Banks.
Content	Quantitative information
Frequency	Annual. If it is not possible to disclose the template together with the annual financial statements, it should be disclosed as soon as possible thereafter and no later than 4 months after the end of each financial year.
Format	Flexible
Accompanying narrative	Reporting Banks may wish to supplement the template with a narrative commentary to explain any significant movements over the reporting period and the key drivers of such movements.

			(a)	(b)
			Senior management	Other material risk-takers
1	Fixed remuneration	Number of employees		
2		Total fixed remuneration (row 3 + row 5 + row 7)		
3		of which: cash-based		
4		of which: deferred		
5		of which: shares and other share-linked instruments		
6		of which: deferred		
7		of which: other forms of remuneration		
8		of which: deferred		
9	Variable remuneration	Number of employees		
10		Total variable remuneration (row 11 + row 13 + row 15)		
11		of which: cash-based		
12		of which: deferred		
13		of which: shares and other share-linked instruments		
14		of which: deferred		
15		of which: other forms of remuneration		
16		of which: deferred		
17	Total remuneration (row 2 + row 10)			

Table 11-44B: Explanatory Notes to Remuneration Awarded during the Financial Year

Explanatory notes	
(a)	Senior management and other material risk-takers categories in columns (a) and (b) must correspond to the type of employees described in Table 11-44.
(b)	Other forms of remuneration in rows 7 and 15 must be described in Table 11-44 and, if needed, in the accompanying narrative to Table 11-44A.

Table 11-44C: Special Payments

Purpose	Provide quantitative information on special payments for the financial year.
Scope of application	The template is mandatory for all Reporting Banks.
Content	Quantitative information
Frequency	Annual. If it is not possible to disclose the template together with the annual financial statements, it should be disclosed as soon as possible thereafter and no later than 4 months after the end of each financial year.
Format	Flexible
Accompanying narrative	Reporting Banks may wish to supplement the template with a narrative commentary to explain any significant movements over the reporting period and the key drivers of such movements.

		Guaranteed bonuses		Sign-on awards		Severance payments	
		Number of employees	Total amount	Number of employees	Total amount	Number of employees	Total amount
1	Senior management*						
2	Other material risk-takers						

* Where the disclosure of the total amount of certain special payments will reveal information relating to the remuneration of specific employees, the Reporting Bank may omit the disclosure. Nonetheless, the Reporting Bank should provide the reason for the omission in the narrative commentary and disclose the omitted information to the Authority to assist the Authority in its assessment of the Reporting Bank's remuneration practices.

Table 11-44D: Explanatory Notes to Special Payments

Explanatory notes	
(a)	Senior management and other material risk-takers categories in columns (a) and (b) must correspond to the type of employees described in Table 11-44.
(b)	Guaranteed bonuses are payments of guaranteed bonuses during the financial year.
(c)	Sign-on awards are payments allocated to employees upon recruitment during the financial year.
(d)	Severance payments are payments allocated to employees dismissed during the financial year.

Table 11-44E: Deferred Remuneration

Purpose	Provide quantitative information on deferred and retained remuneration.
Scope of application	The template is mandatory for all Reporting Banks.
Content	Quantitative information
Frequency	Annual. If it is not possible to disclose the template together with the annual financial statements, it should be disclosed as soon as possible thereafter and no later than 4 months after the end of each financial year.
Format	Flexible
Accompanying narrative	Reporting Banks may wish to supplement the template with a narrative commentary to explain any significant movements over the reporting period and the key drivers of such movements.

		(a)	(b)	(c)	(d)	(e)
	Deferred and retained remuneration	Total outstanding deferred remuneration	of which: total outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustments	Total amendments during the year due to ex post explicit adjustments	Total amendments during the year due to ex post implicit adjustments	Total deferred remuneration paid out in the financial year
1	Senior management					
2	Cash					
3	Shares					
4	Share-linked instruments					
5	Other					
6	Other material risk-takers					
7	Cash					
8	Shares					
9	Share-linked instruments					
10	Other					

Table 11-44F: Explanatory Notes to Deferred Remuneration

Explanatory notes	
(a)	*Outstanding exposed to ex post explicit adjustment*: part of the deferred and retained remuneration that is subject to direct adjustment clauses.[806B]
(b)	*Outstanding exposed to ex post implicit adjustment*: part of the deferred and retained remuneration that is subject to adjustment clauses that could change the remuneration, due to the fact that they are linked to the performance of other indicators.[806C]
(c)	In columns (a) and (b), Reporting Banks must disclose the figures as at reporting date (cumulated over the last years). In columns (c)–(e), Reporting Banks must disclose the movements during the financial year. While columns (c) and (d) must show the movements specifically related to column (b), column (e) must show payments that have affected column (a).

[806B] For example, subject to malus, clawbacks or similar reversal or downward revaluations of awards.
[806C] For example, fluctuation in the value of shares performance or performance units.

Amendments to Sub-division 11 [Effective from 31 Dec 2017]

Sub-division 11: Composition of Capital

11.3.18 To enable users to compare the capital adequacy of banks across jurisdictions, a Reporting Bank shall disclose the information set out in this Sub-division in its published financial statements, or provide a URL in its published financial statements to such disclosure which is made on its website or publicly available regulatory reports. Regardless of the location of the disclosure, all disclosures shall be in the format set out in this Sub-division. ~~A Reporting Bank shall disclose the information required under this Sub-division (with the exception of the requirements set out in paragraphs 11.3.20 to 11.3.22) from the date of publication of its first set of financial statements relating to a balance sheet date on or after 30 June 2013.~~

11.3.19 A Reporting Bank shall disclose all items set out in Table 11-45 on a quarterly basis.

Table 11-45: Key Capital Figures

Quantitative Disclosures	(a)	Total RWA and minimum capital requirements at the Group level. These shall be based on the floor-adjusted total RWA which incorporates the floor adjustment on total RWA set out in Table 11-3A(m).
	(b)	CET1 Capital, Tier 1 Capital, Eligible Total Capital, CET1 CAR, Tier 1 CAR and Total CAR at the Group level. The CAR figures shall be based on the floor-adjusted total RWA which incorporates the floor adjustment on total RWA set out in Table 11-3A(m). ~~The Countercylical Buffer calculated in accordance with paragraphs 4.1.15, 4.1.16 and 4.1.20 in Part IV, including the geographical breakdown of its private sector credit exposures used in the calculation.~~
	(c)	Total RWA, CET1 CAR, Tier 1 CAR and Total CAR for each significant[807] banking subsidiary[808]. In the case of a significant local subsidiary, the required disclosures shall be based on the floor-adjusted total RWA which incorporates the floor adjustment on total RWA set out in Table 11-3A(m). In the case of a significant overseas subsidiary, the required disclosures shall incorporate any Pillar 1 floor adjustments in accordance with the capital adequacy rules that are applied to the subsidiary in the overseas jurisdiction.

807 A significant banking subsidiary may be determined in several ways, for example, in terms of revenue contribution to the banking group.

808 A Reporting Bank shall provide disclosures in relation to a significant subsidiary on a Solo basis, but may choose to disclose such information on a sub-consolidated basis providing that capital adequacy requirements are imposed on this basis and that an explanatory note to this effect is provided by the Reporting Bank. In the case of a significant overseas subsidiary, the required disclosures may be made on the basis of the capital adequacy rules that are applied to the subsidiary in the overseas jurisdiction, provided that this is disclosed in an explanatory note that includes a description of the basis of the calculation and the approaches applied to each major risk type in the overseas jurisdiction. Such disclosures are appropriate in order to recognise the limitations of transfer of funds or capital within the Group.

~~Post 1 January 2018 disclosure~~Composition of capital template

11.3.20 To improve consistency and ease of use of disclosures relating to the composition of regulatory capital, and to mitigate the risk of inconsistent formats undermining the objective of enhanced disclosure, a Reporting Bank shall provide a breakdown of its regulatory capital and regulatory adjustments in the format as set out in the template in Annex 11B of this Part with effect from 1 January 2018. This template shall be used to capture the capital position of the Reporting Bank from 1 January 2018 onwards, and after the end of the transition period for the phasing-in of regulatory adjustments set out in paragraphs 6.1.3, 6.2.3 and 6.3.3.

11.3.21 To prevent a divergence of templates that could undermine the objectives of consistency and comparability, a Reporting Bank shall not add, delete or change the definitions of any rows from the template set out in Annex 11B of this Part.

11.3.22 In cases where a more conservative definition of an element is required under this Notice relative to those set out under the Basel III capital standards, a Reporting Bank shall clearly label them as being different from the Basel III definition, and separately disclose the impact of each of these differences in the notes to the template.

Reconciliation requirements[809]

11.3.23 A Reporting Bank shall, for the purpose of the reconciliation, publish its financial statements in accordance with the Accounting Standards, as at each reporting date for which the Reporting Bank provides its reconciliation disclosures, on its website. To show a full reconciliation between the balance sheet in its published financial statements and the regulatory capital elements reported using the template in Annex 11B, a Reporting Bank shall perform the three following steps using the template in Annex 11C of this Part –~~:~~

(a) Step 1: Disclose the reported balance sheet under the regulatory scope of consolidation:

(i) The difference in scope of consolidation for accounting purposes and for regulatory purposes often explains much of the difference between the numbers used in the calculation of regulatory capital and the numbers used in a Reporting Bank's published financial statements. As such, a key element of the reconciliation requirements involves disclosing how the balance sheet in its published financial statements changes when the regulatory scope of consolidation is applied. ~~An illustration of Step 1 is set out in Annex 11C, Table 11C-1.~~

[809] Prior to 1 January 2018 (i.e. during the transitional period), the reconciliation requirements shall apply to the modified template used set out in Annex 11E (instead of the post-1 January 2018 template) of this Part.

(ii) In addition to sub-paragraph (i) above, the Reporting Bank shall disclose the list of legal entities that are included within its accounting scope of consolidation but excluded from its regulatory scope of consolidation, and vice versa[810]. For entities that are included in both the regulatory and accounting scopes of consolidation, but the method of consolidation differs between these two scopes, the Reporting Bank shall list these legal entities separately and explain the differences in the consolidation methods. For each legal entity that is required to be disclosed by this sub-paragraph, the Reporting Bank shall disclose the entity's total balance sheet assets, total balance sheet equity (as stated on the accounting balance sheet of the legal entity) and a description of the principal activities of the entity.

(iii) Where its regulatory scope of consolidation is identical to its accounting scope of consolidation, the Reporting Bank shall state that there is no difference between the regulatory and accounting scopes of consolidation and proceed to Step 2 below.

(b) Step 2: Expand the lines of the balance sheet under the regulatory scope of consolidation to identify all components of regulatory capital reported using the template set out in Annex 11B[811].

(i) As many elements used in the calculation of regulatory capital cannot be readily identified from the face of the balance sheet, a Reporting Bank should expand the rows of the regulatory-scope balance sheet such that all components of regulatory capital reported using the template set out in Annex 11B are disclosed separately.

