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- (vi) when a bank conducts business with a qualifying central counterparty, the bank shall calculate its relevant exposure and the related required amount of capital and reserve funds in accordance with the relevant requirements specified in paragraph (d) below, provided that, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, when a central counterparty no longer meets the relevant requirements related to a qualifying central counterparty, the bank may continue to treat all relevant transactions with that counterparty in accordance with the relevant requirements specified in paragraph (d) below, for a maximum period of up to three months following the date on which that counterparty no longer meets the said requirements, whereafter the bank shall calculate its relevant exposure and the related required amount of capital and reserve funds in accordance with the relevant requirements specified in paragraph (e) below;
- (vii) when a bank conducts business with a non-qualifying central counterparty, the bank shall calculate its relevant exposure and the related required amount of capital and reserve funds in accordance with the relevant requirements specified in paragraph (e) below.

(d) Exposures to qualifying central counterparties

- (i) Subject to the provisions of subparagraph (v) below, when a bank acts as a clearing member of a qualifying central counterparty for its own purposes, the bank shall in respect of all relevant OTC derivative instruments, exchange traded derivative instruments and securities financing transactions apply a risk weight of 2 per cent to the bank's relevant trade exposure to the qualifying central counterparty, provided that:-
 - (A) when the said bank acting as a clearing member offers clearing services to clients, the 2 per cent risk weight shall also apply to the clearing member's trade exposure to the qualifying central counterparty that arises when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the qualifying central counterparty defaults;
 - (B) the bank shall calculate the relevant exposure amount for such trade exposure in accordance with the relevant requirements related to the current exposure method, standardised method or internal model method, respectively specified in subregulations (17) to (19) below, read with the relevant requirements specified in subregulation (9) in respect of collateralised exposure, provided that in the case of banks that apply the internal model method the 20-day floor for the margin period of risk will not apply, provided that the relevant netting set does not contain illiquid collateral or exotic trades and provided there are no disputed trades;

- (C) when settlement is legally enforceable on a net basis in an event of default and regardless of whether the counterparty is insolvent or bankrupt, the bank may calculate the relevant total replacement cost of all contracts relevant to the trade exposure on a net replacement cost basis, provided that the relevant close-out netting sets-
- (i) shall in the case of all relevant repo-style transactions comply with all the relevant requirements specified in subregulation (9)(b)(xvi);
 - (ii) shall in the case of all relevant transactions in derivative instruments comply with all the relevant requirements specified in subregulation (17)(b);
 - (iii) shall in all relevant cases of cross-product netting comply with all the relevant requirements specified in subregulation (19)(d),

Provided that when a bank is unable to demonstrate to the satisfaction of the Registrar that all relevant netting agreements meet the aforesaid requirements, the bank shall regard each relevant single transaction as a netting set of its own for purposes of calculating its relevant trade exposure amount.

- (ii) Without derogating from the provisions of subparagraph (v) below, a bank that acts as a clearing member shall in all relevant cases calculate its relevant exposures, including any potential CVA risk exposure, to clients as bilateral trades, irrespective whether the clearing member guarantees the trade or acts as an intermediary between the client and the relevant qualifying central counterparty, provided that, in order to recognise the shorter close-out period for cleared transactions-
 - (A) a bank that adopted the internal model method and that acts as a clearing member may calculate its relevant exposure amount to clients and the related required amount of capital and reserve funds by applying a margin period of risk of no less than 5 days;
 - (B) a bank that adopted the current exposure method or standardised method may multiply the relevant exposure amount or EAD with a scaling factor of no less than 0.71, provided that when the margin period of risk is greater than 5 days the relevant scaling factor shall be as follows:

Margin period of risk	Scaling factor
6 days	0.77
7 days	0.84
8 days	0.89
9 days	0.95
10 days	1.00

- (iii) When a bank is a client of a clearing member, and the bank enters into a transaction with the said clearing member acting as a financial intermediary, that is, the clearing member completes an offsetting transaction with a qualifying central counterparty, the bank's exposures to the clearing member shall be calculated in accordance with the relevant requirements specified in subparagraph (i) above, provided that-
- (A) the relevant qualifying central counterparty shall identify the relevant offsetting transactions as client transactions and the qualifying central counterparty and/or the clearing member, as the case may be, shall hold collateral to support the relevant transactions, in a manner that prevents any losses to the client due to-
- (i) the default or insolvency of the clearing member;
 - (ii) the default or insolvency of the clearing member's other clients; and
 - (iii) the joint default or insolvency of the clearing member and any of its other clients.

That is, upon the insolvency of the clearing member, there shall be no legal impediment, other than the need to obtain a court order to which the client shall be entitled, to the transfer of the collateral belonging to clients of a defaulting clearing member to the qualifying central counterparty, to one or more other surviving clearing members or to the client or the client's nominee.

- (B) when requested, the bank shall provide the Registrar with an independent, written and reasoned legal opinion that concludes that, in the event of legal challenge, the relevant courts and administrative authorities would find that the client would bear no losses on account of the insolvency of an intermediary clearing member or of any other clients of such intermediary in terms of-
- (i) the law of the jurisdiction(s) of the client, clearing member and qualifying central counterparty;
 - (ii) the law of the jurisdiction(s) in which the branch is located when the foreign branch of the client, clearing member or qualifying central counterparty is involved;
 - (iii) the law that governs the individual transactions and collateral; and
 - (iv) the law that governs any contract or agreement necessary to meet the respective requirements specified in these items (A) and (B);

- (C) relevant laws, regulation, rules, contractual, or administrative arrangements shall provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through the qualifying central counterparty, or by the qualifying central counterparty, should the clearing member default or become insolvent, and in which case the client positions and collateral with the qualifying central counterparty shall be transferred at market value unless the client requests to close out the position at market value;
 - (D) when all the conditions and requirements specified in the preceding items (A) to (C) are met, but the client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, the bank shall apply a risk weight of 4 per cent to the relevant client's exposure to the clearing member;
 - (E) when the bank is a client of the clearing member and the conditions and requirements envisaged in items (A) to (D) above are not met, the bank shall calculate all relevant exposures and the related required amount of capital and reserve funds, including any relevant CVA risk exposure, to the relevant clearing member on a bilateral trade basis.
- (iv) When a bank that is a client of a clearing member enters into a transaction with a qualifying central counterparty, and the clearing member guarantees the bank's performance, the bank's exposures to the qualifying central counterparty shall be calculated in accordance with the relevant requirements specified in subparagraph (i) above, provided that-
- (A) the relevant qualifying central counterparty shall identify the relevant offsetting transactions as client transactions and the qualifying central counterparty and/or the clearing member, as the case may be, shall hold collateral to support the relevant transactions, in a manner that prevents any losses to the client due to-
 - (i) the default or insolvency of the clearing member;
 - (ii) the default or insolvency of the clearing member's other clients; and
 - (iii) the joint default or insolvency of the clearing member and any of its other clients.

That is, upon the insolvency of the clearing member, there shall be no legal impediment, other than the need to obtain a court order to which the client shall be entitled, to the transfer of the collateral belonging to clients of a defaulting clearing member to the qualifying central counterparty, to one or more other surviving clearing members or to the client or the client's nominee.

- (B) when requested, the bank shall provide the Registrar with an independent, written and reasoned legal opinion that concludes that, in the event of legal challenge, the relevant courts and administrative authorities would find that the client would bear no losses on account of the insolvency of an intermediary clearing member or of any other clients of such intermediary in terms of-
- (i) the law of the jurisdiction(s) of the client, clearing member and qualifying central counterparty;
 - (ii) the law of the jurisdiction(s) in which the branch is located when the foreign branch of the client, clearing member or qualifying central counterparty is involved;
 - (iii) the law that governs the individual transactions and collateral; and
 - (iv) the law that governs any contract or agreement necessary to meet the respective requirements specified in these items (A) and (B);
- (C) relevant laws, regulation, rules, contractual, or administrative arrangements shall provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through the qualifying central counterparty, or by the qualifying central counterparty, should the clearing member default or become insolvent, and in which case the client positions and collateral with the qualifying central counterparty shall be transferred at market value unless the client requests to close out the position at market value;
- (D) when all the conditions and requirements specified in the preceding items (A) to (C) are met, but the client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, the bank shall apply a risk weight of 4 per cent to the relevant client's exposure to the clearing member;
- (E) when the bank is a client of the clearing member and the conditions and requirements envisaged in items (A) to (D) above are not met, the bank shall calculate all relevant exposures and the related required amount of capital and reserve funds, including any relevant CVA risk exposure, to the relevant clearing member on a bilateral trade basis.
- (v) In all relevant cases, any asset or collateral posted or provided shall, from the perspective of the bank posting or providing such collateral, be assigned the relevant risk weight that otherwise applies to such asset or collateral in terms of the relevant provisions or requirements specified in these Regulations, regardless of the fact that such asset has been posted or provided as collateral, provided that-

- (A) when an asset or collateral of a clearing member or client is posted with or provided to a qualifying central counterparty or a clearing member, and the asset or collateral is not held in a bankruptcy remote manner, the bank posting or providing such asset or collateral shall also recognise the related credit risk, based upon the asset or collateral being exposed to risk of loss that is based on the creditworthiness of the entity or person holding such asset or collateral, provided that-
 - (i) when the entity or person holding such asset or collateral is the qualifying central counterparty, a risk weight of 2 per cent shall apply to collateral included in the definition of trade exposure;
 - (ii) the relevant risk weight of the qualifying central counterparty shall apply to assets or collateral posted or provided for any purpose other than the situation provided for in sub-item (i) above;
- (B) collateral posted or provided by a clearing member, including cash, securities, other pledged assets, and excess initial or variation margin, which is often being referred to as overcollateralisation, that is held by a custodian, and is bankruptcy remote from the relevant qualifying central counterparty, shall not be subject to a capital requirement for counterparty credit risk exposure to such bankruptcy remote custodian, provided that for purposes of this item (B), custodian includes a trustee, agent, pledgee, secured creditor or any other person that holds property in a manner that does not give such person a beneficial interest in such property and will not result in such property being subject to legally-enforceable claims by such person's creditors, or to a court-ordered stay of the return of such property, should such person become insolvent or bankrupt;
- (C) collateral posted by a client, that is held by a custodian, and is bankruptcy remote from the relevant qualifying central counterparty, the clearing member and other clients, shall not be subject to a capital requirement for counterparty credit risk, provided that when the collateral is held at the qualifying central counterparty on a client's behalf and is not held on a bankruptcy remote basis-
 - (i) a risk weight of 2 per cent shall apply to that collateral when all the relevant conditions and requirements envisaged in paragraph (d)(iii)(A) to (d)(iii)(C) above are met;
 - (ii) a risk weight of 4 per cent shall apply to that collateral when the relevant conditions envisaged in paragraph (d)(iii)(D) apply;

- (vi) When a default fund is shared between products or types of business with settlement risk only, such as in the case of equities and bonds, and products or types of business which give rise to counterparty credit risk, such as OTC derivative instruments, exchange traded derivative instruments or securities financing transactions, the risk weight determined in accordance with the relevant formulae and methodology specified in subparagraph (vii) or (viii) below shall be assigned to all relevant default fund contributions, without any apportionment to different classes or types of business or products, provided that-
- (A) when default fund contributions from clearing members are segregated by product types and only accessible for specific product types, the relevant capital requirements for those default fund exposures shall be determined for each relevant product giving rise to counterparty credit risk in accordance with the formulae and methodology specified in subparagraphs (vii) and (viii) below;
 - (B) when the relevant qualifying central counterparty's prefunded own resources are shared among product types, the qualifying central counterparty shall allocate those funds to each of the relevant calculations, in proportion to the respective product specific exposure or EAD amount;
 - (C) a bank acting as a clearing member shall calculate its relevant required amount of capital and reserve funds related to exposures arising from default fund contributions to a qualifying central counterparty in accordance with-
 - (i) the formulae and methodology related to method 1, set out in subparagraph (vii) below; or
 - (ii) the formulae and methodology related to method 2, set out in subparagraph (viii) below.
- (vii) *Method 1: calculations in respect of default fund exposure*
- (A) Based on the risk sensitive formulae specified in item (B) below, which formulae incorporate-
 - (i) the size and quality of a qualifying central counterparty's financial resources;
 - (ii) the counterparty credit risk exposures of such qualifying central counterparty; and
 - (iii) the application of such financial resources via the qualifying central counterparty's loss bearing waterfall, in the case of one or more clearing member defaults,

a bank that acts as a clearing member may calculate a risk weight for its default fund contributions, provided that the bank's risk sensitive capital requirement for its default fund contribution, denoted by K_{CMI} , shall be calculated using the formulae and methodology specified in item (B) below, which calculation-

- (aa) may also be performed by any relevant qualifying central counterparty, supervisor or other person with access to the relevant required data;
 - (bb) shall be made only when the relevant conditions and requirements specified in item (E) below, are met.
- (B) Any person that wishes to calculate the capital requirement and related risk weight shall firstly calculate the qualifying central counterparty's hypothetical capital requirement due to its counterparty credit risk exposures to all of its relevant clearing members, through the application of the formula specified below:

$$K_{CCP} = \sum_{\text{clearing members } i} \max(EBRM_i - IM_i - DF_i; 0) \cdot RW \cdot \text{Capital ratio}$$

where:

K_{CCP} is the hypothetical capital requirement for a qualifying central counterparty, calculated for the sole purpose of determining the capitalisation of clearing member default fund contributions, that is, K_{CCP} does not represent the actual capital requirements for a qualifying central counterparty, which may be determined by the relevant qualifying central counterparty and/or its relevant supervisor

RW is a minimum risk weight of 20 per cent, or such higher risk weight as may be specified in writing by the Registrar when, for example, the clearing members in a qualifying central counterparty are not highly rated

Capital ratio shall be 8 per cent

$$\max(EBRM_i - IM_i - DF_i; 0)$$

is the exposure amount of the qualifying central counterparty to clearing member 'i', with all values relating to the valuation at the end of the day before the margin called on the final margin call of that day is exchanged, and

EBRM _i	is the exposure value to clearing member 'i' before the application of risk mitigation in terms of the current exposure method for derivative instruments or the comprehensive approach envisaged in subregulation (9)(b), or for securities financing transactions as envisaged in subregulation (9)(b)(xvi), and where, for purposes of this calculation, variation margin that has been exchanged (before the margin called on the final margin call of that day) enters into the mark-to-market value of the transactions
IM _i	is the initial margin collateral posted by the clearing member with the qualifying central counterparty
DF _i	is the prefunded default fund contribution by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce the qualifying central counterparty loss

and in respect of which first step-

- (i) each relevant exposure amount shall be the counterparty credit risk exposure amount that a qualifying central counterparty has to a clearing member, calculated as a bilateral trade exposure for OTC derivatives and exchange traded derivatives, either in terms of the relevant requirements related to the current exposure method, or the standard supervisory haircut method for securities financing transactions, provided that the holding periods for securities financing transaction calculations specified in subregulation (9)(b)(xiv) shall apply even if more than 5000 trades are within one netting set, that is, the higher specified supervisory floor for more than 5000 trades shall not apply in this case;
- (ii) for purposes of calculating K_{CCP} via the current exposure method (CEM), the relevant formula specified in subregulation (17) shall be replaced with the formula:

$$A_{Net} = 0.15*A_{Gross} + 0.85*NGR*A_{Gross}$$

where, for the purposes of this calculation-

- (aa) the numerator of the NGR shall be EBRM_i, as specified hereinbefore, without the CEM add-on in case of OTC derivatives, and the denominator shall be the gross replacement cost, provided that when the minimum variation margin settlement frequency is daily, but the qualifying central counterparty calls margin intraday, then NGR shall be calculated just before margin is actually exchanged at the end of the day, with NGR expected to be non-zero;
 - (bb) the NGR shall be calculated on a counterparty by counterparty basis;
 - (cc) when NGR cannot be calculated as required, the bank shall apply a transitional default value for NGR of 0.30, until 31 March 2013, whereafter the bank shall follow the relevant approach specified in respect of non-qualifying central counterparties;
 - (iii) the potential future exposure calculation under the CEM for options and swaptions that are transacted through a qualifying central counterparty shall be adjusted by multiplying the relevant notional amount of the contract by the absolute value of the option's delta, which shall be calculated according to the relevant requirements and formula specified in subregulation (18)(b);
 - (iv) the netting sets that are applicable to regulated clearing members shall be the same as those envisaged in paragraph (d)(i)(C) above, provided that, for all other clearing members, the netting rules specified by the relevant qualifying central counterparty and based upon notification of each of its clearing members, or such requirements related to netting sets as may be specified in writing by the Registrar, shall apply.
- (C) Following the first-step calculation envisaged in item (B) above, the aggregate capital requirement for all relevant clearing members, prior to any relevant concentration and/or granularity adjustment, shall be calculated, assuming a scenario where two average clearing members default and therefore their default fund contributions are not available to mutualise losses, which scenario is incorporated in the risk-sensitive formulae specified below:

$$K_{CM}^* = \begin{cases} c_2 \cdot \mu \cdot (K_{CCP} - DF') + c_2 \cdot DF'_{CM} & \text{if } DF' < K_{CCP} \\ c_2 \cdot (K_{CCP} - DF_{CCP}) + c_1 \cdot (DF' - K_{CCP}) & \text{if } DF_{CCP} < K_{CCP} \leq DF' \\ c_1 \cdot DF'_{CM} & \text{if } K_{CCP} \leq DF_{CCP} \end{cases} \quad \begin{matrix} (i) \\ (ii) \\ (iii) \end{matrix}$$

where:

K^*_{CM} is the aggregate capital requirement on default fund contributions from all relevant clearing members prior to the application of any relevant granularity and/or concentration adjustment

DF_{CCP} is the qualifying central counterparty's prefunded own resources, such as contributed capital, retained earnings, etc., that are required to be used by the relevant qualifying central counterparty to cover its losses before clearing members' default fund contributions are used to cover such losses

DF_{CM} is the prefunded default fund contributions from surviving clearing members available to mutualise losses under the assumed scenario. Specifically:

$$DF'_{CM} = DF_{CM} - 2 \cdot \overline{DF}_i$$

where \overline{DF}_i is the average default fund contribution

DF' is the total prefunded default fund contributions available to mutualise losses under the assumed scenario. Specifically:

$$DF' = DF_{CCP} + DF'_{CM}$$

c_1 is a decreasing capital factor, between 0.16 per cent and 1.6 per cent, applied to the excess prefunded default funds provided by clearing members, that is, DF_{CM} :

$$c_1 = \text{Max}\left\{\frac{1.6\%}{(DF'/K_{CCP})^{0.3}}, 0.16\%\right\}$$

c_2 is 100 per cent; a capital factor applied when a qualifying central counterparty's own resources (DF_{CCP}) are less than such qualifying central counterparty's hypothetical capital requirements (K_{CCP}), and, as a result, the clearing member default funds are expected to assist in the coverage of the qualifying central counterparty's hypothetical capital requirements (K_{CCP})

μ is 1.2; an exposure scalar that is applied in respect of the unfunded part of the qualifying central counterparty's hypothetical capital requirements (K_{CCP})

and

Equation (i) shall apply when a qualifying central counterparty's total prefunded default fund contributions (DF) are less than the qualifying central counterparty's hypothetical capital requirements (K_{CCP}), in which case the clearing members' unfunded default fund commitments are expected to bear such loss and the exposure for a clearing member bank is expected to be greater than the exposure if all default funds had been prefunded, due to the potential failure of other members to make additional default fund contributions when called.

When a qualifying central counterparty's total prefunded default fund contributions (DF) are not sufficient to cover the qualifying central counterparty's hypothetical capital requirements (K_{CCP}), and clearing members do not have an obligation to contribute more default funds to offset a shortfall in qualifying central counterparty loss-absorbing resources, such clearing members shall still be subject to an additional capital requirement because their exposures to such qualifying central counterparty are, in fact, riskier than would be the case if the qualifying central counterparty had access to adequate resources to cover its hypothetical capital requirements. This requirement reflects the underlying assumption that qualifying central counterparties, through own resources and member default funds, are expected to have adequate loss-bearing, mutualised, financial resources to make defaults on their exposures highly unlikely. When such loss-bearing resources are inadequate, the members' exposures are bearing additional risk, and require additional capital.

Therefore, an exposure scalar (μ) of 1.2 is applied in respect of the unfunded part of K_{CCP} , to reflect the bank's increased exposure arising from reliance on unfunded default fund contributions. When a part of the qualifying central counterparty's own financial resources available to cover losses is used after all clearing members' default fund contributions (DF_{CM}) are used to cover losses, then this part of the qualifying central counterparty's contribution to losses shall be included as part of the total default fund (DF).

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Equation (ii) shall apply when a qualifying central counterparty's own resource contributions to losses (DF_{CCP}) and the clearing members' default contributions (DF_{CM}), are both required to cover the qualifying central counterparty's hypothetical capital (K_{CCP}), but are, in the aggregate, greater than the qualifying central counterparty's hypothetical capital requirements K_{CCP} . As stated hereinbefore, for DF_{CCP} to be included in the total default fund available to mutualise losses (DF'), the qualifying central counterparty's own resources have to be used before DF_{CM} . When that is not the case, and a part of the qualifying central counterparty's own financial resources is used in combination, on a pro rata or formulaic basis, with the clearing members' default fund contributions (DF_{CM}) to cover qualifying central counterparty losses, then this equation shall be adapted in accordance with such conditions or requirements as may be specified in writing by the Registrar, in order to ensure that this part of the qualifying central counterparty contribution is treated in a manner similar to a clearing member's default fund contribution.

Equation (iii) shall apply when a qualifying central counterparty's own financial resource contribution to loss (DF_{CCP}) is used first in the waterfall, and is greater than the qualifying central counterparty's hypothetical capital (K_{CCP}), so that the qualifying central counterparty's own financial resources are expected to bear all of the qualifying central counterparty's losses before the clearing members' default fund contributions (DF_{CM}) are called upon to bear any loss.

(D) Following the second calculation envisaged in item (C) above, the capital requirement for an individual clearing member 'i' (K_{CMI}) shall be calculated by distributing K_{CM}^* to individual clearing members in proportion to the individual clearing member's share of the total prefunded default fund contributions, that is, the presumption shall be that losses will be allocated proportionate to prefunded DF contributions of clearing members, provided that-

(i) when the relevant practice of the qualifying central counterparty differs, the aforesaid allocation method shall be adjusted in accordance with such conditions or requirements as may be specified in writing by the Registrar following consultation;

- (ii) the granularity and concentration of the relevant qualifying central counterparty shall be taken into account through the application of the respective factors 'N', which accounts for the number of members, and 'β', as follows:

$$K_{CM_i} = \left(1 + \beta \cdot \frac{N}{N-2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

where:

$$\beta \quad \text{is equal to } \frac{A_{Net,1} + A_{Net,2}}{\sum_i A_{Net,i}}$$

and subscripts 1 and 2 denote the clearing members with the two largest A_{Net} values, and A_{Net}

- (aa) for OTC derivatives is defined as in item (B) hereinbefore, that is,

$$A_{Net} = 0.15 * A_{Gross} + 0.85 * NGR * A_{Gross}; \text{ and}$$

- (bb) for securities financing transactions shall be replaced by $E * H_e + C * (H_c + H_{fx})$, as defined in subregulation (9)(b)

N is the number of clearing members

DF_i is the prefunded default fund contribution from an individual clearing member 'i'

DF_{CM} is the prefunded default fund contributions from all clearing members, or any other member-contributed financial resources that are available to bear mutualised qualifying central counterparty losses

- (iii) when the aforesaid allocation method can not be applied because the relevant qualifying central counterparty does not have prefunded default fund contributions, the allocation method specified below shall apply:

- (aa) allocate K_{CM}^* based upon each relevant clearing member's proportionate liability for default fund calls, that is, unfunded DF commitment; or

- (bb) when such an allocation is not determinable, the allocation of K_{CM}^* shall be based upon the size of each clearing member's posted initial margin,

which allocation approaches shall replace (DF_i / DF_{CM}) in the aforesaid calculation of K_{CM_i} .

(E) In all relevant cases, sufficient information regarding or related to the calculation of K_{CCP} , DF_{CM} , and DF_{CCP} shall be made available-

- (i) to allow the Registrar or any relevant supervisor of the qualifying central counterparty to appropriately oversee the said calculations;
- (ii) to permit each relevant clearing member to calculate its capital requirement for the default fund; and
- (iii) for the relevant supervisor of such clearing member to review and confirm the required calculations,

provided that, as a minimum-

- (aa) K_{CCP} shall be calculated on a quarterly basis or such more frequent basis as may be specified in writing by the Registrar;
- (bb) whichever person makes the aforesaid calculations shall, whenever required, make available to the relevant supervisor of any relevant bank clearing member sufficient aggregate information regarding the composition of the qualifying central counterparty's exposures to clearing members and information provided to the clearing member for the purposes of the calculation of K_{CCP} , DF_{CM} , and DF_{CCP} ;
- (cc) relevant required information shall be made available to the relevant supervisor on a sufficiently frequent basis to allow the supervisor to duly monitor the risks incurred by the relevant clearing members;
- (dd) K_{CCP} and K_{CMI} shall be recalculated at least quarterly, or whenever material changes occur in respect of, for example, the number or exposure of cleared transactions, or the financial resources of the relevant qualifying central counterparty.

(viii) *Method 2: calculation in respect of default fund exposure*

A bank that acts as a clearing member may apply a risk weight of 1250 per cent, or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds, to its default fund exposures to the relevant qualifying central counterparty, provided that-

- (A) an overall limit shall apply in respect of the relevant aggregate amount of risk-weighted exposure related to all the bank's relevant exposures to that qualifying central counterparty, including any relevant amount of trade exposure, which limit shall be equal to 20 per cent times the relevant amount of trade exposures to that qualifying central counterparty, that is, in terms of this approach, the relevant aggregate amount of risk weighted exposure for both trade and default fund exposures of bank "i" to each relevant qualifying central counterparty shall be equal to:

$$\text{Min } \{(2\% * TE_i + 1250\% * DF_i); (20\% * TE_i)\}$$

where:

TE_i is the trade exposure of bank "i" to the relevant qualifying central counterparty, as measured by the bank in accordance with the relevant requirements specified in paragraph (d)(i) above

DF_i is the pre-funded contribution of bank "i" to the relevant qualifying central counterparty's default fund

- (B) since the equation specified in item (A) above already incorporates the 2 per cent risk weight on trade exposures specified in paragraph (d)(i), the said 2 per cent risk weight shall not otherwise apply for purposes of this calculation.

(e) Exposures to non-qualifying central counterparties

In respect of a bank's-

- (i) trade exposure to a non-qualifying central counterparty, based on the relevant type or category of counterparty credit exposure, a bank shall apply the relevant requirements specified in these Regulations for the standardised approach for the measurement of its exposure to credit risk;
- (ii) default fund contributions to a non-qualifying central counterparty, which default fund contributions shall for purposes of this paragraph (e) include both the funded and the unfunded contributions to be paid when required by the relevant central counterparty, the bank shall apply a risk weight of 1250 per cent, or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds, provided that in respect of any liability for unfunded contributions, that is, any relevant unlimited binding commitment, the Registrar shall specify in writing the relevant amount of unfunded commitment to which the bank shall apply the aforesaid risk weight of 1250 per cent or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds.

(f) *Matters related to minimum required capital and reserve funds for CVA risk, calculated in terms of the standardised approach*

- (i) A bank, other than a bank that obtained the approval of the Registrar for the use of the internal model method for the measurement of the bank's exposure to counterparty credit risk and the internal models approach for the measurement of specific risk as part of the bank's exposure to market risk, shall calculate the relevant additional required amount of capital on a portfolio basis in accordance with the formula specified below:

$$K = 2.33 * \sqrt{h} * \sqrt{(A - B)^2 + C}$$

where:

$$A = \sum_i 0.5 * w_i * (M_i * EAD_i^{\text{total}} - M_i^{\text{hedge}} B_i)$$

$$B = \sum_{\text{ind}} w_{\text{ind}} * M_{\text{ind}} * B_{\text{ind}}$$

$$C = \sum_i 0.75 * w_i^2 * (M_i * EAD_i^{\text{total}} - M_i^{\text{hedge}} B_i)^2$$

h is the one-year risk horizon, in units of a year, $h = 1$.

w_i is the weight applicable to counterparty 'i', provided that-

- (i) based on its external rating, counterparty 'i' shall be mapped to one of the seven weights specified in table 16 below:

Table 16

Rating¹	Weight w_i
AAA	0.7%
AA	0.7%
A	0.8%
BBB	1.0%
BB	2.0%
B	3.0%
CCC	10.0%

1. The notations used in this table relate to the ratings used by a particular credit assessment institution. The use of the rating scale of a particular credit assessment institution does not mean that any preference is given to a particular credit assessment institution. The assessments/ rating scales of other external credit assessment institutions recognised as eligible institutions in South Africa, may have been used instead.