(ii) In addition, each element of the expanded balance sheet shall be given a reference number or letter for the purposes of Step 3 below. ~~An illustration of Step 2 is set out in Annex 11C, Table 11C-2.~~

(c) Step 3: Map each element disclosed under Step 2 to the composition of capital disclosure template set out in Annex 11B.

(i) The Reporting Bank shall use the reference numbers or letters from Step 2 to show the source of every input to each component of regulatory capital reported using the template set out in Annex 11B. ~~An illustration of Step 3 is set out in Annex 11C, Table 11C-3.~~

11.3.24 The three-step approach described above offers the following benefits:

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810 This refers to legal entities that are included in the regulatory scope of consolidation, but excluded from the accounting scope of consolidation.

811 A Reporting Bank would only need to expand the lines of the balance sheet to the extent necessary to reach the components of capital disclosed in the capital disclosure template set out in Annex 11B.

(a) the level of disclosure is proportionate, varying with the complexity of the balance sheet and capital structure of the Reporting Bank. Where no further information is added by a step, the Reporting Bank can skip the step;

(b) users can trace the origin of the elements of the regulatory capital back to their exact location on a Reporting Bank's balance sheet under the regulatory scope of consolidation; and

(c) the approach is flexible enough to be used under any accounting standard. A Reporting Bank is required to map all regulatory capital components reported in the disclosure template back to its balance sheet under the regulatory scope of consolidation regardless of whether the accounting standards require the source to be reported on the balance sheet.

Main features template

11.3.25 To ensure that the main features of the regulatory capital instruments of a Reporting Bank are disclosed in a consistent and comparable way, the Reporting Bank shall complete, for each regulatory capital instrument issued, the main features template set out in Annex 11D of this Part.

11.3.26 This template represents the minimum level of summary disclosure that a Reporting Bank is required to report in respect of each regulatory capital instrument issued. In this regard, the Reporting Bank shall -

(a) disclose within the template, information relating to its capital instruments that are subject to the transitional arrangements;

(b) report each regulatory capital instrument issued, including ordinary shares, in a separate column of the template, such that the completed template provides a 'main features report' that summarises all of the regulatory capital instruments of the Reporting Bank's banking group;

(c) disclose the list of features set out in Annex 11D and any other features of its regulatory capital instruments that it deems to be important;

(d) keep the main features report up to date, such that the disclosure is updated and made publicly available whenever the Reporting Bank issues or repays a capital instrument and whenever there is a redemption, conversion/write-down or other material change in the nature of an existing capital instrument; and

(e) ensure that the main features report is included in the Reporting Bank's published financial statements or, at a minimum, that these financial statements provide a URL to where the main features report can be found on the Reporting Bank's website or publicly available regulatory reports.

Other disclosure requirements

11.3.27 A Reporting Bank which discloses non-regulatory ratios[812] involving components of regulatory capital, shall accompany such disclosures with a comprehensive explanation of how these ratios are calculated.

11.3.28 A Reporting Bank shall make available on its website, the full terms and conditions of all capital instruments included in its regulatory capital. This will allow users to investigate the specific features of individual capital instruments. Such disclosures shall be updated whenever the Reporting Bank issues or repays a capital instrument and whenever there is a redemption, conversion/write-down or other material change in the nature of an existing capital instrument.

11.3.29 A Reporting Bank shall also maintain a section on its website, where all the information relating to disclosure of regulatory capital is made available to users ("regulatory disclosures section"). In cases where the disclosure requirements set out in this Sub-division are met via publication through publicly available regulatory reports, the regulatory disclosures section of the Reporting Bank's website should provide URLs to the relevant regulatory reports that relate to the Reporting Bank.

11.3.30 A Reporting Bank is encouraged to include the information disclosed in the regulatory disclosures section of the website in its published financial statements. At a minimum, the Reporting Bank shall ensure that the published financial statements direct users to the relevant section of its website, where the full set of required regulatory disclosure is provided.

Template during the transitional period

11.3.31 During the transitional period, a Reporting Bank shall disclose the specific components of capital, including capital instruments and regulatory adjustments that are benefitting from the transitional provisions. To ensure that disclosure during the transitional period is consistent and comparable across banks in different jurisdictions, the Reporting Bank shall use the modified version of the template set out in Annex 11B, and this modified version, as well as an illustration of how the template will work in practice, is set out in Annex 11E of this Part.

[812] For example, "Equity Tier 1", "Core Tier 1" or "Tangible Common Equity" ratios.

Amendments to Sub-division 12
[Effective from 31 Dec 2017, except for deletion of Paragraph 11.3.35]

Sub-division 12: Leverage Ratio

~~11.3.32 A Reporting Bank shall disclose the information required under this Sub-division from the date of publication of its first set of financial statements relating to a balance sheet on or after 1 January 2015.~~

11.3.33 A Reporting Bank shall disclose the information set out in this Sub-division in its published financial statements, or provide a URL in its published financial statements to such disclosure which is made on its website or publicly available regulatory reports.

11.3.34 Regardless of the location of the disclosure, a Reporting Bank shall make all disclosures in the format set out in this Sub-division. To prevent a divergence of formats that could undermine the objectives of consistency and comparability, the Reporting Bank shall not add, delete or change the definitions of any rows from the templates set out in this Sub-division.

[Deletion of Paragraph 11.3.35 effective from 1 Jan 2018]
~~11.3.35 A Reporting Bank shall disclose rows 20, 21 and 22 in Table 11G-1 of Annex 11G as at the end of each quarter, along with the comparative figures of the prior three quarters. The Reporting Bank may, with the prior approval of the Authority, disclose these three rows based on more frequent calculations (e.g. daily or monthly averaging) as long as the basis of calculation is consistently applied over time.~~

Summary comparison table

11.3.36 A Reporting Bank shall, for the purpose of the reconciliation, publish its financial statements in accordance with the Accounting Standards, as at each reporting date for which the Reporting Bank provides its reconciliation disclosures, on its website. A Reporting Bank shall disclose a reconciliation of its balance sheet assets in its published financial statements with the leverage ratio exposure measure in the format as set out in Annex 11F~~, using values at the end of the financial reporting period~~.

Common disclosure template

11.3.37 A Reporting Bank shall disclose a breakdown of the main leverage ratio regulatory elements in the format as set out in Annex 11G~~, using values at the end of the financial reporting period~~.

~~11.3.38 A Reporting Bank shall disclose and explain the source(s) of material differences between its total balance sheet assets (net of on-balance sheet derivative and SFT assets) as reported in its published financial statements and its on-balance sheet exposures in row 1 of Table 11G-1 of Annex 11G.~~

~~Other disclosure requirements~~

~~11.3.39 A Reporting Bank shall explain the key drivers of material changes in its leverage ratio observed from the end of the previous financial reporting period to the end of the current financial reporting period (i.e. whether these changes stem from changes in the numerator, changes in the denominator, or both).~~

Insertion of Sub-division 13 [Effective from 31 Dec 2017]

Sub-division 13: Macroprudential Supervisory Measures

11.3.40 A Reporting Bank shall disclose all items set out in Table 11-46.

Table 11-46: Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer

Purpose	To provide an overview of the geographical distribution of private sector credit exposures relevant for the calculation of the countercyclical buffer.
Scope of application	The template is mandatory for all Reporting Banks subject to a countercyclical buffer requirement based on the jurisdictions in which they have private sector credit exposures subject to a countercyclical buffer requirement compliant with the Basel standards. Only banks with exposures to jurisdictions in which the countercyclical buffer rate is higher than zero must disclose this template set out in Table 11-46.
Content	Private sector credit exposures and other relevant inputs necessary for the computation of the bank-specific countercyclical buffer requirement.
Frequency	Semi-annual
Format	Flexible
Accompanying narrative	For the purposes of the countercyclical buffer, Reporting Banks should use, where possible, exposures on an "ultimate risk" basis. They should disclose the methodology of geographical allocation used, and explain the jurisdictions or types of exposures for which the ultimate risk method is not used as a basis for allocation. The allocation of exposures to jurisdictions should be made taking into consideration the *Frequently asked questions on the Basel III countercyclical capital buffer, October 2015*[812A] and any other clarifications provided by BCBS. Information about the drivers for changes in the exposure amounts and the applicable jurisdiction-specific rates must be summarised.

[812A] www.bis.org/bcbs/publ/d339.pdf

	(a)	(b)	(c)	(d)
Geographical breakdown	Country-specific countercyclical buffer requirement	RWA for private sector credit exposures used in the computation of the countercyclical buffer	Bank-specific countercyclical buffer requirement	Countercyclical buffer amount
(Home) Country 1				
Country 2				
Country 3				
…				
Country N				
Sum				
Total				

Table 11-47: Explanatory Notes to Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer

Definitions	
(a)	*RWA for private sector credit exposures*: This is in accordance with paragraph 4.1.16(b).
(b)	*Country*: Country in which the Reporting Bank has relevant private sector credit exposures, and which has set a countercyclical capital buffer rate greater than zero that was applicable during the reporting period covered by the template set out in Table 11-46.
(c)	*Sum*: Sum of RWA for private sector credit exposures, in jurisdictions with a non-zero countercyclical buffer rate.
(d)	*Country-specific Countercyclical buffer requirement*: This is the requirement that is applicable at the reporting date, calculated in accordance with paragraph 4.1.16(a).
(e)	*Bank-specific countercyclical buffer requirement*: This is in accordance with paragraph 4.1.15.
(f)	*Total*: Total of RWA for private sector credit exposures, across all jurisdictions to which the bank is exposed, including jurisdictions with no countercyclical buffer rate or with a countercyclical buffer rate set at zero, and value of the bank specific countercyclical capital buffer rate and resulting countercyclical buffer amount.
(g)	*Countercyclical capital buffer amount*: amount of CET1 Capital held to meet the countercyclical capital buffer requirement determined in accordance with paragraphs 4.1.14 to 4.1.20.
Linkages across tables	
(h)	Amount in [Table 11-46:Total/d] is equal to [Table 11-1A:9/a] for the semi-annual disclosure of Table 11-1A, and to [Table 11-1A:9/b] in the quarterly disclosure of Table 11-1A.
(i)	Amount in [Table 11-46:Total/d] is equal to [11B-2:66/a].

Deletion of Annex 11A [Effective from 31 Dec 2017]

Annex 11A

~~BREAKDOWN IN REMUNERATION DISCLOSURES FOR SENIOR MANAGEMENT AND MATERIAL RISK TAKERS~~

~~Table 11A-1 – Amount of Remuneration Awards for Current Financial Year~~[813]

~~Category~~		~~Unrestricted~~	~~Deferred~~
~~Fixed remuneration~~	~~Cash-based~~	~~x~~	~~x~~
	~~Shares and share-linked instruments~~	~~x~~	~~x~~
	~~Other forms of remuneration~~	~~x~~	~~x~~
~~Variable remuneration~~	~~Cash-based~~	~~x~~	~~x~~
	~~Shares and share-linked instruments~~	~~x~~	~~x~~
	~~Other forms of remuneration~~	~~x~~	~~x~~

~~[813] Separate tables should be completed for (a) senior management and (b) material risk takers.~~

Amendments to Annex 11B [Effective from 31 Dec 2017]

Annex 11B

~~POST 1 JANUARY 2018 DISCLOSURE TEMPLATE~~ COMPOSITION OF CAPITAL

A Reporting Bank shall disclose its capital position using the template set out in Table 11B-1 after the transition period for the phasing-in of regulatory adjustments set out in paragraphs 6.1.3, 6.2.3 and 6.3.3 ends on 1 January 2018.[814] A Reporting Bank shall exclude the rows in italics from the disclosure template after all ineligible capital instruments have been fully phased out in accordance with paragraph 6.5.3 of the Notice. ~~Table 11B-2 sets out the explanation of each row of Table 11B-1.~~

A Reporting Bank is required to complete column (b) to show the source of every major input, which is to be cross-referenced to the corresponding rows in Table 11C. This is Step 3 as required under the three-step approach to reconciliation as explained and illustrated in paragraphs 11.3.23(c) and Annex 11C. Table 11B-2 sets out the explanation of each row of Table 11B-1.

Table 11B-1: ~~Disclosure Template to be used from 1 January 2018~~ Composition of Regulatory Capital

Purpose	To provide a breakdown of the constituent elements of a Reporting Bank's capital.
Scope of application	The table is mandatory for all Reporting Banks at the consolidated level.
Content	Breakdown of regulatory capital according to the scope of regulatory consolidation.
Frequency	Semi-annually
Format	Fixed
Accompanying narrative	A Reporting Bank shall explain any significant changes over the semi-annual reporting period and the key drivers of such changes.

		(a)	(b)
		Amount	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common Equity Tier 1 capital: instruments and reserves			
1	Paid-up ordinary shares and share premium (if applicable)		(g)
2	Retained earnings		

814 A Reporting Bank shall report deductions from capital as positive numbers, and additions to capital as negative numbers.

3#	Accumulated other comprehensive income and other disclosed reserves		
4	*Directly issued capital subject to phase out from CET1 (only applicable to non-joint stock companies)*		
5	Minority interest that meets criteria for inclusion		
6	**Common Equity Tier 1 capital before regulatory adjustments**		
Common Equity Tier 1 capital: regulatory adjustments			
7	Valuation adjustment pursuant to Part VIII of MAS Notice 637		
8	Goodwill, net of associated deferred tax liability		(a) minus (d)
9#	Intangible assets, net of associated deferred tax liability		(b) minus (e)
10#	Deferred tax assets that rely on future profitability		
11	Cash flow hedge reserve		
12	Shortfall of TEP relative to EL under IRBA		
13	Increase in equity capital resulting from securitisation transactions		
14	Unrealised fair value gains/losses on financial liabilities and derivative liabilities arising from changes in own credit risk		
15	Defined benefit pension fund assets, net of associated deferred tax liability		
16	Investments in own shares		
17	Reciprocal cross-holdings in ordinary shares of financial institutions		
18	Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake		
19	Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries) (amount above 10% threshold)		
20#	Mortgage servicing rights (amount above 10% threshold)		(c) minus (f) minus 10% threshold

21#	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of associated deferred tax liability)		
22	Amount exceeding the 15% threshold		
23	of which: investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)		
24#	of which: mortgage servicing rights		
25#	of which: deferred tax assets arising from temporary differences		
26	National specific regulatory adjustments		
26A	PE/VC investments held beyond the relevant holding periods set out in MAS Notice 630		
26B	Capital deficits in subsidiaries and associates that are regulated financial institutions		
26C	Any other items which the Authority may specify		
27	Regulatory adjustments applied in calculation of CET1 Capital due to insufficient AT1 Capital to satisfy required deductions		
28	**Total regulatory adjustments to CET1 Capital**		
29	**Common Equity Tier 1 capital (CET1)**		
Additional Tier 1 capital: instruments			
30	AT1 capital instruments and share premium (if applicable)		(h)
31	of which: classified as equity under the Accounting Standards		
32	of which: classified as liabilities under the Accounting Standards		
33	*Transitional: Ineligible capital instruments (pursuant to paragraphs 6.5.3 and 6.5.4)*		
34	AT1 capital instruments issued by fully-consolidated subsidiaries that meet criteria for inclusion		
35	*of which: instruments issued by subsidiaries subject to phase out*		

36	**Additional Tier 1 capital before regulatory adjustments**		
Additional Tier 1 capital: regulatory adjustments			
37	Investments in own AT1 capital instruments		
38	Reciprocal cross-holdings in AT1 capital instruments of financial institutions		
39	Investments in AT1 capital instruments of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake		
40	Investments in AT1 capital instruments of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)		
41	National specific regulatory adjustments which the Authority may specify		
42	Regulatory adjustments applied in calculation of AT1 Capital due to insufficient Tier 2 Capital to satisfy required deductions		
43	**Total regulatory adjustments to Additional Tier 1 capital**		
44	**Additional Tier 1 capital (AT1)**		
45	**Tier 1 capital (T1 = CET1 + AT1)**		
Tier 2 capital: instruments and provisions			
46	Tier 2 capital instruments and share premium (if applicable)		
47	*Transitional: Ineligible capital instruments (pursuant to paragraphs 6.5.3 and 6.5.4)*		
48	Tier 2 capital instruments issued by fully-consolidated subsidiaries that meet criteria for inclusion		
49	*of which: instruments issued by subsidiaries subject to phase out*		
50	Provisions		
51	**Tier 2 capital before regulatory adjustments**		
Tier 2 capital: regulatory adjustments			
52	Investments in own Tier 2 instruments		

53	Reciprocal cross-holdings in Tier 2 capital instruments of financial institutions		
54	Investments in Tier 2 capital instruments of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake		
55	Investments in Tier 2 capital instruments of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)		
56	National specific regulatory adjustments which the Authority may specify		
57	**Total regulatory adjustments to Tier 2 capital**		
58	**Tier 2 capital (T2)**		
59	**Total capital (TC = T1 + T2)**		
60	**Floor-adjusted total risk weighted assets**		
Capital ratios (as a percentage of floor-adjusted risk weighted assets)			
61	**Common Equity Tier 1 CAR**		
62	**Tier 1 CAR**		
63	**Total CAR**		
64	Bank-specific buffer requirement		
65	of which: capital conservation buffer requirement		
66	of which: bank specific countercyclical buffer requirement		
67	of which: G-SIB and/or D-SIB buffer requirement (if applicable)		
68	Common Equity Tier 1 available ~~to meet buffers~~ after meeting the Reporting Bank's minimum capital requirements		
National minima			
69	Minimum CET1 CAR		
70	Minimum Tier 1 CAR		
71	Minimum Total CAR		
Amounts below the thresholds for deduction (before risk weighting)			
72	Investments in ordinary shares, AT1 capital and Tier 2 capital of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake		

73	Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)		
74	Mortgage servicing rights (net of associated deferred tax liability)		
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liability)		
Applicable caps on the inclusion of provisions in Tier 2			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)		
77	Cap on inclusion of provisions in Tier 2 under standardised approach		
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)		
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach		
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
80	*Current cap on CET1 instruments subject to phase out arrangements*		
81	*Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)*		
82	*Current cap on AT1 instruments subject to phase out arrangements*		
83	*Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)*		
84	*Current cap on T2 instruments subject to phase out arrangements*		
85	*Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)*		

Items marked with a hash [#] are elements where a more conservative definition has been applied relative to those set out under the Basel III capital standards.

Table 11B-2: Explanatory Notes to ~~Disclosure Template to be used from 1 January 2018~~ Composition of Regulatory Capital

Explanatory Notes	
1	This is the sum of components calculated in accordance with paragraph 6.1.1(a) and 6.1.1(b) of the Notice.
2	This is as defined under paragraph 6.1.1(c) of the Notice.
3	This is the sum of components calculated in accordance with paragraph 6.1.1(d) and 6.1.1(e) of the Notice.
4	This is only applicable to non-joint stock companies.
5	This is as defined under paragraph 6.1.1(f) of the Notice.
6	This is the sum of rows 1 to 5.
7	This is as defined under paragraph 6.1.3(n) of the Notice.
8	This is as defined under paragraph 6.1.3(a) of the Notice.
9	This is as defined under paragraph 6.1.3(b) of the Notice.
10	This is as defined under paragraph 6.1.3(c) of the Notice.
11	This is as defined under paragraph 6.1.3(d) of the Notice.
12	This is as defined under paragraph 6.1.3(e) of the Notice.
13	This is as defined under paragraph 6.1.3(f) of the Notice.
14	This is as defined under paragraph 6.1.3(g) of the Notice.
15	This is as defined under paragraph 6.1.3(h) of the Notice.
16	This is as defined under paragraph 6.1.3(i) of the Notice.
17	This is as defined under paragraph 6.1.3(j) of the Notice.
18	This is as defined under paragraph 6.1.3(o) of the Notice.
19	This is as defined under paragraph 6.1.3(p) of the Notice.
20	Not applicable. This is the amount of mortgage servicing rights which is subject to threshold deduction in accordance with paragraphs 87 to 88 of Basel III. Mortgage servicing rights are required to be fully deducted.
21	Not applicable. This is the amount of deferred tax assets arising from temporary differences which is subject to threshold deduction in accordance with paragraphs 87 to 88 of Basel III. Deferred tax assets arising from temporary differences are required to be fully deducted.
22	This is the total amount by which the three threshold items exceed the 15% threshold, excluding amounts reported in rows 19 to 21, calculated in accordance with paragraph 6.1.3(p)(i)(B) of the Notice.
23	The amount reported in row 22 that relates to investments in the ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries at the Solo and Group levels).
24	Not applicable. This is the amount reported in row 22 that relates to mortgage servicing rights. Mortgage servicing rights are required to be fully deducted.
25	Not applicable. This is the amount reported in row 22 that relates to deferred tax assets arising from temporary differences. Deferred tax assets arising from temporary differences are required to be fully deducted.
26	This is the sum of rows 26A to 26C.
26A	This is as defined under paragraph 6.1.3(l) of the Notice.
26B	This is as defined under paragraph 6.1.3(m) of the Notice.
26C	This is as defined under paragraph 6.1.3(q) of the Notice.
27	This is as defined under paragraph 6.1.3(r) of the Notice.