- (ii) subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, when a counterparty does not have an external rating, the bank shall map the relevant internal rating of the counterparty to one of the relevant external ratings specified above

EAD_i^{total} is the exposure at default of counterparty 'i', aggregated across all relevant netting sets, including the effect of any relevant collateral in accordance with the relevant requirements specified in these Regulations for the Standardised Method, the Current Exposure Method or the Internal Model Method, provided that in the case of-

- (i) a bank other than a bank that obtained the approval of the Registrar to adopt the Internal Model Method for the measurement of the bank's exposure to counterparty risk, the bank shall apply the following discounting factor to the exposure:

$$(1 - \exp(-0.05 \cdot M_i)) / (0.05 \cdot M_i);$$

- (ii) a bank that obtained the approval of the Registrar to adopt the Internal Model Method for the measurement of the bank's exposure to counterparty risk, the relevant discount factor is already included in M_i , and no further discount shall be applied

B_i is the notional amount of purchased single name CDS hedges, which notional amounts shall be aggregated in the case of more than one position referencing counterparty 'i', and used to hedge the bank's exposure to CVA risk, provided that the bank shall apply the following discounting factor to the relevant notional amount:

$$(1 - \exp(-0.05 \cdot M_i^{\text{hedge}})) / (0.05 \cdot M_i^{\text{hedge}})$$

B_{ind} is the full notional amount of one or more index CDS of purchased protection, used to hedge the bank's exposure to CVA risk, provided that the bank shall apply the following discounting factor to the relevant notional amount:

$$(1 - \exp(-0.05 \cdot M_{\text{ind}})) / (0.05 \cdot M_{\text{ind}})$$

w_{ind} is the relevant weight applicable to index hedges, provided that the bank shall map indices to one of the seven weights (w_i) specified in table 16, based on the average spread of index 'ind'

M_i is the effective maturity of the relevant transactions with counterparty 'i', provided that-

- (i) in the case of a bank other than a bank that obtained the approval of the Registrar to adopt the Internal Model Method for the measurement of the bank's exposure to counterparty risk, M_i shall be the notional weighted average maturity as envisaged in regulation 23(13)(d)(ii)(B)(iii), provided that M_i shall for purposes of this calculation not be capped at 5 years;
- (ii) a bank that obtained the approval of the Registrar to adopt the Internal Model Method for the measurement of the bank's exposure to counterparty risk shall calculate M_i in accordance with the relevant requirements specified in subregulation (19)(c)

M_i^{hedge} is the maturity of the hedge instrument with notional B_i, provided that in the case of several positions the bank shall aggregate the relevant quantities M_i^{hedge}·B_i

M_{ind} is the maturity of the index hedge 'ind', provided that in the case of more than one index hedge position, it shall be the relevant notional weighted average maturity

Provided that, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, when a counterparty is also a constituent of an index on which a CDS is used to hedge the bank's exposure to counterparty credit risk, the notional amount attributable to that relevant single name, as per its reference entity weight, may be subtracted from the relevant index CDS notional amount and treated as a single name hedge (B_i) of the individual counterparty with maturity based on the maturity of the index.

(g) *Matters related to the calculation of the aggregate amount of required capital and reserve funds for counterparty credit risk and credit valuation adjustments*

The aggregate amount of required capital and reserve funds related to a bank's exposure to counterparty credit risk and CVA risk, that is, default risk and the risk of mark-to-market losses in respect of specified exposures, shall in the case of-

- (i) a bank that obtained the approval of the Registrar for the use of the internal model method for the measurement of the bank's exposure to counterparty credit risk and the internal models approach for the measurement of specific risk as part of a bank's exposure to market risk, be equal to the sum of-

- (A) the higher of the relevant required amount of capital and reserve funds for default risk calculated in terms of the internal model method based on-

- (i) current parameter calibrations for EAD; or
(ii) stressed parameter calibrations for EAD,

Provided that when a bank that obtained the approval of the Registrar for the use of the IRB approach can demonstrate to the satisfaction of the Registrar that in its VaR calculations made in terms of the relevant requirements specified in subregulation (19)(h)(i), the relevant specific VaR model incorporates the effects of rating migrations, the bank shall calculate the risk weights applied to its relevant OTC derivative exposures with the full maturity adjustment as a function of PD and M set equal to 1, provided that when the bank is unable to demonstrate the aforesaid to the satisfaction of the Registrar, the bank shall apply the full maturity adjustment function, through the application of the formula specified below:

$$(1 - 1.5 \times b)^{-1} \times (1 + (M - 2.5) \times b)$$

where:

M is the effective maturity; and

b is the maturity adjustment as a function of the PD,

as envisaged in subregulation (11)(d)(ii) read with the relevant requirements specified in subregulation (13)(d)(ii)(B)

and

- (B) the relevant amount of required capital and reserve funds for CVA risk calculated in accordance with the relevant requirements specified in paragraph (b)(iv) above read with the relevant requirements specified in subregulation (19)(h) below;

- (ii) a bank that obtained the approval of the Registrar for the use of the internal model method for the measurement of the bank's exposure to counterparty credit risk, but not for the use of the internal models approach for the measurement of specific risk as part of a bank's exposure to market risk, be equal to the sum of-

- (A) the higher of the relevant required amount of capital and reserve funds for default risk calculated in terms of the internal model method based on-
 - (i) current parameter calibrations for EAD; or
 - (ii) stressed parameter calibrations for EAD,

and
- (B) the relevant amount of required capital and reserve funds for CVA risk calculated in accordance with the standardised approach specified in paragraph (f) above;
- (iii) all banks other than the banks envisaged in subparagraphs (i) and (ii) above, be equal to the sum of-
 - (A) the relevant aggregate required amount for default risk calculated in accordance with the relevant requirements related to the said current exposure method or standardised method for all relevant counterparties and instruments; and
 - (B) the relevant amount of required capital and reserve funds for CVA risk calculated in accordance with the standardised approach specified in paragraph (f) above.

(16) Conditions subject to which an exposure value or EAD of zero may be applied in respect of a bank's exposure to counterparty credit risk

- (a) Unless specifically otherwise provided in these Regulations, a bank may in respect of its exposure to counterparty credit risk apply an exposure value or EAD of zero, provided that-
 - (i) the said exposure to counterparty credit risk shall relate to protection provided by the reporting bank in the form of a credit-default swap contract, which contract is held in the bank's banking book, provided that the said contract-
 - (A) shall be treated similar to a guarantee provided by the reporting bank and in accordance with the relevant requirements specified in subregulations (9)(d), (12)(e) or (14)(d), as the case may be;
 - (B) shall be subject to required capital and reserve funds in respect of the contract's full notional amount;
 - (ii) the said exposure to counterparty credit risk shall relate to purchased credit derivative protection and the reporting bank shall calculate its required amount of capital and reserve funds in respect of the hedged exposure in accordance with the relevant requirements specified in subregulation (15)(b)(i) above.

(17) *Method 1: Calculation of counterparty credit exposure in terms of the current exposure method*

(a) *Matters relating to the exposure amount or EAD*

A bank that adopted the current exposure method for the measurement of the bank's exposure to counterparty credit risk-

- (i) shall in respect of each relevant transaction, contract or netting set calculate the relevant replacement cost or net replacement cost of the said transaction, contract or netting set;
- (ii) shall in respect of each relevant netting set multiply the relevant notional principle amount with the relevant credit conversion factors specified in table 17 below in order to calculate the relevant required add-on amount, which add-on amount shall be calculated independent from and irrespective of the relevant replacement cost or value calculated in terms of the provisions of subparagraph (i) above.

Table 17
Credit conversion factor

Remaining maturity	Interest rates	FX and gold	Equities	Precious metals except gold	Other commodities
One year or less	0,0%	1,0%	6,0%	7,0%	10,0%
More than one year to five years	0,5%	5,0%	8,0%	7,0%	12,0%
More than five years	1,5%	7,5%	10,0%	8,0%	15,0%

- (iii) may recognise eligible collateral obtained in respect of the bank's exposure to counterparty credit risk in accordance with the relevant requirements specified in subregulation (9)(b)(iv) read with the provisions of subregulation (9)(b)(vii);
- (iv) shall in the case of any single name credit derivative contract held in the bank's trading book calculate the bank's exposure amount or EAD through the application of the relevant potential future exposure add-on factors specified in table 18 below:

Table 18
Potential future exposure add-on factor¹

Description	Protection buyer	Protection seller
Total-return swap Qualifying ² reference obligation	5%	5%
Non-qualifying reference obligation	10%	10%
Credit-default swap Qualifying ² reference obligation	5%	5% ³
Non-qualifying reference obligation	10%	10% ³

1. Add-on factors are not affected by differences in residual maturity.
2. Qualifying shall for purposes of this regulation bear the same meaning as the "qualifying" category for the treatment of specific risk relating to instruments in terms of the standardised measurement method in regulation 28(7).
3. The protection seller of a credit-default swap shall be subject to the add-on factor only when it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent, in which case the add-on shall be limited to the amount of any unpaid premium.

- (v) shall in the case of any qualifying credit derivative instrument held in respect of a banking book exposure calculate the bank's required amount of capital and reserve funds in accordance with the relevant requirements specified in subregulation (9)(d);
- (vi) shall in the case of any-
 - (A) first to default credit derivative transaction determine the relevant add-on factor based on the lowest credit quality underlying instrument in the basket, that is, when the basket contains any non-qualifying items, the bank shall apply the add-on factor relating to the said non-qualifying reference obligation;
 - (B) second and subsequent to default credit derivative transaction allocate the underlying assets based on the credit quality of the assets, that is, the second lowest credit quality shall determine the add-on factor in respect of a second to default transaction;
- (vii) may in respect of any OTC derivative transaction or contract subject to novation or a legally enforceable bilateral netting agreement recognise the effect of the said novation or netting agreement provided that the bank shall at all times comply with the relevant requirements specified in paragraph (b) below;

(viii) shall calculate its adjusted exposure amount or EAD through the application of the formula specified below, which formula is designed to recognise the effect of collateral and any volatility in the amount relating to the collateral, and, when relevant, the effect of any legally enforceable bilateral netting agreement. The formula is expressed as:

$$E^* = (RC + \text{add-on}) - C_A$$

where:

RC is the relevant current replacement cost, or

when the bank has in place a legally enforceable netting agreement that complies with the relevant requirements specified in paragraph (b) below, the current net replacement cost of the relevant netting set, that is, when the bank has in place a legally enforceable netting agreement the bank may net off positive market values against negative market values in order to calculate a single net current exposure for all transactions covered by the said netting agreement, subject to a minimum value of zero

Add-on is the estimated amount relating to the potential future exposure, or

when the bank has in place a legally enforceable netting agreement that complies with the relevant requirements specified in paragraph (b) below, the adjusted add-on amount, that is, the add-on amount may be reduced through the application of the formula specified below, which formula is designed to recognise reductions in the volatility of current exposures resulting from netting agreements

$$A_{\text{net}} = 0.4(A_{\text{gross}}) + 0.6(\text{NGR} \times A_{\text{gross}});$$

where:

A_{net} is the adjusted add-on for all contracts subject to the bilateral netting contract

A_{gross} is the sum of the gross add-ons for the contracts covered by the netting agreement. **A_{gross}** is equal to the sum of individual add-on amounts, calculated by multiplying the relevant notional principal amount with the relevant specified add-on factor, of all transactions subject to the bilateral netting contract

NGR is the ratio of the net current exposure of the contracts included in the bilateral netting agreement to the gross current exposure of the said contracts

C_A is the volatility adjusted collateral amount calculated in accordance with the relevant requirements of the comprehensive approach specified in subregulation (9)(b), or zero in the absence of eligible collateral, provided that the bank shall apply the relevant haircut for currency risk, that is, Hfx, when a mismatch exists between the collateral currency and the settlement currency. Even when more than two currencies are involved in the exposure, collateral and settlement currency, the bank shall, based on the frequency of mark-to-market, apply a single haircut assuming a 10-business day holding period, scaled up as necessary.

(b) *Matters relating to bilateral netting*

A bank that adopted the current exposure method for the measurement of the bank's exposure to counterparty credit risk may in the case of OTC transactions-

- (i) net transactions subject to novation, in terms of which netting any obligation between the bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations;
- (ii) net transactions subject to any legally valid form of bilateral netting not included in subparagraph (i) above, including any other form of novation,

provided that in all cases-

- (A) the bank shall have in place a netting contract or agreement with the said counterparty which contract or agreement shall create a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of the said transactions in the event of counterparty failure to perform in accordance with the contractual agreement, irrespective whether or not the said failure relates to default, bankruptcy, liquidation or similar circumstances;
- (B) the bank shall have in place written and reasoned legal opinions confirming that in the event of a legal challenge the relevant courts and administrative authorities would find the bank's exposure to be the said net amount in terms of-

- (i) the law of the jurisdiction in which the counterparty is incorporated or chartered, and when the foreign branch of a counterparty is involved, also in terms of the law of the jurisdiction in which the branch is located;
 - (ii) the law that governs the individual transactions; and
 - (iii) the law that governs any contract or agreement necessary to effect the said novation or netting;
- (C) when a national supervisor or regulator is not satisfied with the legal enforceability of the said agreement, neither counterparty shall apply netting in respect of the relevant transactions or contracts;
- (D) the bank shall have in place robust procedures in order to continuously monitor the legal characteristics of the said netting agreement for possible changes in relevant law that may affect the legal enforceability of the said agreement;
- (E) since the gross obligations are not in any way affected, no payment netting agreement, which agreement is designed to reduce the operational costs of daily settlements, shall be taken into consideration in the calculation of the reporting bank's exposure amount, EAD or required capital and reserve funds;
- (F) no contract containing walk-away clauses, that is, any provision that permits a non-defaulting counterparty to make only limited payments or no payment at all to the estate of a defaulter, even when the defaulter is a net creditor, shall be eligible for netting in terms of these Regulations;
- (G) the exposure amount or EAD shall be the sum of the net mark-to-market replacement cost, if positive, plus the said add-on amount, calculated in accordance with the relevant requirements specified in paragraphs (a) above.