Explanatory Notes	
28	This is the total regulatory adjustments to CET1 Capital, to be calculated as the sum of rows 7 to 22 plus rows 26 and 27.
29	This is CET1 Capital, to be calculated as row 6 minus row 28.
30	This is the sum of components calculated in accordance with paragraphs 6.2.1(a) and 6.2.1(b) of the Notice.
31	The amount in row 30 classified as equity under the Accounting Standards.
32	The amount in row 30 classified as liabilities under the Accounting Standards.
33	This is the sum of capital instruments directly issued by the Reporting Bank that no longer qualify as AT1 Capital calculated in accordance with paragraphs 6.5.3 and 6.5.4 of the Notice.
34	This is as defined under paragraph 6.2.1(c) of the Notice.
35	The amount reported in row 34 that relates to instruments subject to phase out from AT1 Capital in accordance with the requirements of paragraphs 6.5.3 and 6.5.4 of the Notice.
36	This is the sum of rows 30, 33 and 34.
37	This is as defined under paragraph 6.2.3(a) of the Notice.
38	This is as defined under paragraph 6.2.3(b) of the Notice.
39	This is as defined under paragraph 6.2.3(d) of the Notice.
40	This is as defined under paragraph 6.2.3(e) of the Notice.
41	This is as defined under paragraph 6.2.3(f) of the Notice.
42	This is as defined under paragraph 6.2.3(g) of the Notice.
43	This is the sum of rows 37 to 42.
44	This is Additional Tier 1 Capital, to be calculated as row 36 minus row 43.
45	This is Tier 1 Capital, to be calculated as row 29 plus row 44.
46	This is the sum of components calculated in accordance with paragraph 6.3.1(a) and 6.3.1(b) of the Notice.
47	This is the sum of capital instruments directly issued by the Reporting Bank that no longer qualify as Tier 2 Capital calculated under paragraph 6.5.3 and 6.5.4 of the Notice.
48	This is as defined under paragraph 6.3.1(c) of the Notice.
49	The amount reported in row 48 that relates to instruments subject to phase out from Tier 2 Capital in accordance with the requirements of paragraphs 6.5.3 and 6.5.4 of the Notice.
50	This is the sum of components calculated in accordance with paragraphs 6.3.1(d) and 6.3.1(e) of the Notice.
51	This is the sum of rows 46 to 48 and row 50.
52	This is as defined under paragraph 6.3.3(a) of the Notice.
53	This is as defined under paragraph 6.3.3(b) of the Notice.
54	This is as defined under paragraph 6.3.3(d) of the Notice.
55	This is as defined under paragraph 6.3.3(e) of the Notice.
56	This is as defined under paragraph 6.3.3(f) of the Notice.
57	This is the sum of rows 52 to 56.
58	This is Tier 2 Capital, to be calculated as row 51 minus row 57.
59	This is Total capital, to be calculated as row 45 plus row 58.

Explanatory Notes	
60	This is the floor-adjusted total risk weighted assets of the Reporting Bank, after incorporating the floor adjustment set out in Table 11-3A(m).
61	This is CET1 CAR, to be calculated as row 29 divided by row 60 (expressed as a percentage).
62	This is Tier 1 CAR, to be calculated as row 45 divided by row 60 (expressed as a percentage).
63	This is Total CAR, to be calculated as row 59 divided by row 60 (expressed as a percentage).
64	This is the bank-specific buffer requirement (minimum CET1 requirement plus capital conservation buffer requirement plus countercyclical buffer requirement~~s~~ plus G-SIB and/or D-SIB buffer requirement, expressed as a percentage of risk weighted assets). This is to be calculated as the sum of (i) the minimum CET1 requirement calculated in accordance with paragraph 4.1.4; (ii) the capital conservation buffer requirement calculated in accordance with paragraphs 4.1.5 to 4.1.13; (iii) the bank-specific countercyclical buffer requirement calculated in accordance with paragraphs 4.1.14 to 4.1.25; and (iv) the buffer requirement for ~~global systemically important banks~~ G-SIBs and/or D-SIBs (if applicable)[815]. This row will show the CET1 CAR below which the Reporting Bank will become subject to constraints on distributions.
65	The amount in row 64 (expressed as a percentage of risk weighted assets) that relates to the capital conservation buffer).
66	The amount in row 64 (expressed as a percentage of risk weighted assets) that relates to the bank-specific countercyclical buffer requirement.
67	The amount in row 64 (expressed as a percentage of risk weighted assets) that relates to the Reporting Bank's G-SIB and/or D-SIB requirement, where relevant.
68	This is to be calculated as the CET1 of the Reporting Bank (as a percentage of floor-adjusted risk weighted assets), less any CET1 capital used to meet the Reporting Bank's CET1, Tier 1 and Total capital requirements.
69	A Reporting Bank shall report the minimum CET1 CAR requirement applicable at that reporting date [pursuant to paragraph 4.1.4 of the Notice.]
70	A Reporting Bank shall report the minimum Tier 1 CAR requirement applicable at that reporting date [pursuant to paragraph 4.1.4 of the Notice.]
71	A Reporting Bank shall report the minimum Total CAR requirement applicable at that reporting date [pursuant to paragraph 4.1.4 of the Notice.]
72	This is the Reporting Bank's investments in the ordinary shares, AT1 Capital and Tier 2 Capital of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake, the total amount of such holdings that are not reported in row 18, row 39 and row 54.
73	This is the Reporting Bank's investments in the ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries at the Solo and Group levels), the total amount of such holdings that are not reported in row 19 and row 23.

815 This is set out in the BCBS' publication on "Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement" (revised July 2013).

Explanatory Notes	
74	Not applicable. This is the amount of mortgage servicing rights not reported in row 20 and row 24.
75	Not applicable. This is the amount of deferred tax assets arising from temporary differences not reported in row 21 and row 25.
76	This is the provisions eligible for inclusion in Tier 2 Capital in respect of exposures subject to SA(CR), calculated in accordance paragraph 6.3.1(d) of the Notice, prior to the application of the cap.
77	This is the cap on inclusion of provisions in Tier 2 Capital in respect of exposures subject to SA(CR), calculated in accordance paragraph 6.3.1(d) of the Notice.
78	This is the provisions eligible for inclusion in Tier 2 Capital in respect of exposures subject to IRBA, calculated in accordance paragraph 6.3.1(e) of the Notice, prior to the application of the cap.
79	This is the cap for inclusion of provisions in Tier 2 Capital in respect of exposures subject to IRBA, calculated in accordance paragraph 6.3.1(e) of the Notice.
80	This is only applicable to non-joint stock companies. This is the current cap on CET1 capital instruments subject to transitional arrangements.
81	This is only applicable to non-joint stock companies. This is the amount excluded from CET1 Capital due to cap (excess over cap after redemptions and maturities).
82	This is the cap on ineligible AT1 capital instruments subject to transitional arrangements, see paragraph 6.5.3 of the Notice.
83	This is the amount excluded from AT1 Capital due to cap (excess over cap after redemptions and maturities), see paragraph 6.5.3 of the Notice.
84	This is the current cap on ineligible Tier 2 capital instruments subject to transitional arrangements, see paragraph 6.5.3 of the Notice.
85	This is the amount excluded from Tier 2 Capital due to cap (excess over cap after redemptions and maturities), see paragraph 6.5.3 of the Notice.

The previous Annex 11C (Illustration of the 3-Step Approach to Reconciliation) is deleted and substituted with the following Annex 11C [Effective from 31 Dec 2017]

Annex 11C

RECONCILIATION OF REGULATORY CAPITAL TO BALANCE SHEET

Table 11C-1: Reconciliation of Regulatory Capital to Balance Sheet

Purpose	To enable users to identify the differences between the scope of accounting consolidation and the scope of regulatory consolidation, and to show the link between a Reporting Bank's balance sheet in its published financial statements and the numbers that are used in the composition of capital disclosure template set out in Table 11B-1.
Scope of application	The table is mandatory for all Reporting Banks.
Content	Carrying values (corresponding to the values reported in financial statements.
Frequency	Semi-annually[816]
Format	Flexible (but the rows must align with the presentation of the Reporting Bank's financial report).
Accompanying narrative	A Reporting Bank shall explain any significant changes in the expanded balance sheet items over the semi-annual reporting period and the key drivers of such changes. A Reporting Bank may explain significant changes in other balance sheet items in the narrative commentary of Table 11-6.

	(a)	**(b)**	**(c)**
	Balance sheet as per published financial statements	**Under regulatory scope of consolidation**	**Reference**
	As at reporting period end	**As at reporting period end**	
Assets			
Cash and balances at central banks			
Items in the course of collection from other banks			
Trading portfolio assets			
Financial assets designated at fair value			
Derivative financial instruments			
Loans and advances to banks			
Loans and advances to customers			

[816] With the prior approval of the Authority, the required disclosures from a Reporting Bank may be made with at least the same frequency as the publication of the Reporting Bank's financial statements.

Reverse repos and other similar secured lending			
Fair value through other comprehensive income financial investments			
Current and deferred tax assets			
Prepayments, accrued income and other assets			
Investments in associates and joint ventures			
Goodwill and intangible assets			
of which: goodwill			(a)
of which: other intangibles (excluding MSRs)			(b)
#of which: MSRs			(c)
Property, plant and equipment			
Total assets			
Liabilities			
Deposits from banks			
Items in the course of collection due to other banks			
Customer accounts			
Repos and other similar secured borrowing			
Trading portfolio liabilities			
Financial liabilities designated at fair value			
Derivative financial instruments			
Debt securities in issue			
Accruals, deferred income and other liabilities			
Current and deferred tax liabilities			
of which: DTLs related to goodwill			(d)
of which: DTLs related to intangible assets (excluding MSRs)			(e)
#of which: DTLs related to MSRs			(f)
Subordinated liabilities			
Provisions			
Retirement benefit liabilities			
Total liabilities			
Shareholders' Equity			
Paid-in share capital			
of which: amount eligible for CET1			(g)
of which: amount eligible for AT1			(h)
Retained earnings			

Accumulated other comprehensive income			
Total shareholders' equity			

Items marked with a hash [#] are elements where a more conservative definition has been applied relative to those set out under the Basel III capital standards

A Reporting Bank shall take its published financial statements (numbers reported in column (a) above) and report the numbers when the regulatory scope of consolidation is applied (numbers reported in column (b) above). This is referred to as Step 1 under the three-step approach to reconciliation, as explained and illustrated in paragraph 11.3.23(a).

If there are rows in the balance sheet under the regulatory scope of consolidation that are not present in the published financial statements, a Reporting Bank is required to add these and give a value of zero in column (a).

If a Reporting Bank's scope of accounting consolidation and its scope of regulatory consolidation are exactly the same, columns (a) and (b) must be merged and this fact must be clearly disclosed in the accompanying narrative.

As in the case of Table 11-4, the rows in the above template set out in Table 11C must follow the balance sheet presentation used by the Reporting Bank in its financial statements, on which basis the Reporting Bank is required to expand the balance sheet to identify all the items that are disclosed in Table 11B-1 (referred to as Step 2 under the three-step approach to reconciliation, as explained and illustrated in paragraph 11.3.23(b)).[817,818] A Reporting Bank must make disclosure which is proportionate to the complexity of the Reporting Bank's balance sheet. A Reporting Bank must give each item a reference number/letter in column (c) that is used as cross-reference to column (b) of Table 11B-1.