(18) *Method 2: Calculation of counterparty credit exposure in terms of the standardised method*

(a) *Matters relating to the exposure amount or EAD*

A bank that adopted the standardised method for the measurement of the bank's exposure to counterparty credit risk-

- (i) shall separately calculate its counterparty credit exposure or EAD amount in respect of each relevant netting set through the application of the formula specified below:

The exposure amount or EAD shall be equal to-

$$\beta \cdot \max \left(CMV - CMC; \sum_j \left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right| \times CCF_j \right)$$

where:

CMV is the relevant current market value of the relevant portfolio of transactions within the netting set with a particular counterparty, gross of any collateral, that is,

$$CMV = \sum_i CMVi$$

where:

$CMVi$ is the relevant current market value of transaction i

CMC is the relevant current market value of the collateral assigned to the relevant netting set, that is,

$$CMC = \sum_l CMC_l$$

where:

CMC_l is the relevant current market value of collateral l

i is the index designating transaction

l is the index designating collateral

j is the index designating specified hedging sets, which hedging sets correspond to risk factors for which risk positions of opposite sign may be offset to yield a net risk position on which the exposure measure is based

RPT_{ij} is the relevant risk position from transaction i with respect to hedging set j, that is, for example, a short-term FX forward contract with one leg denominated in the domestic currency shall be mapped into three risk positions, which is, firstly an FX risk position, secondly a foreign currency interest rate risk position and finally a domestic currency risk position

RPC_{lj} is the risk position from collateral l with respect to hedging set j

CCF_j is the specified credit conversion factor with respect to the hedging set j

- b** is the beta factor, which beta factor shall be equal to 1.4, provided that based on the reporting bank's exposure to counterparty credit risk and the related risk factors, the Registrar may specify a beta factor higher than 1.4
- (ii) shall in the calculation of the exposure amount or EAD include collateral received from a counterparty as a positive amount and collateral posted to a counterparty as a negative amount, provided that only instruments qualifying as eligible collateral in accordance with the relevant provisions of subregulation (9)(b)(iv) shall be recognised as eligible collateral in terms of the provisions of this subregulation (18);
 - (iii) shall assign to any risk position that reflects a long position in respect of a transaction with a linear risk profile a positive sign, and to any risk position that reflects a short position in respect of a transaction with a linear risk profile a negative sign;
 - (iv) shall in the case of an OTC derivative transaction with a linear risk profile, such as a forward contract, future contract or swap contract, which contract requires an exchange of a financial instrument such as a bond, an equity instrument or a commodity against payment, treat the payment part of the transaction in accordance with the relevant requirements relating to payment legs specified in this subregulation (18);
 - (v) shall in the case of transactions that require the exchange of payment against payment, such as an interest-rate-swap contract or foreign-exchange forward contract, identify the relevant payment legs of the contract, which payment legs shall be represented by the contractually agreed gross payments, including the notional amount of the transaction, provided that for purposes of calculating the bank's exposure to counterparty credit risk-
 - (A) the bank may in the case of payment legs with a remaining maturity of less than one year disregard any relevant interest rate risk;
 - (B) the bank may treat transactions that consist of two payment legs denominated in the same currency, such as an interest-rate swap contract, as a single aggregate transaction;
 - (vi) shall in the case of transactions with linear risk profiles with equity, equity indices, gold, other precious metals or other commodities as the underlying financial instruments, map-
 - (A) the relevant component of the transaction to a risk position in the relevant equity, equity index or commodity hedging set, which commodity hedging set may relate to gold or other precious metals;

- (B) the relevant payment leg of the transaction to an interest rate risk position within the appropriate interest rate hedging set, provided that when the payment leg is denominated in a foreign currency the bank shall also map the relevant component of the transaction to a foreign exchange risk position in the relevant currency;
- (vii) shall in the case of transactions with linear risk profiles with a debt instrument such as a bond or loan as the underlying instrument, map the relevant transaction to an interest rate risk position with one risk position in respect of the relevant debt instrument and another risk position in respect of the payment leg, provided that-
- (A) any transaction with a linear risk profile that requires an exchange of payment against payment, including any relevant foreign exchange forward contract, shall be mapped to an interest rate risk position in respect of each of the relevant payment legs;
 - (B) when the underlying debt instrument is denominated in a foreign currency, the bank shall map the relevant debt instrument to a foreign exchange risk position in the relevant currency;
 - (C) when a payment leg is denominated in a foreign currency, the bank shall map the relevant payment leg to a foreign exchange risk position in the said currency, that is, the bank, for example, shall map a short-term FX forward contract with one leg denominated in domestic currency into three risk positions, which is, firstly an FX risk position, secondly a foreign currency interest rate risk position and finally a domestic currency risk position;
 - (D) the bank shall assign to any foreign-exchange basis swap transaction an exposure amount or EAD of zero;
- (viii) shall determine the size and sign of all relevant risk positions in accordance with the relevant formulae and requirements specified in paragraph (b) below, provided that in the case of-
- (A) any transaction with a non-linear risk profile in respect of which the reporting bank is unable to determine the required delta value; or
 - (B) any payment leg or transaction with a debt instrument as the underlying instrument and in respect of which payment leg or transaction the reporting bank is unable to determine the required modified duration,

through the application of the bank's internal model approved by the Registrar for the measurement of the bank's exposure to market risk, the Registrar may determine the size of the relevant risk position or require the bank to instead use the current exposure method, provided that in the said cases the reporting bank shall not apply any netting and shall determine the relevant exposure amount or EAD as if the netting set comprised of only the said individual transaction;

(ix) shall group all relevant risk positions into the appropriate hedging sets specified in paragraph (c) below, provided that in respect of each relevant hedging set the reporting bank-

(A) shall calculate the absolute amount of the sum of the relevant risk positions, which sum shall constitute the net risk position and in the formula specified in subparagraph (i) above be represented by the variable-

$$\left| \sum_i RPT_{ij} - \sum_i RPC_{ij} \right|$$

(B) shall in the case of option contracts include in the relevant net risk position any sold option that may increase the current market value of the relevant netting set;

(x) shall in respect of the net risk position relating to a specific hedging set apply the relevant credit conversion factors specified in paragraph (d) below, provided that in the case of-

(A) any transaction with a non-linear risk profile in respect of which the reporting bank is unable to determine the required delta value; or

(B) any payment leg or transaction with a debt instrument as the underlying instrument and in respect of which payment leg or transaction the reporting bank is unable to determine the required modified duration,

through the application of the bank's internal model approved by the Registrar for the measurement of the bank's exposure to market risk, the Registrar may determine the relevant credit conversion factor relating to the relevant risk position or require the bank to instead use the current exposure method, provided that in the said cases the reporting bank shall not apply any netting and shall determine the relevant exposure amount or EAD as if the netting set comprised of only the said individual transaction.

(b) *Further matters relating to the size and sign of an exposure amount or EAD*

In respect of any bank that adopted the standardised method for the measurement of the bank's exposure to counterparty credit risk, the size of a risk position arising from-

(i) any instrument other than a debt instrument, which risk position relate to a transaction with a linear risk profile, shall be the effective notional value, that is, the relevant market price multiplied by the relevant quantity, of the relevant underlying financial instrument, which instrument may include a commodity, converted to the bank's domestic currency;

- (ii) a debt instrument, and the payment legs of all transactions, shall be the effective notional value of the outstanding gross payments, including the notional amount, converted to the bank's domestic currency, multiplied by the modified duration of the relevant debt instrument or payment leg;
- (iii) a credit-default swap, shall be the notional value of the relevant reference debt instrument multiplied by the remaining maturity of the said credit-default swap;
- (iv) an OTC derivative instrument with a non-linear risk profile, including options and swaptions, shall be the delta equivalent effective notional value of the relevant financial instrument underlying the transaction provided that the underlying financial instrument is an instrument other than a debt instrument;
- (v) an OTC derivative instrument with a non-linear risk profile, including options and swaptions, in respect of which instrument the underlying is a debt instrument or payment leg, shall be the delta equivalent effective notional value of the relevant financial instrument or payment leg multiplied by the modified duration of the relevant debt instrument or payment leg,

provided that the reporting bank may use the formulae specified below in order to determine the size and sign of a specific risk position.

- (A) In the case of all instruments other than debt instruments, through the application of the formula specified below:

The effective notional value or delta equivalent notional value shall be equal to-

$$p_{ref} \frac{\partial V}{\partial p}$$

where:

p_{ref} is the relevant price of the underlying instrument, expressed in the reference currency

v is the relevant value of the financial instrument, that is, in the case of an option contract, the option price, and in the case of a transaction with a linear risk profile, the value of the underlying instrument itself

p is the price of the underlying instrument, expressed in the same currency as "v"

- (B) In the case of all debt instruments, and the payment legs of all transactions, through the application of the formula specified below:

Effective notional value multiplied by the modified duration, or

Delta equivalent in notional value multiplied by the modified duration

$$\frac{\partial V}{\partial r}$$

where:

v is the relevant value of the financial instrument, that is, in the case of an option contract, the option price, and in the case of a transaction with a linear risk profile, the value of the underlying instrument itself or of the relevant payment leg

Provided that when “v” is denominated in a currency other than the reference currency, the bank shall convert the derivative into the reference currency by multiplying the relevant amount with the relevant exchange rate

r is the relevant interest level

(c) *Matters relating to hedging sets*

A bank that adopted the standardised method for the measurement of the bank's exposure to counterparty credit risk-

- (i) shall in the case of any interest rate position arising from debt instruments of low specific risk, that is, any debt instrument subject to a specific risk capital requirement of 1,6 per cent or lower in terms of the relevant requirements relating to the standardised approach for market risk envisaged in regulation 28(4) read with the relevant requirements specified in regulation 28(7), and in respect of each relevant currency, map the relevant position into one of six hedging sets specified in table 20 below, provided that-

- (A) the bank shall assign relevant interest rate positions arising from the payment legs to the same hedging sets as interest rate risk positions from debt instruments of low specific risk;

- (B) the bank shall assign interest rate positions arising from money deposits received from a counterparty as collateral to the same hedging sets as interest rate risk positions from debt instruments of low specific risk;
- (C) in the case of any underlying debt instrument such as a floating rate note, or payment legs such as floating rate legs relating to interest swaps, in respect of which the interest rate is linked to a reference interest rate that represents a general market interest level such as a government bond yield, a money market rate or swap rate, the bank shall base the rate adjustment frequency on the length of the time interval up to the next re-adjustment of the reference interest rate. Otherwise, the remaining maturity shall be the remaining life of the underlying debt instrument or, in the case of any payment leg, the remaining life of the transaction;
- (D) there shall be one hedging set in respect of each relevant issuer of a reference debt instrument that underlies a credit-default swap;
- (E) there shall be one hedging set in respect of each relevant issuer of a debt instrument of high specific risk, that is, any debt instrument subject to a specific risk capital requirement of more than 1,6 per cent in terms of the relevant requirements relating to the standardised approach for market risk envisaged in regulation 28(4) read with the relevant requirements specified in regulation 28(7), or when deposits are placed as collateral with a counterparty with no debt obligations outstanding of low specific risk;
- (F) when a payment leg emulates a debt instrument of high specific risk, such as a total-return swap contract with one leg emulating a bond, there shall be one hedging set in respect of each relevant issuer of the said reference debt instrument provided that the reporting bank may assign risk positions that arise from debt instruments relating to a specific issuer or from reference debt instruments of the same issuer that are emulated by payment legs or that underlie a credit-default swap to the same hedging set,

which hedging sets shall be defined per currency, based on a combination of-

- (i) the nature of the reference interest rate, that is, a sovereign rate or a rate other than a sovereign rate;
- (ii) the remaining maturity or rate adjustment frequency of the relevant instrument, that is, one year or less, more than one year to five years, and more than five years, as specified in table 19 below:

Table 19
Hedging sets for interest rate risk positions, per currency

Remaining maturity or rate-adjustment frequency	Sovereign- referenced interest rates	Non-sovereign referenced interest rates
One year or less	X	X
More than one year to five years	X	X
More than five years	X	X

- (ii) shall in the case of underlying financial instruments other than debt instruments, such as equity instruments, precious metals or commodities, assign the relevant instrument to the same hedging set only when the said instruments are identical or similar instruments, where similar instruments in the case of-
 - (A) equity instruments mean instruments issued by the same issuer provided that the reporting bank shall treat an equity index as a separate issuer;
 - (B) precious metals mean instruments relating to the same metal provided that the reporting bank shall treat a precious metal index as a separate precious metal;
 - (C) commodities mean instruments relating to the same commodity provided that the reporting bank shall treat a commodity index as a separate commodity;
 - (D) electric power include delivery rights and obligations that relate to the same peak or off-peak load time interval within any relevant 24 hour interval.

(d) *Matters relating to credit conversion factors*

In respect of the net risk position relating to a specific hedging set, a bank that adopted the standardised method for the measurement of the bank's exposure to counterparty credit risk shall in the case of-

- (i) a net risk position arising from a debt instrument or reference debt instrument apply a credit conversion factor of-
 - (A) 0.6 percent when the risk position relates to a debt instrument or reference debt instrument of high specific risk;
 - (B) 0.3 percent when the risk position relates to a reference debt instrument that underlies a credit-default swap, which instrument is of low specific risk;

- (C) 0.2 percent when the risk position relates to a net position other than a position envisaged in item (A) or (B) above.
- (ii) underlying financial instruments other than debt instruments, and in respect of foreign exchange rates, apply the credit conversion factors specified in table 20 below:

Table 20

Exchange rates	Gold	Equity	Precious metals (excluding gold)	Electric power	Other commodities (excluding precious metals)
2.5%	5.0%	7.0%	8.5%	4%	10.0%

- (iii) underlying instruments of OTC derivative instruments, which instruments are not included in any one of the categories specified in subparagraph (i) or (ii) above, apply to the relevant notional equivalent amount a credit conversion factor of 10 per cent, provided that the reporting bank shall assign the said instrument to a separate individual hedging set in respect of each relevant category of underlying instrument.

(19) Method 3: Calculation of counterparty credit exposure in terms of the internal model method

(a) Matters relating to the exposure amount or EAD, and matters related thereto

A bank that obtained the approval of the Registrar to adopt the internal model method for the measurement of the bank's exposure to counterparty credit risk-

- (i) shall calculate its counterparty credit exposure or EAD amount at the level of each relevant netting set and through the application of the formulae specified below, provided that-
 - (A) the bank shall in no case capture the effect of a reduction of EAD due to a clause in a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates;
 - (B) when the bank's internal model includes the effect of collateral on changes in the market value of the netting set, the bank shall jointly model collateral other than cash of the same currency as the exposure itself with the exposure in its EAD calculations for securities financing transactions;

- (C) when the bank is unable to jointly model any relevant eligible collateral with the exposure to recognise in its EAD calculations for OTC derivatives the effect of collateral, other than cash of the same currency as the exposure itself, the bank shall apply either haircuts that meet the standards of the financial collateral comprehensive approach specified in subregulation (9) of these Regulations with own haircut estimates or the standard haircuts specified in subregulation (9)(b)(xi);
- (D) when the bank identified specific wrong way risk in respect of a counterparty, the bank shall calculate its relevant counterparty credit exposure or EAD amount and any related amount of required capital and reserve funds in accordance with the relevant requirements specified in subparagraph (ii) below.

Exposure amount or EAD = $\alpha \times \text{EEPE}$

where:

EAD is the relevant exposure amount or exposure at default

α is an alpha factor, which alpha factor shall be equal to 1.4 if the bank complies with all the relevant qualitative requirements specified in regulations 39(8) to 39(12) of these Regulations, provided that-

- (i) based on the reporting bank's exposure to counterparty credit risk, the bank's backtesting results of its model, the bank's level of compliance with the qualitative requirements specified in regulations 39(8) to 39(12) of these Regulations, and the related risk factors, the Registrar may specify a higher alpha factor, which related risk factors may include low granularity of counterparties, high exposures to general wrong-way risk or high correlation of market values across counterparties;
- (ii) subject to the prior written approval of the Registrar and in accordance with the relevant requirements specified in paragraph (b) below, the bank may estimate its own alpha factor

EEPE is the effective expected positive exposure, which effective expected positive exposure is the weighted average effective expected exposure during the first year of future exposure calculated across possible future values of relevant market risk factors such as interest rates or foreign exchange rates and in accordance with the formula specified below, provided that when all contracts in the relevant netting set mature before one year, effective expected positive exposure shall be the weighted average of effective expected exposure until all contracts in the netting set mature

$$\text{Effective EPE} = \sum_{k=1}^{\min(1 \text{ year, maturity})} \text{effective EE}_{t_k} \times \Delta t_k$$

where:

EE is the expected exposure amount estimated by the bank's internal model at the relevant series of future dates

and

the weights $\Delta t_k = t_k - t_{k-1}$ make provision for the cases when future exposure is calculated at dates that are not equally spaced over time

effective expected exposure shall be calculated recursively through the application of the formula specified below

$$\text{Effective EE}_{t_0} = \max(\text{effective EE}_{t_{-1}}, \text{EE}_{t_0})$$

where:

current date shall be denoted by t_0

and

Effective EE_{t0} shall be equal to the current exposure

- (ii) shall in the case of an instrument where a connection exists between the counterparty and the underlying issuer, and for which specific wrong way risk has been identified, calculate its relevant counterparty credit exposure or EAD amount and any related required amount of capital and reserve funds in accordance with the relevant requirements specified in this subparagraph (ii), provided that-

- (A) when calculating its relevant required amount of capital and reserve funds for counterparty credit risk, the relevant aforesaid instrument in respect of which a connection exists between the counterparty and the underlying issuer shall be regarded as not being part of the same netting set as other transactions with that counterparty;
- (B) in the case of a single-name credit default swap, the exposure or EAD amount in respect of that swap counterparty shall be equal to the full expected loss in the remaining fair value of the underlying instruments assuming the underlying issuer is in liquidation;

The use of the full amount of expected loss in remaining fair value of the underlying instrument allows the bank to recognise, in respect of such swap, the market value that has already been lost and any expected recoveries.

Accordingly, for such swap transactions, a bank that adopted-

- (i) the standardised approach for the measurement of the bank's exposure to credit risk shall apply the relevant risk weight applicable to an unsecured transaction;
- (ii) the foundation or advanced IRB approach for the measurement of the bank's exposure to credit risk shall set LGD equal to 100 per cent.

Recoveries may be possible on the underlying instrument beneath such a swap. The relevant capital requirement for such underlying exposure shall be calculated without reduction for the swap that introduces wrong way risk. Normally this will result in the underlying exposure being risk weighted equivalent to an unsecured transaction, that is, assuming the underlying exposure is an unsecured credit exposure.

- (C) in the case of equity derivatives, bond options, securities financing transactions, etc., referencing a single company, EAD shall be equal to the value of the transaction under the assumption of a jump-to-default of the underlying security, provided that when this results in the re-use of possibly existing market risk calculations for IRC that already contain an LGD assumption, the LGD shall be set equal to 100 per cent;
- (iii) shall calculate an expected exposure amount or peak exposure amount based on a distribution of exposures that accounts for any non-normality in the said distribution of exposures, including any leptokurtosis, that is, fat tails;

- (iv) may, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, instead of calculating the exposure amount or EAD by multiplying effective expected positive exposure with the specified alpha factor specified in subparagraph (i) above, use a more conservative measure than effective expected positive exposure, such as a VaR model for counterparty exposure or another measure based on peak exposure instead of average exposure;
- (v) may in the calculation of its counterparty credit exposure or EAD apply any form of internal model, including a simulation model or analytical model, provided that-
 - (A) the said internal model adopted by the reporting bank shall specify the forecasting distribution for changes in the market value of a netting set attributable to changes in market variables such as interest rates or foreign exchange rates, which forecasting distribution for changes in the market value of a netting set may include eligible financial collateral specified in subregulation (9)(b)(iv), provided that the bank shall in respect of the said collateral comply with the relevant quantitative, qualitative and data requirements relating to the internal model method, specified in this subregulation (19);
 - (B) in respect of each relevant future date and based on the changes in the market variables, the model shall compute the bank's exposure to counterparty credit risk relating to a particular netting set;
 - (C) in the case of a counterparty subject to a margining agreement, the model may capture future movements in the value of collateral;
 - (D) to the extent that the reporting bank recognises collateral in the estimation of an exposure amount or EAD via current exposure, the bank shall not recognise the said benefit of collateral in its estimates of LGD, that is, the bank shall apply an LGD ratio of an otherwise similar uncollateralised facility when the bank recognises the value of collateral obtained in the estimation of an exposure amount or EAD;
 - (E) the bank shall at all times comply with the relevant requirements specified in paragraph (f) below.
- (vi) shall determine the effective maturity relating to a particular netting set in accordance with the relevant requirements specified in paragraph (c) below;

- (vii) shall not in the calculation of its exposure amount or EAD apply any cross-product netting otherwise than in accordance with the relevant requirements specified in paragraph (d) below.
- (viii) shall in respect of any netting set subject to margining calculate the relevant exposure in accordance with the relevant requirements specified in paragraph (e) below;
- (ix) may in respect of any OTC derivative transaction or contract subject to novation or a legally enforceable bilateral netting agreement recognize the effect of the said novation or netting agreement in accordance with the relevant requirements specified in subregulation (17) above.

(b) *Matters relating to own estimates of alpha*

Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank that adopted the internal model method for the measurement of the bank's exposure to counterparty credit risk may calculate its own internal estimates of alpha, provided that-

- (i) the alpha factor shall in no case be less than 1.2, that is, any internally estimated alpha factor shall be subject to an absolute minimum of 1.2;
- (ii) alpha shall constitute a ratio, calculated as-
 - (A) economic capital derived from a joint simulation of all relevant market and credit risk factors relating to counterparty exposure across all relevant counterparties, as the numerator; **divided by**
 - (B) economic capital based on expected positive exposure, as the denominator,
- (iii) any internal estimate of alpha shall take into account the granularity of the relevant exposures;
- (iv) the bank-
 - (A) shall comply with all relevant operating requirements relating to internal estimates of expected positive exposure specified in paragraph (f) below;
 - (B) shall demonstrate to the satisfaction of the Registrar that its internal estimate of alpha captures in the numerator the material sources of stochastic dependency of distributions of market values of transactions or portfolios of transactions across counterparties, such as the correlation of defaults across counterparties and between market risk and default;

- (C) shall in respect of the denominator, apply expected positive exposure in a manner similar to a fixed outstanding loan amount;
 - (D) shall ensure that the numerator and denominator of alpha are calculated in a consistent manner with respect to the modelling methodology, parameter specifications and portfolio composition;
 - (E) shall ensure that the approach applied by the bank in order to determine alpha is based on the internal economic capital approach adopted by the bank, which approach-
 - (i) shall be duly documented;
 - (ii) shall be subject to independent validation.
 - (F) shall frequently review its internal estimates of alpha, but in no case less frequently than once a quarter or more frequently when the composition of the relevant portfolio varies over time;
 - (G) shall continuously assess its model risk;
 - (v) when appropriate, any volatility and correlation of market risk factors used in the joint simulation of market risk and credit risk shall be conditioned on the credit risk factor in order to reflect potential increases in volatility or correlation in an economic downturn situation.
- (c) *Matters relating to effective maturity*

A bank that obtained the approval of the Registrar to adopt the internal model method for the measurement of the bank's exposure to counterparty credit risk shall in the case of-

- (i) a netting set in respect of which the original maturity of the longest-dated contract contained in the said netting set is equal to or exceeds one year, calculate the effective maturity of the relevant exposure through the application of the formula specified below, instead of the formula specified in subregulation (13)(d)(ii)(B), provided that subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank that uses an internal model, amongst other things, to calculate a one-sided credit valuation adjustment relating to its counterparty credit exposure may apply the effective credit duration estimated by the bank in respect of the said exposure instead of the effective maturity calculated in accordance with the formula specified below:

$$M = \frac{\sum_{k=1}^{t_k \leq 1\text{year}} \text{Effective } EE_k \times \Delta t_k \times df_k + \sum_{t_k > 1\text{year}}^{\text{maturity}} EE_k \times \Delta t_k \times df_k}{\sum_{k=1}^{t_k \leq 1\text{year}} \text{Effective } EE_k \times \Delta t_k \times df_k}$$

where:

M is the effective maturity, which effective maturity shall be subject to a maximum of five years

df_k is the risk-free discount factor relating to future time period t_k

- (ii) a netting set in respect of which all contracts have an original maturity of less than one year, other than any short-term exposure as envisaged in subparagraph (iii) below, calculate the effective maturity of the relevant exposure in accordance with the formula and requirements specified in subregulation (13)(d)(ii)(B), provided that the bank shall in respect of the said exposures apply a maturity floor equal to one year;
- (iii) any short-term exposure calculate the effective maturity of the relevant exposure in accordance with the formula and requirements specified in subregulation (13)(d)(ii)(B)(ii).

(d) *Matters relating to cross-product netting*

- (i) A bank that obtained the approval of the Registrar to adopt the internal model method for the measurement of the bank's exposure to counterparty credit risk may include in a particular netting set relating to a particular counterparty any exposure arising from a securities financing transaction or both a securities financing transaction and an OTC derivative contract, provided that-
 - (A) in all cases the bank shall have in place a legally sound bilateral netting agreement, which agreement shall comply with the relevant requirements and criteria specified in subparagraph (ii) below;
 - (B) at all times, the bank shall comply with such procedural requirements or additional requirements as may be specified in writing by the Registrar.
- (ii) Legal and operational criteria

A bank that wishes to include in a netting set relating to a particular counterparty, exposures that arise from securities financing transactions or both securities financing transactions and OTC derivative contracts shall have in place a legally sound written bilateral netting agreement with the said counterparty, which agreement shall create a single legal obligation covering all relevant bilateral master agreements and transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the relevant positive and negative close-out amounts and mark-to-market values in the event of any failure of the counterparty to perform in accordance with the said transactions, contracts or agreements, irrespective whether or not the said failure relates to default, bankruptcy, liquidation or similar circumstances, provided that-

- (A) the bank shall have in place written and reasoned legal opinion that conclude with a high degree of certainty that in the event of legal challenge the relevant courts or administrative authorities would find the bank's exposure in terms of the said cross-product netting agreement to be the cross-product net amount under the laws of all relevant jurisdictions
 - (i) which legal opinions-
 - (aa) as a minimum, shall address the validity and enforceability of the said cross-product netting agreement under its terms and the impact of the cross-product netting agreement on the material provisions of any included bilateral master agreement;
 - (bb) shall generally be recognised in all relevant jurisdictions or communities.
 - (ii) which laws of all relevant jurisdictions include-
 - (aa) the law of the jurisdiction in which the counterparty is chartered or incorporated and if the foreign branch of a counterparty is involved, the law of the jurisdiction in which the branch is located;
 - (bb) the law that governs the relevant individual transactions;
 - (cc) the law that governs any contract or agreement necessary to effect the netting.
- (B) the bank shall have in place robust internal procedures to verify, prior to including a transaction in a netting set, that the transaction is covered by legal opinions that comply with the aforesaid criteria;
- (C) the bank shall regularly update all relevant legal opinions in order to ensure continued enforceability of the cross-product netting agreement in light of any possible changes in relevant law;
- (D) the cross-product netting agreement shall not contain any walk-away clause, that is, any provision that permits a non-defaulting counterparty to make only limited payments or no payment at all to the estate of the person that defaulted, even when the defaulting person is a net creditor;

- (E) each relevant bilateral master agreement and transaction included in across-product netting agreement shall continuously comply with any relevant legal requirement specified in these Regulations that may have an impact on the legal recognition or enforceability of the said bilateral agreement, contract or transaction;
- (F) the reporting bank shall duly maintain record of all relevant and required documentation;
- (G) the reporting bank shall aggregate the relevant credit risk amounts relating to each relevant counterparty in order to obtain the single legal exposure amount across products and transactions covered by the cross-product netting agreement, which aggregated amount, amongst other things, shall form part of the bank's risk management processes relating to credit risk, credit limits and economic capital;
- (H) the reporting bank shall demonstrate to the satisfaction of the Registrar that the bank effectively integrates the risk-mitigating effects of cross-product netting into its risk management and other information technology systems.

(e) *Matters relating to margin agreements*

- (i) Subject to the provisions of subparagraphs (ii) and (iii) below, when
 - (A) a particular netting set is subject to a margin agreement and the reporting bank's internal model is able to capture the effect of margining in its estimation of expected exposure, the bank may apply for the approval of the Registrar to use the said estimated expected exposure amount directly in the formula relating to effective expected exposure, specified in paragraph (a) above;
 - (B) a particular counterparty exposure is subject to a margin agreement and the reporting bank's model is able to calculate expected positive exposure without margin agreements but the model is not sufficiently sophisticated to calculate expected positive exposure with margin agreements, the effective expected positive exposure of a counterparty that is subject to a margin agreement, re-margining and daily mark-to-market as envisaged in subparagraph (ii) below, shall be deemed to be equal to the lesser of
 - (i) effective expected positive exposure without any held or posted margining collateral, plus any collateral that has been posted to the counterparty independent of the daily valuation and margining process or current exposure, that is, initial margin or independent amount; or

- (ii) an add-on that reflects the potential increase in exposure over the margin period of risk plus the larger of-
 - (aa) the current exposure net of and including all collateral currently held or posted, excluding any collateral called or in dispute; or
 - (bb) the largest net exposure, including all collateral held or posted under the margin agreement that would not trigger a collateral call, which amount shall reflect all relevant thresholds, minimum transfer amounts, independent amounts and initial margins under the margin agreement,

which add-on shall be calculated as:

$$E[\max(\Delta MtM, 0)]$$

where:

E[...] is the expectation, that is, the average over scenarios

ΔMtM is the possible change of the mark-to-market value of the transactions during the margin period of risk

Provided that-

- (i) changes in the value of collateral shall be reflected using the standard haircut method or own estimates of haircut method envisaged in subregulation (9)(b) of these Regulations, but no collateral payments are assumed during the margin period of risk;
- (ii) the margin period of risk shall be subject to the relevant floor specified in subparagraph (ii) below;
- (iii) through backtesting, the bank shall test whether realised exposures are consistent with the shortcut method prediction over all relevant margin periods within one year envisaged in this item (B), provided that when backtesting indicates that effective EPE is underestimated, the bank shall take appropriate action to make the method more conservative, such as, for example, scaling up risk factor moves;

- (iv) when some of the trades in the netting set have a maturity of less than one year, and the netting set has higher risk factor sensitivities without these trades, the bank shall take this fact into account;
- (ii) In the case of transactions subject to daily re-margining and mark-to-market valuation, when the bank calculates its exposure or EAD amount subject to margin agreements, the bank shall apply a floor margin period of risk of five business days for netting sets consisting only of repo-style transactions, and a floor margin period of risk of 10 business days for all other netting sets, provided that-
 - (A) in respect of all netting sets where the number of trades exceeds 5,000 at any point during a quarter, the bank shall apply a floor margin period of risk of 20 business days for the following quarter;
 - (B) in respect of netting sets containing one or more trades involving either illiquid collateral, or an OTC derivative that cannot be easily replaced, the bank shall apply a floor margin period of risk of 20 business days.