Linkages across templates

(a) The amounts in columns (a) and (b) in Table 11C-1 before balance sheet expansion (ie before Step 2) must be identical to columns (a) and (b) in Table 11-4; and

817 For example, paid-in share capital may be reported as one line on the balance sheet. However, some elements of this may meet the requirements for inclusion in CET1 and other elements may only meet the requirements for AT1 or Tier 2, or may not meet the requirements for inclusion in regulatory capital at all. Therefore, if the Reporting Bank has some paid-in capital that feeds into the calculation of CET1 and some that feeds into the calculation of AT1, it must expand the "paid-in capital" line of the balance sheet in the manner illustrated in Table 11C-1. As another example, one of the regulatory adjustments is the deduction of goodwill net of any associated deferred tax liability that would be extinguished if the goodwill becomes impaired or derecognised under the Accounting Standards. The Reporting Bank shall expand elements of the balance sheet in the manner illustrated in Table 11C-1 to separately identify the components of goodwill and the associated deferred tax liability.

818 Items (a) to (h) in Table 11C-1 are examples of items that may need to be expanded for a particular banking group.

(b) Each expanded item must be cross-referenced to the corresponding items in Table 11B-1.

Amendments to Annex 11D [Effective from 31 Dec 2017]

Annex 11D

MAIN FEATURES OF REGULATORY CAPITAL INSTRUMENTS ~~TEMPLATE~~

~~A Reporting Bank shall ensure that the key features of all of its regulatory capital instruments are disclosed using the template set out in Table 11D-1. The Reporting Bank shall complete all cells for each outstanding regulatory capital instrument, and insert "NA" if the cell is not applicable. Table 11D-2 sets out the explanation of each row of Table 11D-1.~~

A Reporting Bank is required to complete Table 11D-1 for each outstanding regulatory capital instrument (Reporting Banks must insert "NA" if the question is not applicable).

A Reporting Bank is required to report each instrument, including common shares, in a separate column of Table 11D-1, such that the completed Table 11D-1 will provide a "main features report" that summarises all of the regulatory capital instruments of the banking group.

Using the reference numbers in the left-hand column of Table 11D-1, Table 11D-2 provides a more detailed explanation of what a Reporting Bank is required to report in each of the cells. Table 11D-2 sets out the explanation of each row of Table 11D-1.

Table 11D-1: ~~Disclosure Template for~~ Main Features of Regulatory Capital Instruments

Purpose	To provide a description of the main features of a Reporting Bank's regulatory capital instruments that are recognised as part of its capital base under Part VI of this Notice.
Scope of application	The table is mandatory for all Reporting Banks.
Content	Quantitative and qualitative information as required.
Frequency	Table 11D-1 must be posted on a Reporting Bank's website. It must be updated whenever a Reporting Bank issues or repays a capital instrument, and whenever there is a redemption, conversion/writedown or other material change in the nature of an existing instrument. A Reporting Bank must, at a minimum, update Table 11D-1 semi-annually. A Reporting Bank shall include the web link in each Pillar 3 report to the issuances made over the previous period.
Format	Flexible
Accompanying narrative	A Reporting Bank is required to make available on its website the full terms and conditions of all instruments included in regulatory capital.

1	Issuer	
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	
3	Governing law(s) of the instrument	

	~~Regulatory treatment~~	
4	Transitional Basel III rules	
5	Post-transitional Basel III rules	
6	Eligible at solo/group/group&solo	
7	Instrument type (types to be specified by each jurisdiction)	
8	Amount recognised in regulatory capital (Currency in millions, as of most recent reporting date)	
9	Par value of instrument	
10	Accounting classification	
11	Original date of issuance	
12	Perpetual or dated	
13	Original maturity date	
14	Issuer call subject to prior supervisory approval	
15	Optional call date, contingent call dates and redemption amount	
16	Subsequent call dates, if applicable	
	Coupons / dividends	
17	Fixed or floating dividend/coupon	
18	Coupon rate and any related index	
19	Existence of a dividend stopper	
20	Fully discretionary, partially discretionary or mandatory	
21	Existence of step up or other incentive to redeem	
22	Noncumulative or cumulative	
23	Convertible or non-convertible	
24	If convertible, conversion trigger (s)	
25	If convertible, fully or partially	
26	If convertible, conversion rate	
27	If convertible, mandatory or optional conversion	
28	If convertible, specify instrument type convertible into	
29	If convertible, specify issuer of instrument it converts into	
30	Write-down feature	
31	If write-down, write-down trigger(s)	
32	If write-down, full or partial	
33	If write-down, permanent or temporary	
34	If temporary write-down, description of write-up mechanism	
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned)	
36	Non-compliant transitioned features	
37	If yes, specify non-compliant features	

Table 11D-2: Explanatory Notes to Main Features ~~Template~~of Regulatory Capital Instruments

Explanatory Notes	
1	Identifies issuer legal entity. *Free text*

2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement) *Free text*
3	Specifies the governing law(s) of the instrument *Free text*
4	Specifies the regulatory capital treatment during the Basel III transitional Basel III phase (i.e. the component of capital that the instrument is being phased-out from). *Select from menu: [Common Equity Tier 1] [Additional Tier 1] [Tier 2]*
5	Specifies regulatory capital treatment under Basel III rules not taking into account transitional treatment. *Select from menu: [Common Equity Tier 1] [Additional Tier 1] [Tier 2] [Ineligible]*
6	Specifies the level(s) within the group at which the instrument is included in capital. *Select from menu: [Solo] [Group] [Solo and Group]*
7	Specifies instrument type, varying by jurisdiction. Helps provide more granular understanding of features, particularly during transition. *Select from menu: menu options to be provided to banks by each jurisdiction*
8	Specifies amount recognised in regulatory capital. *Free text*
9	Par value of instrument *Free text*
10	Specifies accounting classification. Helps to assess loss absorbency. *Select from menu: [Shareholders' equity] [Liability – amortised cost] [Liability – fair value option] [Non-controlling interest in consolidated subsidiary]*
11	Specifies date of issuance. *Free text*
12	Specifies whether dated or perpetual. *Select from menu: [Perpetual] [Dated]*
13	For dated instrument, specifies original maturity date (day, month and year). For perpetual instrument put "no maturity". *Free text*
14	Specifies whether there is an issuer call option. ~~Helps to assess permanence.~~ *Select from menu: [Yes] [No]*
15	For instrument with issuer call option, specifies (i) first date of call if the instrument has a call option on a specific date (day, month and year); ~~and, in addition, specifies~~ if the instrument has a tax and/or regulatory event call; and (iii)~~. Also specifies~~ the redemption price.~~ Helps to assess permanence.~~ *Free text*
16	Specifies the existence and frequency of subsequent call dates, if applicable. ~~Helps to assess permanence.~~ *Free text*
17	Specifies whether the coupon/dividend is fixed over the life of the instrument, floating over the life of the instrument, currently fixed but will move to a floating rate in the future, currently floating but will move to a fixed rate in the future. *Select from menu: [Fixed], [Floating] [Fixed to floating], [Floating to fixed]*

18	Specifies the coupon rate of the instrument and any related index that the coupon/dividend rate references. *Free text*
19	Specifies whether the non payment of a coupon or dividend on the instrument prohibits the payment of dividends on common shares (ie whether there is a dividend stopper). *Select from menu: [yes], [no]*
20	Specifies whether the issuer has full discretion, partial discretion or no discretion over whether a coupon/dividend is paid. If the bank has full discretion to cancel coupon/dividend payments under all circumstances it must select "fully discretionary" (including when there is a dividend stopper that does not have the effect of preventing the bank from cancelling payments on the instrument). If there are conditions that must be met before payment can be cancelled (e.g. capital below a certain threshold), the bank must select "partially discretionary". If the bank is unable to cancel the payment outside of insolvency the bank must select "mandatory". *Select from menu: [Fully discretionary] [Partially discretionary] [Mandatory]*
21	Specifies whether there is a step-up or other incentive to redeem. *Select from menu: [Yes] [No]*
22	Specifies whether dividends / coupons are cumulative or noncumulative. *Select from menu: [Noncumulative] [Cumulative]*
23	Specifies whether instrument is convertible or not. ~~Helps to assess loss absorbency.~~ *Select from menu: [Convertible] [Nonconvertible]*
24	Specifies the conditions under which the instrument will convert, including point of non-viability. Where one or more authorities have the ability to trigger conversion, the authorities should be listed. For each of the authorities it should be stated whether ~~it is the terms of the contract of the instrument that provide~~ the legal basis for the authority to trigger conversion is provided by the terms of the contract of the instrument (a contractual approach) or ~~whether the legal basis is provided by~~ statutory means (a statutory approach). *Free text*
25	For conversion trigger separately, specifies whether the instrument will: (i) always convert fully; (ii) may convert fully or partially; or (iii) will always convert partially *Free text referencing one of the options above*
26	Specifies rate of conversion into the more loss absorbent instrument. ~~Helps to assess the degree of loss absorbency.~~ *Free text*
27	For convertible instruments, specifies whether conversion is mandatory or optional. ~~Helps to assess loss absorbency.~~ *Select from menu: [Mandatory] [Optional] [NA]*
28	For convertible instruments, specifies instrument type convertible into. ~~Helps to assess loss absorbency.~~ *Select from menu: [Common Equity Tier 1] [Additional Tier 1] [Tier 2] [Other]*
29	If convertible, specify issuer of instrument into which it converts. *Free text*

30	Specifies whether there is a write down feature. ~~Helps to assess loss absorbency.~~ *Select from menu: [Yes] [No]*
31	Specifies the trigger at which write-down occurs, including point of non-viability. Where one or more authorities have the ability to trigger write-down, the authorities should be listed. For each of the authorities it should be stated whether ~~it is the terms of the contract of the instrument that provide~~ the legal basis for the authority to trigger write-down is provided by the terms of the contract of the instrument (a contractual approach) or ~~whether the legal basis is provided by~~ statutory means (a statutory approach). *Free text*
32	For each write-down trigger separately, specifies whether the instrument will: (i) always be written down fully: (ii) may be written down partially; or (iii) will always be written down partially. ~~Helps assess the level of loss absorbency at write-down.~~ *Free text referencing one of the options above*
33	For write down instrument, specifies whether write down is permanent or temporary. ~~Helps to assess loss absorbency.~~ *Select from menu: [Permanent] [Temporary] [NA]*
34	For instrument that has a temporary write-down, description of write-up mechanism. *Free text*
35	Specifies instrument to which it is most immediately subordinate. ~~Helps to assess loss absorbency on gone-concern basis.~~ Where applicable, banks should specify the column numbers of the instruments in the completed ~~main features template~~ Table 11D-1 to which the instrument is most immediately subordinate. In the case of structural subordination, “NA” should be entered. *Free text*
36	Specifies whether there are non-compliant features. *Select from menu: [Yes] [No]*
37	If there are non-compliant features, asks bank/institution to specify which ones. ~~Helps to assess instrument loss absorbency.~~ *Free text*