For purposes of this paragraph (e), “illiquid collateral” and “OTC derivatives that cannot be easily replaced” shall be determined in the context of stressed market conditions and shall be characterised by the absence of continuously active markets where a counterparty would, within two or fewer days, obtain multiple price quotations that would not move the market or represent a price reflecting a market discount in the case of collateral, or premium in the case of an OTC derivative.

Examples of situations where trades shall be deemed illiquid include, but are not limited to, trades that are not marked daily and trades that are subject to specific accounting treatment for valuation purposes, such as OTC derivatives or repo-style transactions referencing securities of which the fair value is determined by models with inputs that are not observed in the market.

- (C) in all cases the bank shall duly consider whether trades or securities held as collateral are concentrated in a particular counterparty, and if that counterparty suddenly exited the market, whether the bank would be able to replace its trades;
- (D) when the bank experienced more than two margin call disputes on a particular netting set during the preceding two quarters, and the disputes lasted longer than the applicable margin period of risk, before consideration of this provision, the bank shall in respect of the following two quarters apply a margin period of risk at least double the floor specified hereinbefore for that netting set;

- (E) in the case of re-margining with a periodicity of N-days, irrespective of the shortcut method or full internal model method envisaged hereinbefore, the bank shall apply a margin period of risk of at least the aforesaid specified floor plus the N days minus one day, that is:

Margin Period of Risk = F + N - 1.

where:

F is the floor number of days specified hereinbefore

N is the said periodicity of N-days for re-margining

- (iii) The requirements specified in subregulation (7)(b)(iii) of these Regulations regarding legal certainty, documentation, correlation and a robust risk management process shall, insofar as the said provisions are relevant, *mutatis mutandis* apply in respect of all relevant margin agreements.

(f) *Matters relating to model validation and operational requirements*

A bank that wishes to adopt the internal model method for the measurement of the bank's exposure to counterparty credit risk by estimating expected positive exposure, that is, a bank that wishes to apply its EPE model, shall in addition to such requirements as may be specified in writing by the Registrar comply with-

- (i) the qualitative requirements specified in regulation 39(8), which qualitative requirements include matters relating to-
- (A) the bank's EPE model;
 - (B) board and senior management oversight and involvement;
 - (C) an independent risk control function or unit; and
 - (D) backtesting.
- (ii) the operational requirements specified in regulations 39(9) to 39(12), which operational requirements include matters relating to-
- (A) the use test;
 - (B) stress testing;
 - (C) the identification of wrong-way risk; and
 - (D) internal controls and model integrity.

(g) *Matters related to minimum required capital and reserve funds for default risk*

In order to determine the minimum required amount of capital and reserve funds for default risk in respect of a bank's exposure to counterparty credit risk, a bank that obtained the approval of the Registrar to adopt the internal model method shall use the greater of-

- (i) the portfolio-level capital requirement, excluding the requirement related to credit valuation adjustments (CVA) envisaged in paragraph (h) below, based on Effective EPE using current market data; and
- (ii) the portfolio-level capital requirement based on Effective EPE using a stress calibration, provided that the stress calibration shall be a single consistent stress calibration for the whole portfolio of relevant counterparties,

Provided that the greater of Effective EPE using current market data and the stress calibration shall be applied on a total portfolio level and not on a counterparty by counterparty basis.

(h) *Matters related to minimum required capital and reserve funds for credit valuation adjustments (CVA) for a bank that obtained approval for the internal model method for the measurement of the bank's exposure to counterparty credit risk and the internal models approach for the measurement of specific risk as part of the bank's exposure to market risk*

- (i) A bank that obtained the approval of the Registrar for the use of the internal model method for the measurement of the bank's exposure to counterparty credit risk and the internal models approach for the measurement of specific risk as part of the bank's exposure to market risk shall calculate the relevant additional required amount of capital and reserve funds by modelling the impact of changes in the counterparties' credit spreads on the CVAs of all relevant OTC derivative counterparties, together with all relevant eligible CVA hedges, using the bank's value-at-risk (VaR) model for bonds, which VaR model is restricted to changes in the counterparties' credit spreads and does not model the sensitivity of CVA to changes in other market factors, such as changes in the value of the reference asset, commodity, currency or interest rate of a derivative, provided that-
 - (A) regardless of its accounting valuation method used to determine CVA, the additional required amount of capital for CVA shall for each relevant counterparty be based on the formula specified below, in which formula the first factor within the sum represents an approximation of the market implied marginal probability of a default occurring between times t_{i-1} and t_i , acknowledging that market implied default probability or risk neutral probability represents the market price of buying protection against a default, which may differ from the actual probability of a default.

$$CVA = (LGD_{MKT}) \cdot \sum_{i=1}^T \text{Max}\left(0; \exp\left(-\frac{s_{i-1} \cdot t_{i-1}}{LGD_{MKT}}\right) - \exp\left(-\frac{s_i \cdot t_i}{LGD_{MKT}}\right)\right) \cdot \left(\frac{EE_{i-1} \cdot D_{i-1} + EE_i \cdot D_i}{2}\right)$$

where:

t_i is the time of the i-th revaluation time bucket, starting from t₀=0

t_T is the longest contractual maturity across the netting sets with the counterparty

s_i is the credit spread of the counterparty at tenor t_i, used to calculate the CVA of the counterparty, provided that the bank shall use-

- (i) the CDS spread of the relevant counterparty whenever it is available; or
- (ii) an appropriate proxy spread that is based on the rating, industry and region of the counterparty when the relevant CDS spread is not available

LGD_{MKT} is the loss given default of the counterparty, which shall be based on-

- (i) the spread of a market instrument of the relevant counterparty; or
- (ii) the appropriate proxy spread that is based on the rating, industry and region of the counterparty when a counterparty instrument is not available

The aforesaid LGD_{MKT} is different from the LGD used to determine the IRB and CCR default risk requirement, as this LGD_{MKT} is a market assessment rather than an internal estimate

EE_i is the expected exposure to the counterparty at revaluation time t_i, as defined in paragraph (a) above, where exposures of different netting sets for such counterparty are added, and where the longest maturity of each netting set is given by the longest contractual maturity inside the netting set, provided that a bank that adopted the short-cut method envisaged in paragraph (e) above for margined trades shall apply the relevant requirements and formula specified in subparagraph (ii) below

D_i is the default risk-free discount factor at time t_i, where D₀ = 1

(ii) When a bank's approved VaR model-

- (A) is based on credit spread sensitivities for specific tenors, the bank shall base each relevant credit spread sensitivity on the formula specified below:

$$\text{Regulatory CS01}_i = 0.0001 \cdot t_i \cdot \exp\left(-\frac{s_i \cdot t_i}{LGD_{MKT}}\right) \left(\frac{EE_{i-1} \cdot D_{i-1} - EE_{i+1} \cdot D_{i+1}}{2} \right)$$

This derivation assumes positive marginal default probabilities before and after time bucket t_i and is valid for $i < T$.

For the final time bucket $i = T$, the corresponding formula is:

$$\text{Regulatory CS01}_T = 0.0001 \cdot t_T \cdot \exp\left(-\frac{s_T \cdot t_T}{LGD_{MKT}}\right) \left(\frac{EE_{T-1} \cdot D_{T-1} + EE_T \cdot D_T}{2} \right)$$

- (B) uses credit spread sensitivities to parallel shifts in credit spreads, which shall for purposes of these Regulations be referred to as regulatory CS01, the bank shall use the formula specified below, which derivation assumes positive marginal default probabilities;

$$\text{Regulatory CS01} = 0.0001 \cdot \sum_{i=1}^T \left(t_i \cdot \exp\left(-\frac{s_i \cdot t_i}{LGD_{MKT}}\right) - t_{i+1} \cdot \exp\left(-\frac{s_{i+1} \cdot t_{i+1}}{LGD_{MKT}}\right) \right) \cdot \left(\frac{EE_{i-1} \cdot D_{i-1} + EE_i \cdot D_i}{2} \right)$$

- (iii) Any hedge used and managed by the bank to mitigate its exposure to CVA risk, shall be included in the bank's calculation of the relevant required amount of capital for CVA risk in accordance with the relevant requirements specified in subregulation (15)(b).

(20) *Specific matters relating to delivery-versus-payment transactions, and non-delivery-versus-payment or free-delivery transactions*

(a) A bank shall in respect of-

- (i) any delivery-versus-payment transaction, that is, any transaction settled through a delivery-versus-payment system-
- (A) which system makes provision for the simultaneous exchanges of securities for cash, including payment versus payment;
- (B) which transaction exposes the reporting bank to a risk of loss equal to the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price, that is, the positive current exposure amount;

- (C) which transaction may include-
- (i) the settlement of commodities;
 - (ii) the settlement of foreign exchange;
 - (iii) the settlement of securities;
 - (iv) settlement through a licensed exchange, clearing house or central counterparty, and which transactions are subject to daily mark-to-market, payment of daily variation margins and involve a mismatched trade;
- (ii) any non-delivery-versus-payment or free-delivery transaction, that is, any transaction in respect of which cash is paid out without receipt of the contracted receivable, which receivable may include a security, foreign currency, gold or a commodity, or conversely, any transaction in respect of which deliverables were delivered without receipt of the contracted cash payment, which transaction exposes the reporting bank to a risk of loss equal to the full amount of the cash amount paid or deliverables delivered,

calculate its required amount of capital and reserve funds in accordance with the relevant requirements specified in paragraph (b) below, provided that-

- (A) the provisions of this subregulation (20) shall not apply-
- (i) to any repurchase agreement, resale agreement, securities lending transaction or securities borrowing transaction that has failed to settle,
 - (ii) to any forward contract or one-way cash payment due in respect of an OTC derivative transaction,
- which agreement, contract or transaction shall be subject to the relevant requirements specified in subregulations (16) to (19) above, or subregulations (6) to (14);
- (B) in the case of a system wide failure of a settlement or clearing system, or a central counterparty, the Registrar may, subject to such conditions as may be specified in writing by the Registrar, exempt a bank from the requirements specified in paragraph (b) below;
- (C) a failure of a counterparty to settle a trade as envisaged in this subregulation (20) will not necessarily fall within the ambit of default for the purpose of measuring the reporting bank's exposure to credit risk as envisaged in this regulation 23.

(b) Minimum required amount of capital and reserve funds

A bank shall in the case of-

- (i) any delivery-versus-payment transaction in respect of which payment has not taken place in the period of five business days after the contracted settlement date calculate its required amount of capital and reserve funds by multiplying the relevant positive current exposure amount with the relevant percentage specified in table 21 below.

Table 21

Number of working days after the contracted settlement date	Risk multiplier
From 5 to 15	8%
From 16 to 30	50%
From 31 to 45	75%
46 or more	100%

- (ii) any non-delivery-versus-payment or free-delivery transaction, after the first contractual date relating to payment or delivery when the relevant second leg has not been received at the end of the relevant business day, treat the relevant payment made as a loan exposure, that is, a bank that adopted-
 - (A) the IRB approach shall calculate its risk-weighted exposure and related required amount of capital and reserve funds in accordance with the relevant formulae and requirements specified in subregulations (11) and (13);
 - (B) the standardised approach shall calculate its risk-weighted exposure and related required amount of capital and reserve funds in accordance with the relevant requirements specified in subregulations (6) and (8),

provided that-

- (i) when the relevant exposure amount is not material, the reporting bank may choose to apply a risk weight of 100 per cent to the said exposure amount;
- (ii) when five business days have lapsed following the second contractual payment or delivery date and the second leg has not effectively taken place, the bank that made the first payment leg shall deduct from its common equity tier 1 capital and reserve funds the full amount of value transferred plus any relevant replacement cost until the said second payment or delivery leg is effectively made;

- (iii) when determining a risk weight in respect of any failed free-delivery exposure, a bank that adopted-
 - (aa) the IRB approach for the measurement of the bank's exposure to credit risk may in respect of a counterparty in respect of which the bank has no other banking book exposure assign a PD ratio, based on the relevant counterparty's external rating;
 - (bb) the advanced IRB approach for the measurement of the bank's exposure to credit risk may apply an LGD ratio of 45 per cent, in lieu of estimating an LGD ratio, provided that the bank shall apply the said ratio to all failed trade exposures; or
 - (cc) the IRB approach for the measurement of the bank's exposure to credit risk may apply the risk weights specified in the standardised approach, in subregulation (8), or a risk weight of 100 per cent.

(21) EXPECTED LOSS

A bank that adopted the IRB approach for the measurement of the bank's exposure to credit risk shall calculate an aggregate amount in respect of the bank's expected losses, which aggregate expected loss amount-

- (a) shall exclude any expected losses in respect of-
 - (i) the bank's equity exposures subject to the PD/LGD approach prescribed in regulation 31(6)(c);
 - (ii) credit exposures resulting from a securitisation scheme;
- (b) shall be determined by multiplying the expected loss ratio relating to a particular credit exposure with the relevant EAD amount;
- (c) shall in the case of-
 - (i) credit exposures relating to corporate institutions other than specialised lending mapped into the standardised risk grades specified in subregulation (11)(d)(iii)(C), sovereigns, banks and the bank's retail portfolios, which exposures-
 - (A) are not in default, and
 - (B) do not constitute protected exposures or eligible exposures subject to the double default approach,

be calculated by multiplying the exposure's relevant PD ratio with its LGD ratio;

- (ii) credit exposures relating to corporate institutions, sovereigns, banks and the bank's retail portfolios, which exposures are in default, be calculated by estimating the expected loss amount through the application of the relevant LGD ratio;
- (iii) exposures relating to specialised lending mapped into the standardised risk grades specified in subregulation (11)(d)(iii)(C), excluding exposures relating to high-volatility commercial real estate, be calculated by multiplying the relevant EAD amount with the minimum required capital adequacy ratio prescribed in accordance with the relevant provisions of regulation 38(8)(b), and the risk weights specified in table 22 below:

Table 22

Rating grade				
Strong	Good	Satisfactory	Weak	Default
5%	10%	35%	100%	625%

- (iv) exposures relating to high-volatility commercial real estate mapped into the standardised risk grades specified in subregulation (11)(d)(iii)(C), be calculated by multiplying the relevant EAD amount with the minimum required capital adequacy ratio prescribed in accordance with the relevant provisions of regulation 38(8)(b), and the risk weights specified in table 23 below:

Table 23

Rating grade				
Strong	Good	Satisfactory	Weak	Default
5%	5%	35%	100%	625%

- (v) other exposures, including any protected exposure or eligible exposure subject to the double default approach, be deemed to be equal to nil.