Amendments to Annex 11F [Effective from 31 Dec 2017]

Annex 11F

LEVERAGE RATIO SUMMARY COMPARISON TABLE

Table 11F-1: Leverage Ratio Summary Comparison Table

Purpose	To reconcile the total assets in the published financial statements to the leverage ratio exposure measure.
Scope of application	The table is mandatory for all Reporting Banks.
Content	Quantitative information. The Leverage Ratio follows the same scope of regulatory consolidation as used for the risk-based capital framework. Disclosures must be reported on a quarter-end basis. However, Reporting Banks may, with prior approval of the Authority, use more frequent calculations[819] as long as they do so consistently.
Frequency	Quarterly[820]
Format	Fixed
Accompanying narrative	Reporting Banks are required to disclose and detail the source of material differences between their total balance sheet assets (net of on-balance sheet derivative and SFT assets) as reported in their financial statements and their on-balance sheet exposures as set out in row 1 of Table 11G-1. Reporting Banks are required to include the basis for their disclosures.[820A]

	Item	Amount
1	Total consolidated assets as per published financial statements	
2	Adjustment for investments in entities that are consolidated for accounting purposes but are outside the regulatory scope of consolidation	
3	Adjustment for fiduciary assets recognised on the balance sheet in accordance with the Accounting Standards but excluded from the calculation of the exposure measure	
4	Adjustment for derivative transactions	
5	Adjustment for SFTs	
6	Adjustment for off-balance sheet items	
7	Other adjustments	
8	**Exposure measure**	

[819] For example, daily or monthly averaging.

[820] With the prior approval of the Authority, the required disclosures from a Reporting Bank may be made with at least the same frequency as the publication of the Reporting Bank's financial statements.

[820A] For example, quarter-end averaging, daily averaging or monthly averaging.

Table 11F-2: Explanatory Notes to Leverage Ratio Summary Comparison Table

Explanatory Notes	
1	This is the total consolidated assets of a Reporting Bank as per its published financial statements.
2	This is the adjustment for investments in entities that are consolidated for accounting purposes, but outside the regulatory scope of consolidation in accordance with paragraphs 1.2 and 1.3 of Annex 4A.
3	This relates to paragraph 2.5 of Annex 4A.
4	This is the adjustment for the difference between the calculation of derivative transactions in accordance with the Accounting Standards, and the calculation of derivative transactions in accordance with paragraphs 2.7 to 2.17 of Annex 4A ("derivative exposure measures").
5	This is the adjustment for the difference between the calculation of SFTs in accordance with the Accounting Standards, and the calculation of SFTs in accordance with paragraphs 2.18 to 2.24 of Annex 4A ("SFT exposure measures").
6	This is the exposure measures of off-balance sheet items in accordance with paragraph 2.25 of Annex 4A ("exposure measures of off-balance sheet items").
7	This is the sum of any other adjustments.
8	This is the sum of rows 1 to 7. This should be consistent with row 21 of Table 11G-1 of Annex 11G.

Amendments to Annex 11G [Effective from 31 Dec 2017]

Annex 11G

LEVERAGE RATIO COMMON DISCLOSURE TEMPLATE

Table 11G-1: Leverage Ratio Common Disclosure Template

Purpose	Provide a detailed breakdown of the components of the leverage ratio denominator.
Scope of application	The table is mandatory for all Reporting Banks.
Content	Quantitative information. The disclosures must be made on a quarter-end basis. However, Reporting Banks may, with prior approval of the Authority, use more frequent calculations[820B], as long as they do so consistently.
Frequency	Quarterly
Format	Fixed
Accompanying narrative	Reporting Banks must describe the key factors that have had a material impact on the leverage ratio at the end of the reporting period compared to the end of the previous reporting period. Reporting Banks are required to include the basis for their disclosures.[820C]

	Item	**Amount**	
		Current Quarter	**Previous Quarter**
	Exposure measures of on-balance sheet items		
1	On-balance sheet items (excluding derivative transactions and SFTs, but including on-balance sheet collateral for derivative transactions or SFTs)		
2	Asset amounts deducted in determining Tier 1 capital		
3	**Total exposure measures of on-balance sheet items** (excluding derivative transactions and SFTs)		
	Derivative exposure measures		
4	Replacement cost associated with all derivative transactions (net of the eligible cash portion of variation margins)		
5	Potential future exposure associated with all derivative transactions		
6	Gross-up for derivative collaterals provided where deducted from the balance sheet assets in accordance with the Accounting Standards		

[820B] For example, daily or monthly averaging.
[820C] For example, quarter-end averaging, daily averaging or monthly averaging.

7	Deductions of receivables for the cash portion of variation margins provided in derivative transactions		
8	CCP leg of trade exposures excluded		
9	Adjusted effective notional amount of written credit derivatives		
10	Further adjustments in effective notional amounts and deductions from potential future exposures of written credit derivatives		
11	**Total derivative exposure measures**		
	SFT exposure measures		
12	Gross SFT assets (with no recognition of accounting netting), after adjusting for sales accounting		
13	Eligible netting of cash payables and cash receivables		
14	SFT counterparty exposures		
15	SFT exposure measures where a Reporting Bank acts as an agent in the SFTs		
16	**Total SFT exposure measures**		
	Exposure measures of off-balance sheet items		
17	Off-balance sheet items at notional amount		
18	Adjustments for calculation of exposure measures of off-balance sheet items		
19	**Total exposure measures of off-balance sheet items**		
	Capital and Total exposures		
20	**Tier 1 capital**		
21	**Total exposures**		
	Leverage ratio		
22	**Leverage ratio**		

Table 11G-2: Explanatory Notes to Leverage Ratio Common Disclosure Template

Explanatory Notes	
1	This is the sum of on-balance sheet assets in the calculation of the Reporting Bank's exposure measure in respect of on-balance sheet items in accordance with paragraph 2.4 of Annex 4A.
2	This is the amount of deductions from capital measure in accordance with paragraphs 1.2 and 1.3 of Annex 4A and excluded from the total exposures. Deductions shall not include liability items in accordance with paragraph 2.6 of Annex 4A. The Reporting Bank shall report a negative amount here.
3	This is the sum of rows 1 and 2.
4	This is the replacement cost associated with all derivative transactions that are not covered by a qualifying bilateral netting agreement and the net replacement cost associated with all derivative transactions that are covered by a qualifying bilateral netting agreement in accordance with paragraphs 2.7(a) and 2.8(a) of Annex 4A respectively, including exposures resulting from transactions described in paragraph 2.14 of Annex 4A. The calculation shall be net of the cash portion of variation margins received in accordance with paragraph 2.12(a) of Annex 4A.
5	This is the amount for potential future exposure associated with all derivative transactions that are not covered by a qualifying bilateral netting agreement and the add-on, "A_{Net}", for the potential future exposure associated with all derivative transactions that are covered by a qualifying bilateral netting agreement in accordance with paragraphs 2.7(b) and 2.8(b) of Annex 4A respectively.
6	This is the grossed-up amount of collaterals where the collaterals provided by the Reporting Bank in relation to derivative transactions that have reduced the value of its balance sheet assets in accordance with paragraph 2.10 of Annex 4A.
7	This is as defined under paragraph 2.12(b) of Annex 4A. The Reporting Bank shall report a negative amount here.
8	This is the amount of CCP trade exposures associated with the CCP leg of derivative transactions which are excluded in accordance with paragraph 2.13 of Annex 4A. The Reporting Bank shall report a negative amount here.
9	This is the adjusted effective notional amounts (i.e. the effective notional amounts reduced by any negative change in fair value amounts) for written credit derivative transactions in accordance with paragraphs 2.15 and 2.16 of Annex 4A.
10	This is the sum of: • adjustments to the effective notional amounts of written credit derivative transactions in accordance with paragraphs 2.16(a) and 2.16(b) of Annex 4A; and • deductions from the amounts for potential future exposure of written credit derivative transactions in accordance with paragraph 2.17 of Annex 4A. The Reporting Bank shall report a negative amount here.
11	This is the sum of rows 4–10.
12	This is the gross SFT assets with no recognition of any accounting netting but adjusted for the treatment of the following items: • novation with qualifying CCPs in accordance with paragraph 2.19 of Annex 4A;

	• securities received under a SFT where the Reporting Bank has recognised the securities as an asset on its balance sheet in accordance with paragraph 2.18(a)(i) of Annex 4A; and • SFTs accounted for using sales accounting in accordance with paragraph 2.22 of Annex 4A.
13	This is as defined under paragraph 2.18(a)(ii) of Annex 4A. The Reporting Bank shall report a negative amount here.
14	This is as defined under paragraph 2.18(b) of Annex 4A.
15	This is the SFT exposure measures in accordance with paragraphs 2.23 and 2.24 of Annex 4A.
16	This is the sum of rows 12 to 15.
17	This is the total notional amount of off-balance sheet items, before any adjustment for CCFs in accordance with paragraph 2.25 of Annex 4A.
18	This is the adjustment to the notional amount of off-balance sheet items due to the application of CCFs in accordance with paragraph 2.25 of Annex 4A.
19	This is the sum of rows 17 and 18.
20	This is the capital measure in accordance with Annex 2A.
21	This is the sum of rows 3, 11, 16 and 19.
22	This is the leverage ratio, expressed as a percentage and calculated in accordance with paragraph 1.1 of Annex 4A.