(22) CREDIT IMPAIRMENT

- (a) As a minimum, every bank-
 - (i) shall have in place a sufficiently robust system for the calculation of credit impairment in accordance with the relevant requirements specified in Financial Reporting Standards issued from time to time;
 - (ii) shall have in place sufficiently robust processes and board-approved policies, and sufficient dedicated resources, to ensure-
 - (A) the early identification of assets of deteriorating credit quality;
 - (B) ongoing oversight of problem assets or credit exposure;

- (C) that the bank periodically reviews and assesses-
- (i) all relevant problem assets at an individual level, or a portfolio level in the case of credit exposures with homogenous characteristics;
 - (ii) the adequacy of the bank's asset classification, provisioning and write-offs;
 - (iii) the value, adequacy and enforceability of all relevant risk mitigation instruments or contracts, including guarantees, credit-derivative instruments or other forms of collateral or credit protection;
- (D) that all relevant off-balance-sheet exposures are duly considered;
- (E) that the bank's credit impairments and write-offs reflect realistic repayment and recovery expectations;
- (F) ongoing collection of past due obligations;
- (G) that the bank's board of directors receives timely and appropriate information on the condition of the bank's relevant credit portfolios, including the classification of credit exposures, the level of provisioning and major problem assets;
- (iii) shall base its decisions in respect of credit impairment primarily on an assessment of the recoverability of individual on-balance-sheet and off-balance-sheet items or portfolios of items with similar characteristics, such as credit card receivables;
- (iv) shall identify and recognise impairments in on-balance-sheet and off-balance-sheet items when it is probable that the bank will not be able to collect, or there is no longer a reasonable assurance that the bank will collect, all amounts due according to the contractual terms of the written agreement.
- (b) When the Registrar is of the opinion that the policies and procedures applied by a bank during its assessment of asset quality, risk mitigation and related credit impairment are inadequate, the Registrar may require the relevant bank to raise a specified credit impairment amount against potential credit losses, for example, by requiring in writing the said bank to transfer a specified amount from retained earnings or distributable reserves to a non-distributable reserve.

(c) *Standardised approach*

A bank that-

- (i) adopted the standardised approach for the measurement of a portion of its exposure to credit risk shall determine the relevant portion of any general allowance for credit impairment or general loan-loss reserve that relate to the credit exposures measured in terms of the standardised approach, that is, the bank shall allocate its general allowance for credit impairment or general loan-loss reserve on a pro-rata basis based on the proportion of risk-weighted credit exposure subject to the standardised approach;
- (ii) makes exclusive use of the standardised approach to determine its risk-weighted credit exposure shall attribute the relevant total amount of general allowance for credit impairment or general loan-loss reserve raised to the standardised approach;
- (iii) adopted the standardised approach for the measurement of its exposure to credit risk may include in tier 2 unimpaired reserve funds, up to a maximum amount of 1.25 per cent of the bank's relevant risk-weighted credit exposure, the relevant gross amount of general allowance for credit impairment or general loan-loss reserve.

(d) *IRB approach*

(i) A bank that-

- (A) makes exclusive use of the IRB approach to determine its risk-weighted credit exposure shall attribute to eligible provisions the aggregate amount of any relevant general allowance or general loan-loss reserve raised for credit impairment;
- (B) adopted the IRB approach for the measurement of the bank's exposure to credit risk shall deduct from its eligible provisions the aggregate amount relating to expected loss calculated in accordance with the relevant requirements specified in subregulation (21) above, provided that when the aggregate amount relating to expected losses
 - (i) exceeds the bank's eligible provisions, the bank shall in accordance with the relevant requirements specified in regulation 38(5) of these Regulations deduct from its capital and reserve funds the said excess amount;
 - (ii) is less than the bank's eligible provisions, the bank may include in tier 2 unimpaired reserve funds, in item 85 of the form BA 700, up to a maximum amount of 0.6 per cent of the bank's relevant risk weighted exposure amount, or such a lower percentage as may be specified in writing by the Registrar, the relevant surplus amount;

(ii) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank that adopted both the standardised approach and the IRB approach for the measurement of the bank's risk-weighted credit exposure may apply the bank's internal methods to allocate any general allowance for credit impairment or general loan-loss reserve for recognition in capital under either the standardised or IRB approach.

(23) Instructions relating to the completion of the monthly form BA 200 are furnished with reference to the headings and item descriptions of specified columns and line items appearing on form BA 200, as follows:

***Items relating to the summary of selected credit risk related information:
standardised approach***

Item number	Description
2	<p>Impaired advances</p> <p>This item shall reflect the aggregate amount of impaired advances.</p> <p>As a minimum, an advance is considered to be impaired when objective evidence exists that the bank is unlikely to collect the total amount due.</p>
3 to 6	<p>Assets bought-in</p> <p>These items shall reflect the on-balance sheet carrying value of assets bought-in during the preceding five years to protect an investment, including a loan or advance, which asset has not been disposed of at the end of the reporting period.</p>
7 to 9	<p>Credit impairment</p> <p>These items shall reflect the relevant required aggregate amounts of specific credit impairments and portfolio credit impairments raised by the reporting bank in accordance with the relevant requirements specified in Financial Reporting Standards issued from time to time.</p>
11	<p>Total gross credit exposure</p> <p>This item shall reflect the relevant required gross amount of credit exposure before the application of credit risk mitigation and any relevant credit conversion factor.</p>
12	<p>Credit exposure value post credit risk mitigation</p> <p>This item shall reflect the relevant required aggregate amount of gross credit exposure after the effect of any relevant credit risk mitigation has been included.</p>
13	<p>Credit exposure post credit risk mitigation and credit conversion</p> <p>This item shall reflect the relevant required aggregate amount of gross credit exposure after the effects of any relevant credit risk mitigation and credit conversion factors have been included.</p>

Columns relating to summary of on-balance-sheet and off-balance-sheet credit exposure: standardised approach, items 14 to 34

Column number	Description
1	On-balance-sheet exposure This column shall reflect the aggregate amount in respect of amounts drawn by clients, that is, utilised amounts, which amounts form part of the current exposure of the reporting bank, before the impact of any relevant credit risk mitigation has been taken into consideration.
2	Off-balance-sheet exposure This column shall reflect the aggregate amount relating to, for example, exposures in respect of which a facility has been granted by the reporting bank to an obligor but in respect of which no funds have been paid out and no debit balance has been created, other than any exposure arising from a derivative instrument or repo-style transaction, including any exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor or credit risk mitigation.
3	Repurchase and/ or resale agreements This column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase and/ or resale agreement concluded by the reporting bank.
4	Derivative instruments This column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments, including any relevant exposure amount relating to counterparty credit risk.
14	Credit exposure post credit risk mitigation This column shall reflect the relevant required aggregate amount of gross credit exposure after the impact of any relevant credit risk mitigation has been taken into consideration.

Items relating to reconciliation of credit impairment: standardised approach

Item number	Description
40	Interest in suspense Since interest relating to impaired loans may not ultimately contribute to income when doubt exists regarding the recovery of the relevant loan amount or related interest amount due, this item shall reflect the relevant amount of interest in suspense, that is, irrespective of the accounting treatment of interest income from time to time, this item shall reflect the difference between the relevant amount of interest contractually due to the reporting bank by its clients up to the end of the reporting month and the relevant amount of interest income actually included in the operating profit or loss of the bank.

Item number	Description
43	<p>Recoveries</p> <p>This item shall reflect the relevant aggregate amount in respect of recoveries, net of any relevant amount relating to specific credit impairment and/ or portfolio credit impairment.</p>

Columns relating to credit capital requirements based on risk weights: standardised approach, items 47 to 69

Column number	Description
1	<p>Total gross credit exposure</p> <p>This column shall reflect the aggregate gross credit exposure amount relating to the reporting bank's-</p> <ul style="list-style-type: none"> (a) on-balance-sheet exposure, gross of any valuation adjustment or credit impairment; (b) off-balance-sheet exposure, including amounts in respect of irrevocable commitments, prior to the application of any credit-conversion factor; (c) exposure in respect of any repurchase or resale agreement; (d) exposure in respect of derivative instruments, calculated in accordance with the relevant requirements specified in subregulations (15) to (19).
2	<p>Specific credit impairment</p> <p>This column shall reflect the aggregate amount relating to any specific credit impairment in respect of the exposure amount reported in column 1.</p>
3	<p>Exposure amount post credit risk mitigation (CRM) and specific credit impairment</p> <p>This column shall reflect the reporting bank's relevant adjusted exposure amount, that is, the relevant amount net of any credit risk mitigation and specific credit impairment, calculated in accordance with the relevant requirements specified in these Regulations.</p>
4 to 10	<p>Breakdown of off-balance-sheet exposure based on credit conversion factors (CCF)</p> <p>Based on the relevant credit conversion factors specified in subregulation (6)(g), these columns shall reflect the appropriate breakdown of the reporting bank's adjusted exposure, that is, amounts included in column 3, relating to off-balance-sheet exposure.</p>

**Columns relating to counterparty credit risk based on specified risk weights:
standardised approach, items 80 to 86**

Column number	Description
1	Total notional principal amount This column shall reflect the relevant effective nominal or notional amounts underlying the reported OTC derivative instruments or contracts.
2	Gross replacement cost This column shall reflect the respective gross positive fair value amounts of the reported OTC derivative instruments, before the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulation 23(7)(a), 23(9)(a), 23(17) or 23(18), or any relevant collateral, has been taken into consideration.
3	Net replacement cost This column shall reflect the respective gross positive fair value amounts of the reported OTC derivative instruments, after the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulations 23(7)(a), 23(9)(a), 23(17) or 23(18), but before the effect of any relevant collateral, has been taken into consideration.
4	Gross potential future exposure add-on Based on the relevant OTC derivative instruments' or contracts' notional principal amounts, this column shall reflect the potential future exposure add-on amount, before the impact of any netting or collateral has been taken into consideration.
5	Net potential future exposure add-on Based on the relevant OTC derivative instruments' or contracts' notional principal amounts, this column shall reflect the adjusted add-on amount for all relevant contracts subject to eligible bilateral netting agreements or contracts.
6	Collateral value after haircut This column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of OTC derivative instruments, after the effect of any relevant haircut has been taken into consideration.
7	Credit exposure value In the absence of an eligible master netting agreement, this column shall reflect the current value of all relevant credit exposures arising from securities financing transactions, after the effect of any relevant haircut has been taken into consideration.

***Columns relating to counterparty credit risk based on specified risk weights:
standardised approach, items 80 to 86***

Column number	Description
8	Collateral value In the absence of an eligible master netting agreement, this column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of all relevant securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
9	Netting benefit This column shall reflect the aggregate amount of all relevant netting benefits arising from eligible master netting agreements taken into consideration in the calculation of the reporting bank's relevant adjusted credit exposure amount arising from securities financing transactions.
10	Current market value of portfolio In respect of all relevant OTC derivative instruments, this column shall reflect the relevant current market value of the relevant portfolio of transactions within the netting set with a particular counterparty, before the impact of any collateral has been taken into consideration.
11	Current market value of collateral This column shall reflect the relevant market value of the collateral assigned to the relevant netting set in respect of OTC derivative instruments.
12	Risk position from transaction This column shall reflect the relevant required risk positions arising from the relevant hedging sets related to OTC derivative instruments.
13	Risk position from collateral This column shall reflect the relevant required risk positions from collateral with respect to the relevant hedging sets related to OTC derivative instruments.
14	Net absolute risk position after the application of CCF's In respect of all relevant OTC derivative instruments, this column shall reflect the absolute aggregate amount of the required risk positions related to the relevant hedging sets, after the application of any relevant credit conversion factor.

***Columns relating to counterparty credit risk based on specified risk weights:
standardised approach, items 80 to 86***

Column number	Description
15	Credit exposure value In the absence of an eligible master netting agreement, this column shall reflect the current value of all relevant credit exposures related to securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
16	Collateral value In the absence of an eligible master netting agreement, this column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of all relevant securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
17	Netting benefits This column shall reflect the aggregate amount of all relevant netting benefits arising from eligible master netting agreements taken into consideration in the calculation of the reporting bank's relevant adjusted credit exposure amount related to securities financing transactions.
18	Effective expected positive exposure Based on the relevant requirements specified in subregulation (19)(a), this column shall reflect the relevant required effective expected positive exposure amount related to OTC derivative instruments.
19	Stressed effective expected positive exposure Based on the relevant requirements specified in, amongst others, subregulations (15) and (19) of these Regulations, this column shall reflect the relevant required effective expected positive exposure amount related to OTC derivative instruments in terms of a stressed scenario.
20	Effective expected positive exposure Based on the relevant requirements specified in subregulation (19)(a), this column shall reflect the relevant required effective expected positive exposure amount related to securities financing transactions.
21	Stressed effective expected positive exposure Based on the relevant requirements specified in, amongst others, subregulations (15) and (19) of these Regulations, this column shall reflect the relevant required effective expected positive exposure amount related to securities financing transactions in terms of a stressed scenario.

***Columns relating to counterparty credit risk based on specified risk weights:
standardised approach, items 80 to 86***

Column number	Description
22	Adjusted exposure amount - OTC derivative instruments This column shall reflect the relevant required exposure or EAD amount for OTC derivative instruments, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
23	Adjusted exposure amount - securities financing transactions This column shall reflect the relevant required exposure or EAD amount for securities financing transactions, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
24	Default risk - OTC derivative instruments This column shall reflect the relevant required risk weighted exposure amount for OTC derivative instruments, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
25	Default risk - securities financing transactions This column shall reflect the relevant required risk weighted exposure amount for securities financing transactions, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
26	Standardised approach for CVA Based on the relevant requirements specified in subregulation (15), this column shall reflect the relevant required risk weighted exposure amount for CVA risk, calculated in terms of the standardised approach, provided that, when required by the Registrar, this column shall include any relevant amount related to CVA loss exposures arising from securities financing transactions.