Amendments to Schedule 1B

MAS NOTICE 637: CAPITAL ADEQUACY REPORTING SCHEDULES **Annex 12A**
SCHEDULE 1B

CAPITAL TREATMENT OF ALLOWANCES

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

(In S$ million)

1. General Allowances

(a) General Allowances			A
Less: associated deferred tax assets			
(b) Net General Allowances			

[MAS Notice 637 (Amendment) 2012, with effect from 1 January 2013]

2. General Allowances Attributable to SA(CR), SA(EQ), ~~SA(SE)~~ SEC-ERBA, SEC-SA and RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied

(a) Proportion of credit RWA attributable to SA(CR), SA(~~(~~EQ), ~~SA(SE)~~ SEC-ERBA, SEC-SA, and RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied (%) calculated in accordance with paragraph 6.3.1B			B
(b) General Allowances attributable to SA(CR), SA(EQ), ~~SA(SE)~~ SEC-ERBA, SEC-SA, and RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied	B x A		C
(c) Limit on General Allowances acceptable as Tier 2 Capital calculated in accordance with paragraph 6.3.1(d)			D
(d) Eligible General Allowances recognised as Tier 2 Capital	MIN(C,D)		E

[MAS Notice 637 (Amendment No. 2) 2014]

3. TEP and EL Amount under IRBA~~, IRBA(EQ), IRBA(SE)~~

(a) Proportion of credit RWA attributable to IRBA~~, IRBA(EQ), IRBA(SE)~~ (%) calculated in accordance with paragraph 6.3.1C	~~100% - B~~		F
(b) General Allowances included in TEP	F x A		G

(c) ~~Individual Impairment~~ Specific Allowances included in TEP

			Total
(i)	Sovereign Asset Sub-class	F-IRBA	
		A-IRBA	
(ii)	Bank Asset Sub-class	F-IRBA	
		A-IRBA	
(iii)	Corporate Asset Sub-class	F-IRBA	
		A-IRBA	
(iv)	SL Asset Sub-class (IPRE)	F-IRBA	
		A-IRBA	
(v)	SL Asset Sub-class (PF/ OF / CF)	F-IRBA	
		A-IRBA	
(vi)	HVCRE Asset Sub-class	F-IRBA	
		A-IRBA	
(vii)	SL Asset Sub-class (IPRE)- supervisory slotting criteria		
(viii)	SL Asset Sub-class(PF/ OF / CF)- supervisory slotting criteria		
(ix)	HVCRE Asset Sub-class - supervisory slotting criteria		
(x)	Corporate Small Business Asset Sub-class	F-IRBA	
		A-IRBA	
(xi)	Residential Mortgage Asset Sub-class		
(xii)	QRRE Asset Sub-class		
(xiii)	Other Retail Exposures Asset Sub-class (excluding exposures to small business)		
(xiv)	Other Retail Exposures Asset Sub-class (exposures to small business)		

Total ~~Individual Impairment~~ Specific Allowances included in TEP			H
(d) TEP under IRBA	G+H		I

(e) EL Amount under IRBA

			Total
(i)	Sovereign Asset Sub-class	F-IRBA	
		A-IRBA	
(ii)	Bank Asset Sub-class	F-IRBA	
		A-IRBA	
(iii)	Corporate Asset Sub-class	F-IRBA	
		A-IRBA	
(iv)	SL Asset Sub-class (IPRE)	F-IRBA	
		A-IRBA	
(v)	SL Asset Sub-class (PF/ OF / CF)	F-IRBA	
		A-IRBA	
(vi)	HVCRE Asset Sub-class	F-IRBA	
		A-IRBA	
(vii)	SL Asset Sub-class (IPRE)- supervisory slotting criteria		
(viii)	SL Asset Sub-class(PF/ OF / CF)- supervisory slotting criteria		
(ix)	HVCRE Asset Sub-class - supervisory slotting criteria		
(x)	Corporate Small Business Asset Sub-class	F-IRBA	
		A-IRBA	
(xi)	Residential Mortgage Asset Sub-class		
(xii)	QRRE Asset Sub-class		
(xiii)	Other Retail Exposures Asset Sub-class (excluding exposures to small business)		
(xiv)	Other Retail Exposures Asset Sub-class (exposures to small business)		
	Total EL Amount		J

(f) Comparison of TEP and EL Amount

(i)	TEP less Total EL Amount	IF I>J, I-J		K
(ii)	Limit on (TEP - EL Amount) acceptable as Tier 2 Capital	calculated in accordance with paragraph 6.3.1(e)		L
(iii)	Eligible (TEP - EL Amount) recognised as Tier 2 Capital	MIN(K,L)		M
(iv)	Excess of (EL Amount - TEP) to be included as a regulatory adjustment in the calculation of CET1 Capital	IF J>I, J-I		N

[MAS Notice 637 (Amendment No. 2) 2014]

Amendments to Schedule 2

[Amendments to Schedule 2 are compared with the version of MAS Notice 637 as last revised on 29 November 2017]

MAS NOTICE 637: CREDIT RISK REPORTING SCHEDULES **Annex 12B**

SCHEDULE 2

SUMMARY OF CREDIT RWA

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

1. Credit RWA

		Amount (S$ million)	
(a)	**SA(CR), SA(EQ), SEC-ERBA, SEC-SA**	**Total Credit RWA**	
(i)	Cash and Cash Equivalents		
(ii)	Central Government and Central Bank Asset Class		
(iii)	PSE Asset Class		
(iv)	MDB Asset Class		
(v)	Bank Asset Class		
(vi)	Corporate Asset Class		
(vii)	Regulatory Retail Asset Class		
(viii)	Residential Mortgage Asset Class		
(ix)	CRE Asset Class		
(x)	Other Exposures Asset Class		
(xi)	SA(EQ) RWA		A
(xii)	SEC-ERBA RWA		
(xiii)	SEC-SA RWA		
(xiv)	RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied		
(xv)	Unsettled Trades		
	SA(CR) RWA + SA(EQ) RWA + SEC-ERBA RWA + SEC-SA RWA + RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied		B

			F-IRBA	A-IRBA	Total Credit RWA	
(b)	**IRBA, IRBA(EQ), SEC-IRBA**		(a)	(b)	(c=a+b)	
(i)	Sovereign Asset Sub-class					C
(ii)	Bank Asset Sub-class					D
(iii)	Corporate Asset Sub-class					
	Corporate					
	Corporate - double default					
	Total Corporate Asset Sub-Class					E
(iv)	SL Asset Sub-class					
	IPRE					
	PF/OF/CF					
	IPRE - double default					
	PF/OF/CF - double default					
	IPRE - supervisory slotting criteria					
	PF/OF/CF - supervisory slotting criteria					
	Total SL Asset Sub-class					F
(v)	HVCRE Asset Sub-class					
	HVCRE					
	HVCRE - double default					
	HVCRE - supervisory slotting criteria					
	Total HVCRE Asset Sub-class					G
(vi)	Corporate Small Business Asset Sub-class					
	Corporate Small Business					
	Corporate Small Business - double default					
	Total Corporate Small Business Asset Sub-class					H
(vi)	Residential Mortgage Asset Sub-class					I
(vii)	QRRE Asset Sub-class					J
(viii)	Other Retail Exposures Asset Sub-class					
	Other Retail Exposures (excluding exposures to small business)					
	Exposures to Small Business					
	Total Other Retail Exposures Asset Sub-class					K
	IRBA RWA	SUM(C:K)				L
(ix)	IRBA(EQ) RWA (exposures other than those subject to 1250% risk weight)					M
	IRBA(EQ) RWA (exposures subject to 1250% risk weight)					N
(x)	SEC-IRBA RWA					O
	IRBA RWA and IRBA(EQ) RWA Subject to Scaling Factor	L+M				Q
	Adjusted RWA post Scaling Factor of 1.06	1.06 x Q				R
	IRBA RWA + IRBA(EQ) RWA + SEC-IRBA RWA	R+N+O				S

(c)	**Total CVA RWA**			T
(d)	**Total CCP RWA**			U
		[MAS Notice 637 (Amendment) 2012]		
(e)	**RWA pursuant to paragraph 6.1.3(p)(iii)**			V
(f)	**Total Credit RWA**	B+S+T+U+V		
		[MAS Notice 637 (Amendment) 2012]		

MAS NOTICE 637: CREDIT RISK REPORTING SCHEDULES **Annex 12B**
SCHEDULE 2

SUMMARY OF CREDIT RWA

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

2. Coverage

(a) IRBA, IRBA(EQ) and SEC-IRBA Coverage (applicable at Group level only)

			Amount (S$ million)	
(i)	IRBA RWA + IRBA(EQ) RWA + SEC-IRBA RWA	S		W
	Total Credit RWA (To exclude SA(EQ) RWA in Total Credit RWA if equity exposures are excluded from IRBA(EQ) based on immateriality)	(B+S) or (B+S-A)		X
	IRBA, IRBA(EQ), SEC-IRBA Coverage (%)	W/X		
(ii)	SA(CR) RWA + SA(EQ) RWA + SEC-ERBA RWA + SEC-SA RWA + RWA from securitisation exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied	B or (B-A)		Y
	Total Credit RWA (To exclude SA(EQ) RWA if equity exposures are excluded from IRBA(EQ) based on immateriality)	(B+S) or (B+S-A)		Z
	Coverage of SA(CR), SA(EQ), SEC-ERBA, SEC-SA, and RWA from Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied (%)	Y/Z		

(b) Equity Exposures (applicable at Group level only)

Aggregate Equity Exposures			AA
Eligible Total Capital			BB
Ratio of Aggregate Equity Exposures over Eligible Total Capital	AA/BB		

(c) Asset Classes/Sub-Classes under SA(CR), SA(EQ), SEC-ERBA, SEC-SA or Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied
(To list by asset class/sub-class or portfolios and legal entities and indicate by ticking if exposures are exempted from o transitioning to IRBA, IRBA(EQ) or SEC-IRBA)

No	Asset Sub-Class/Portfolios by	Status (please tick)		Expected date of Transitioning	Credit RWA (in $ million)
		Exempted	Transitioning		

[MAS Notice 637 (Amendment) 2013]
[MAS Notice 637 (Amendment No. 2) 2014]

Amendments to Schedule 2-6A

MAS NOTICE 637: CREDIT RISK REPORTING SCHEDULES **Annex 12B**
SCHEDULE 2-6A

SA(EQ)

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

(In S$ million)

		Gross Exposures (before CRM)	Net Exposures (after CRM)	Risk Weight		SA(EQ) RWA
1.	**Equity Exposures**					
(a)	**Equity exposures in unconsolidated financial institutions, excluding equity investments in funds, in which the Reporting Bank does not hold a major stake (as stated in para 6.1.3 (o)(iii), 6.2.3 (d)(iii) and 6.3.3 (d)(iii) of Part VI)**			100%		
(b)	**Other equity exposures, excluding equity investments in funds**			100%		
			Materiality Threshold Amount			
(c)	**Materiality threshold below which no payment will be made by the protection provider in the event of loss on an SA(EQ) exposure**			1250%		

		~~Gross~~ Net Exposures (as per paragraph 7.2.3(a), using carrying value of the equity investment on the Reporting Bank's balance sheet, after CRM)	~~Net Exposures~~	Risk Weight	~~Before Lvg Adjustment~~ / ~~Total RWA~~	~~After Lvg Adjustment~~ SA(EQ) RWA / ~~Total RWA~~
2.	**Equity Investments in Funds**					
(a)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the LTA**		cancelled		cancelled	
(b)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the MBA**		cancelled		cancelled	
(c)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the FBA**		cancelled	1250%		
(d)	**Equity investments in funds for which risk-weighted exposure amounts are computed using any combination of the LTA, MBA or FBA**		cancelled		cancelled	

		Gross Exposures (before CRM)	Net Exposures (after CRM)	Risk Weight		SA(EQ) RWA
3.	**PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions, which are subject to a risk weight of 1250%, pursuant to paragraphs 6.3.6(i) and 6.3.6(ii)**			1250%		
~~3~~4.	**Total SA(EQ) RWA**					

[MAS Notice 637 (Amendment) 2016]

Amendments to Schedule 2-6B

MAS NOTICE 637: CREDIT RISK REPORTING SCHEDULES
SCHEDULE 2-6B **Annex 12B**

IRBA(EQ)

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

(In S$ million)

	Gross Exposures (before CRM)	Net Exposures (after CRM)	Risk Weight	IRBA(EQ) RWA
		(a)	(b)	(c=axb)
1. Simple Risk Weight Method				
(a) Equity exposures in unconsolidated financial institutions, excluding equity investments in funds, in which the Reporting Bank does not hold a major stake (as stated in para 6.1.3 (o)(iii), 6.2.3 (d)(iii) and 6.3.3 (d)(iii) of Part VI)				
Listed securities			300%	
Other equity exposures			400%	
(b) Other equity exposures, excluding equity investments in funds				
Listed securities			300%	
Other equity exposures			400%	
Total for Equity Exposures under Simple Risk Weight Method				

2. IMM

	Gross Exposures (before CRM)	Net Exposures (after CRM)	Exposures subject to minimum risk weights: EAD	Exposures subject to minimum risk weights: Minimum Risk Weight	Exposures subject to minimum risk weights: IRBA(EQ) RWA using minimum risk weight	Exposures subject to internal models: EAD	Exposures subject to internal models: Potential loss	Exposures subject to internal models: IRBA(EQ) RWA using internal models method	Total IRBA(EQ) RWA
		(d)	(e)	(f)	(g=exf)	(h=d-e)	(i)	(j=ix12.5)	(k=g+j)
(a) Equity exposures in unconsolidated financial institutions, excluding equity investments in funds, in which the Reporting Bank does not hold a major stake (as stated in para 6.1.3 (o)(iii), 6.2.3 (d)(iii), 6.2.3 (d)(iii) and 6.3.3 (d)(iii) of Part VI)									
Listed securities				200%					
Other equity exposures				300%					
(b) Other equity exposures, excluding equity investments in funds									
Listed securities				200%					
Other equity exposures				300%					

	Materiality Threshold Amount	Risk Weight	
(c) Materiality threshold below which no payment will be made by the protection provider in the event of loss on an IRBA(EQ) exposure		1250%	

Total IRBA(EQ) RWA (after comparing with floor) under IMM

		Estimated PD (%)	Gross Exposures (before CRM)	Net Exposures (after CRM)	EL Amounts	IRBA(EQ) RWA		
						Before Comparing with Floor	Floor	After Comparing with Floor
3.	**PD/LGD Method**							
(a)	**Equity exposures in unconsolidated financial institutions, excluding equity investments in funds, in which the Reporting Bank does not hold a major stake (as stated in para 6.1.3 (o)(iii), 6.2.3 (d)(iii) and 6.3.3 (d)(iii) of Part VI), excluding financial institutions that meet the criteria stated in Para 7.4.21A or Para 7.4.22A of MAS Notice 637**							
(1)	Listed securities (no expectations of capital gains)							
	PD1						100%	
	PD2						100%	
	PD3						100%	
	PD4						100%	
							100%	
							100%	
	Default (100%)						100%	
	Sub-Total							
(2)	Private securities (no expectations of capital gains)							
	PD1						100%	
	PD2						100%	
	PD3						100%	
	PD4						100%	
							100%	
							100%	
	Default (100%)						100%	
	Sub-Total							
(3)	Listed securities							
	PD1						200%	
	PD2						200%	
	PD3						200%	
	PD4						200%	
							200%	
							200%	
	Default (100%)						200%	
	Sub-Total							
(4)	Other equity exposures							
	PD1						300%	
	PD2						300%	
	PD3						300%	
	PD4						300%	
							300%	
							300%	
	Default (100%)						300%	
	Sub-Total							

(b)	**Equity exposures in unconsolidated financial institutions, excluding equity investments in funds, in which the Reporting Bank does not hold a major stake (as stated in para 6.1.3 (o)(iii), 6.2.3 (d)(iii) and 6.3.3 (d)(iii) of Part VI) and the financial institutions meet the criteria stated in Para 7.4.21A or Para 7.4.22A of MAS Notice 637**						
(1)	Listed securities (no expectations of capital gains)						
	PD1					100%	
	PD2					100%	
	PD3					100%	
	PD4					100%	
						100%	
						100%	
	Default (100%)					100%	
	Sub-Total						
(2)	Private securities (no expectations of capital gains)						
	PD1					100%	
	PD2					100%	
	PD3					100%	
	PD4					100%	
						100%	
						100%	
	Default (100%)					100%	
	Sub-Total						
(3)	Listed securities						
	PD1					200%	
	PD2					200%	
	PD3					200%	
	PD4					200%	
						200%	
						200%	
	Default (100%)					200%	
	Sub-Total						
(4)	Other equity exposures						
	PD1					300%	
	PD2					300%	
	PD3					300%	
	PD4					300%	
						300%	
						300%	
	Default (100%)					300%	
	Sub-Total						

(c) Other equity exposures, excluding equity investments in funds

(1)	Listed securities (no expectations of capital gains)						
	PD1					100%	
	PD2					100%	
	PD3					100%	
	PD4					100%	
						100%	
						100%	
	Default (100%)					100%	
	Sub-Total						
(2)	Private securities (no expectations of capital gains)						
	PD1					100%	
	PD2					100%	
	PD3					100%	
	PD4					100%	
						100%	
						100%	
	Default (100%)					100%	
	Sub-Total						
(3)	Listed securities						
	PD1					200%	
	PD2					200%	
	PD3					200%	
	PD4					200%	
						200%	
						200%	
	Default (100%)					200%	
	Sub-Total						
(4)	Other equity exposures						
	PD1					300%	
	PD2					300%	
	PD3					300%	
	PD4					300%	
						300%	
						300%	
	Default (100%)					300%	
	Sub-Total						

					Risk Weight	IRBA(EQ) RWA
(d)	**Application of a 1250% risk weight instead of calculating the credit risk-weighted exposure amount under the PD/LGD Method (as per Para 7.5.52 of MAS Notice 637)**				1250%	

		Materiality Threshold Amount			
(e)	**Materiality threshold below which no payment will be made by the protection provider in the event of loss on an IRBA(EQ) exposure**			1250%	
	Total EL For Equity Exposures under PD/LGD Method			1250%	
	Total for Equity Exposures under PD/LGD Method				

		Net Exposures (as per paragraph 7.2.3(c), using carrying value of the equity investment on the Reporting Bank's balance sheet, after CRM)	~~Net Exposures~~	Risk Weight	~~Before Lvg Adjustment~~ ~~Total RWA~~	~~After Lvg Adjustment~~ IRBA(EQ) RWA ~~Total RWA~~
4.	**Equity Investments in Funds**					
(a)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the LTA**		cancelled		cancelled	
(b)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the MBA**		cancelled		cancelled	
(c)	**Equity investments in funds for which risk-weighted exposure amounts are computed using only the FBA**		cancelled	1250%		
(d)	**Equity investments in funds for which risk-weighted exposure amounts are computed using any combination of the LTA, MBA or FBA**		cancelled		cancelled	
~~(e)~~	~~**Equity investments in funds subject to a 1250% risk weight**~~					cancelled
	Total for Equity Investments in Funds					

		Gross Exposures (before CRM)	Net Exposures (after CRM)	Risk Weight	IRBA(EQ) RWA
5.	**PE/VC investments and investments in unconsolidated major stake companies that are not financial institutions, which are subject to a risk weight of 1250%, pursuant to paragraphs 6.3.6(i) and 6.3.6(ii)**			1250%	

		IRBA(EQ) RWA
~~5~~6.	**Total IRBA(EQ) RWA (excluding exposures subject to 1250% risk weights)**	
	Total IRBA(EQ) RWA (only exposures subject to 1250% risk weights)	

[MAS Notice 637 (Amendment) 2013]
[MAS Notice 637 (Amendment) 2016]

Insertion of Schedule 2-7

MAS NOTICE 637: CREDIT RISK REPORTING SCHEDULES
SCHEDULE 2-7

SECURITISATION

Name of the Reporting Bank:

Statement as at:

Scope of Reporting:

	Before CRM Bought		CRM Adjustments		After CRM			
	Exposures Gross of Specific Allowances	**Exposures net of Specific Allowances**	**Due to Credit Protection Bought**	**Due to Recognition of Financial Collateral**	**Net Exposures Net of Specific Allowances**	**Notional Amounts**	**RWA**	
1. Breakdown by Capital Computation Approach								
(a) Exposures Treated Under SEC-IRBA								
Adjusted Securitisation RWA (after application of para 7.1.12 to 7.1.17 on maximum risk-weighted exposure amounts)								A1
Cash Advance Facilities Extended to Securitisation Transactions								
of which, total undrawn amounts of cash advance facilities extended that are unconditionally cancellable (subject to 10% CCF)								
SEC-IRBA RWA								A = A1
(b) Exposures Treated Under SEC-ERBA								
Adjusted Securitisation RWA (after application of para 7.1.12 to 7.1.17 on maximum risk-weighted exposure amounts)								B1
Cash Advance Facilities Extended to Securitisation Transactions								
of which, total undrawn amounts of cash advance facilities extended that are unconditionally cancellable (subject to 10% CCF)								
SEC-ERBA RWA								B = B1
(c) Exposures Treated Under SEC-SA								
Adjusted Securitisation RWA (after application of para 7.1.12 to 7.1.17 on maximum risk-weighted exposure amounts)								C1
Cash Advance Facilities Extended to Securitisation Transactions								
of which, total undrawn amounts of cash advance facilities extended that are unconditionally cancellable (subject to 10% CCF)								
SEC-SA RWA								C = C1
(d) Securitisation Exposures to which the SEC-IRBA, SEC-ERBA, and SEC-SA cannot be applied								D
Total Securitisation RWA								E = A + B + C + I

2. Breakdown by Exposure Type

	Exposures Gross of Specific Allowances	Exposures net of Specific Allowances	Due to Credit Protection Bought	Due to Recognition of Financial Collateral	Net Exposures Net of Specific Allowances	RWA
Senior and Non-Senior Exposures						
(i) Senior Securitisation Exposures						
(ii) Non-Senior Securitisation Exposures						
Securitisation and Resecuritisation Exposures						
(iii) Securitisation (Non-Resecuritisation) Exposures						
(iv) Resecuritisation Exposures						
STC and Non-STC Exposures						
(v) STC Securitisation Exposures						
(vi) Non-STC Securitisation Exposures						

3. Amounts Deducted in Calculation of CET1 Capital	**Amount Deducted in Calculation of CET1 Capital**
(i) Gain on sale	
(ii) Credit-enhancing interest-only strips net of gain on sale	