***Columns relating to counterparty credit risk based on specified risk weights:
standardised approach, items 80 to 86***

Column number	Description
27	<p>Advanced approach for CVA</p> <p>Based on the relevant requirements specified in subregulation (19), this column shall reflect the relevant required risk weighted exposure amount for CVA risk, calculated in terms of the advanced approach, provided that, when required by the Registrar, this column shall include any relevant amount related to CVA loss exposures arising from securities financing transactions.</p>
28	<p>Total risk weighted exposure</p> <p>This column shall reflect the relevant required aggregate amount of risk weighted exposure for counterparty credit risk, including any relevant amount of risk weighted exposure-</p> <ul style="list-style-type: none"> (a) arising from OTC derivative instruments and securities financing transactions; (b) calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method; (c) related to CVA risk; (d) related to central counterparties.

Items relating to counterparty credit risk analysis of netting: standardised approach

Item number	Description
87	Replacement cost This item shall reflect the relevant required netting benefit taken into consideration for calculating the relevant net replacement cost in respect of OTC derivative instruments.
88	Potential future exposure add-on This item shall reflect the relevant required netting benefit taken into consideration for calculating the relevant net potential future exposure add-on amount in respect of OTC derivative instruments.
89	Securities financing transactions This items shall reflect the relevant required netting benefit taken into consideration in respect of securities financing transactions.
90	Cross-product netting This item shall reflect the relevant required cross-product netting amount taken into consideration by a bank that obtained the approval of the Registrar to use the internal model method for counterparty credit risk.

Columns relating to counterparty credit risk analysis of standardised CVA risk weighted exposure: standardised approach, items 92 to 99

Column number	Description
2	EAD This column shall reflect the relevant exposure or EAD amount, calculated in terms of the relevant requirements specified in these Regulations, after the application of any relevant discount factor.
3	Single-name CDS This column shall reflect the relevant required notional amount, after the application of any relevant discount factor, of a purchased single-name CDS, single-name contingent CDS and/or other eligible instrument used to hedge CVA risk.
4	Index CDS This column shall reflect the relevant required notional amount, after the application of any relevant discount factor, of an eligible purchased index CDS used to hedge CVA risk.
5	Standardised CVA risk weighted exposure This column shall reflect the relevant required risk weighted exposure amount related to CVA risk, calculated in terms of the the relevant requirements specified in these Regulations for the standardised approach.

***Columns relating to analysis of central counterparty trade exposure:
standardised approach, items 100 to 103***

Column number	Description
1	<p>Trade exposure</p> <p>This column shall reflect the current and potential future exposure amount of a clearing member or a client to a central counterparty arising from any relevant OTC derivative instrument, exchange traded derivative transaction or securities financing transaction, calculated in accordance with the relevant requirements specified in subregulation (15) read with the relevant requirements respectively specified in subregulations (17) to (19) of these Regulations for the current exposure method, the standardised method or the internal model method.</p>
3	<p>Risk weighted exposure</p> <p>This column shall reflect the relevant required risk weighted exposure amount of a clearing member or a client to a central counterparty arising from any relevant OTC derivative instrument, exchange traded derivative transaction or securities financing transaction, calculated in accordance with the relevant requirements specified in subregulation (15) read with the relevant requirements respectively specified in subregulations (17) to (19) of these Regulations for the current exposure method, the standardised method or the internal model method.</p>
4	<p>Calculated in terms of the standardised approach</p> <p>This column shall reflect the relevant required risk weighted exposure amount calculated in terms of the standardised approach for the measurements of the bank's exposure to credit risk with regards to trade exposures to non-qualifying central counterparties.</p>

Columns relating to analysis of qualifying central counterparty default fund guarantees: standardised approach, items 104 and 105

Column number	Description
1	<p>Initial margin collateral posted with a central counterparty</p> <p>Based on the relevant requirements specified in these Regulations, this column shall reflect the relevant aggregate amount related to a clearing member's or client's funded collateral posted or provided to a central counterparty to mitigate the potential future exposure of the central counterparty to the clearing member arising from the possible future change in the value of their transactions, provided that, in accordance with the relevant requirements specified in these Regulations, initial margin shall exclude any relevant amount related to contributions to a central counterparty in terms of any mutualised loss sharing arrangement, that is, when a central counterparty uses initial margin to mutualise losses among the clearing members, the relevant amount shall be treated as a default fund exposure.</p>

Columns relating to analysis of qualifying central counterparty default fund guarantees: standardised approach, items 104 and 105

Column number	Description
2	<p>Prefunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to any prefunded default fund contributions made by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.</p>
3	<p>Trade exposure</p> <p>This column shall reflect the relevant aggregate amount related to the current and potential future exposure of a clearing member or a client to a central counterparty arising from OTC derivatives, exchange traded derivatives transactions or securities financing transactions, calculated in accordance with the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method.</p>
4	<p>Risk weighted exposure</p> <p>Based on the relevant requirements specified in subregulation (15)(d), this column shall reflect the relevant risk weighted exposure amount calculated in terms of either method 1 or method 2.</p>

Columns relating to analysis of non-qualifying central counterparty default fund guarantees: standardised approach, items 106 and 107

Column number	Description
1	<p>Prefunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to any prefunded default fund contribution by a clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.</p>
2	<p>Unfunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to unfunded default fund contributions, which contributions-</p> <ul style="list-style-type: none"> (a) are liable to be paid by a clearing member when required by the relevant central counterparty; (b) will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.

Columns relating to analysis of non-qualifying central counterparty default fund guarantees: standardised approach, items 106 and 107

Column number	Description
3	<p>Trade exposure</p> <p>This column shall reflect the relevant aggregate amount related to the current and potential future exposure of a clearing member or a client to a central counterparty, arising from OTC derivatives, exchange traded derivatives transactions or securities financing transactions, calculated in accordance with the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method.</p>
4	<p>Risk weighted exposure</p> <p>This column shall reflect the relevant aggregate risk weighted exposure amount equivalent to a deduction against capital and reserve funds.</p>

Items relating to summary of selected credit risk related information: IRB approach

Item number	Description
113	<p>Impaired advances</p> <p>This item shall reflect the aggregate amount of advances in respect of which the bank raised a specific impairment.</p> <p>As a minimum, an advance is considered to be impaired when objective evidence exists that the bank is unlikely to collect the total amount due.</p>
114 to 117	<p>Assets bought-in</p> <p>These items shall reflect the on-balance sheet carrying value of assets bought-in during the preceding five years to protect an investment, including a loan or advance, which asset has not been disposed of at the end of the reporting period.</p>
118 to 120	<p>Credit impairments</p> <p>These items shall reflect the relevant required aggregate amounts of specific credit impairments and portfolio credit impairments raised by the reporting bank in accordance with the relevant requirements specified in financial reporting standards issued from time to time.</p>
122	<p>Total credit extended</p> <p>This item shall reflect the aggregate outstanding credit exposure amount due to the reporting bank in respect of loans, advances, off-balance-sheet exposure, derivative instruments and repurchase or resale agreements, before the effect of credit risk mitigation has been taken into consideration.</p>

Items relating to summary of selected credit risk related information: IRB approach

Item number	Description
123	Exposure at default (EAD) This item shall reflect the reporting bank's relevant aggregate EAD amount, calculated in accordance with the relevant requirements specified in these Regulations.
124	Average probability of default (PD, EAD weighted) This item shall reflect the reporting bank's relevant EAD weighted average probability of default percentage, calculated in accordance with the relevant requirements specified in these Regulations.
125	Average loss given default (LGD, EAD weighted) This item shall reflect the reporting bank's relevant EAD weighted average LGD percentage relating to credit exposure, calculated in accordance with the relevant requirements specified in these Regulations.
126	Total expected loss (EL) Based on, amongst others, the relevant requirements specified in subregulation (21), this item shall reflect the reporting bank's aggregate expected loss amount.
127	Best estimate of expected loss (BEEL) Based on a PD of 100 per cent in respect of any relevant defaulted exposure, this item shall reflect the reporting bank's best estimate of expected loss amount, which best estimate of expected loss amount is expected to be an amount equal to or higher than the amount raised by the reporting bank in respect of specific credit impairment in accordance with the relevant requirements specified in financial reporting standards issued from time to time, provided that when the aforesaid two amounts differ the reporting bank shall at the written request of the Registrar provide the Registrar with a detailed reconciliation in writing between the two said amounts, which reconciliation shall duly explain the relevant reconciliation differences.

Columns relating to summary of on-balance-sheet and off-balance-sheet credit exposure: IRB approach, items 129 to 156

Column number	Description
1	Utilised: on-balance-sheet exposure This column shall reflect the aggregate amount in respect of amounts drawn by clients, which amounts form part of the reporting bank's current on-balance-sheet exposure before the application of any credit risk mitigation (CRM).
2	Off-balance-sheet exposure This column shall reflect the aggregate amount in respect of- (a) facilities granted to clients but not drawn, that is, unutilized facilities in respect of which no funds have been paid out and no debit balance has been raised; and (b) other off-balance-sheet items such as guarantees and commitments made by the reporting bank, which amounts form part of the reporting bank's total current exposure, before the application of any risk mitigation or relevant credit conversion factor.
3	Repurchase and resale agreements This column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase or resale agreement concluded by the reporting bank.
4	Derivative instruments This column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments, including any relevant amount in respect of exposure to counterparty credit risk calculated in accordance with the relevant requirements specified in subregulations (15) to (19).
7	Total credit exposure (EAD) This column shall reflect the aggregate amount in respect of the reporting bank's relevant exposure weighted EAD amount, calculated in accordance with the relevant requirements specified in subregulations (11) and (13).
10	Risk weighted exposure This column shall include any relevant risk weighted exposure amount calculated in respect of the reporting bank's exposure to credit risk, after the application of a scaling factor of 1.06.
12	Risk weighted exposure in respect of assets not subject to double default adjustment This column shall reflect the aggregate amount of credit exposure not subject to any double default adjustment as envisaged in subregulation (12)(g) or (14)(f).

Columns relating to summary of on-balance-sheet and off-balance-sheet credit exposure: IRB approach, items 129 to 156

Column number	Description
13	<p>Risk weighted exposure in respect of assets subject to double default provisions, prior to adjustment</p> <p>This column shall reflect the aggregate amount of credit exposure subject to the requirements of double default envisaged in subregulation (12)(g) or (14)(f), prior to any relevant adjustment in respect of the said double default.</p>

Columns relating to capital requirement in respect of specialised lending subject to specified risk weights and specified risk grades: IRB approach, items 157 to 166

Column number	Description
1	<p>Credit exposure</p> <p>This column shall reflect the relevant current exposure amount of the reporting bank in respect of any specialised lending subject to the risk weights and risk grades specified in subregulation (11)(d)(iii).</p>
3	<p>Expected loss</p> <p>This column shall reflect the relevant expected loss amount in respect of specialised lending, calculated in accordance with the relevant requirements specified in subregulation (21)(c).</p>
4	<p>Specific credit impairment</p> <p>This column shall reflect the relevant amounts in respect of specific credit impairment raised by the reporting bank in respect of specialised lending, calculated in accordance with the relevant requirements specified in financial reporting standards issued from time to time.</p>
5	<p>Number of obligors</p> <p>This column shall reflect the relevant number of obligors included in the specified risk weight category.</p>

Items relating to reconciliation of credit impairments: IRB approach

Item number	Description
217	<p>Interest in suspense</p> <p>Since interest relating to impaired loans may not ultimately contribute to income when doubt exists regarding the recovery of the relevant loan amount or related interest amount due, this item shall reflect the relevant amount of interest in suspense, that is, irrespective of the accounting treatment of interest income from time to time, this item shall reflect the difference between the relevant amount of interest contractually due to the reporting bank by its clients up to the end of the reporting month and the relevant amount of interest income actually included in the operating profit or loss of the bank.</p>
220	<p>Recoveries</p> <p>This item shall reflect the relevant aggregate amount in respect of recoveries, net of any relevant amount relating to specific credit impairment and/ or portfolio credit impairment.</p>

Columns relating to analysis of past due exposure (EAD): IRB approach, items 224 to 251

Column number	Description
2, 4, 6 and 8	<p>Classified in default</p> <p>Based on the respective EAD amounts and in respect of the relevant specified asset classes, these columns shall reflect an analysis of the relevant past due amounts classified as being in default, that is, due to matters such as, for example, early warning signs, an exposure may be classified as being in default even when the said exposure, for example, may not be legally overdue or overdue for more than 90 days.</p>

Columns relating to counterparty credit risk: IRB approach, items 252 to 281

Column number	Description
1	Total notional principal amount This column shall reflect the relevant effective nominal or notional amounts underlying the reported OTC derivative instruments or contracts.
2	Gross replacement cost This column shall reflect the respective gross positive fair value amounts of the reported OTC derivative instruments, before the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulation 23(7)(a), 23(9)(a), 23(17) or 23(18), or any relevant collateral, has been taken into consideration.
3	Net replacement cost This column shall reflect the respective gross positive fair value amounts of the reported OTC derivative instruments, after the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulations 23(7)(a), 23(9)(a), 23(17) or 23(18), but before the effect of any relevant collateral, has been taken into consideration.
4	Gross potential future exposure add-on Based on the relevant OTC derivative instruments' or contracts' notional principal amounts, this column shall reflect the potential future exposure add-on amount, before the impact of any netting or collateral has been taken into consideration.
5	Net potential future exposure add-on Based on the relevant OTC derivative instruments' or contracts' notional principal amounts, this column shall reflect the adjusted add-on amount for all relevant contracts subject to eligible bilateral netting agreements or contracts.
6	Collateral value after haircut This column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of OTC derivative instruments, after the effect of any relevant haircut has been taken into consideration.
7	Credit exposure value In the absence of an eligible master netting agreement, this column shall reflect the current value of all relevant credit exposures arising from securities financing transactions, after the effect of any relevant haircut has been taken into consideration.

Columns relating to counterparty credit risk: IRB approach, items 252 to 281

Column number	Description
8	Collateral value In the absence of an eligible master netting agreement, this column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of all relevant securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
9	Netting benefit This column shall reflect the aggregate amount of all relevant netting benefits arising from eligible master netting agreements taken into consideration in the calculation of the reporting bank's relevant adjusted credit exposure amount arising from securities financing transactions.
10	Current market value of portfolio In respect of all relevant OTC derivative instruments, this column shall reflect the relevant current market value of the relevant portfolio of transactions within the netting set with a particular counterparty, before the impact of any relevant collateral has been taken into consideration.
11	Current market value of collateral This column shall reflect the relevant market value of the collateral assigned to the relevant netting set in respect of OTC derivative instruments.
12	Risk position from transaction This column shall reflect the relevant required risk positions arising from the relevant hedging sets related to OTC derivative instruments.
13	Risk position from collateral This column shall reflect the relevant required risk positions from collateral with respect to the relevant hedging sets related to OTC derivative instruments.
14	Net absolute risk position after the application of CCF's In respect of all relevant OTC derivative instruments, this column shall reflect the absolute aggregate amount of the required risk positions related to the relevant hedging sets, after the application of any relevant credit conversion factor.

Columns relating to counterparty credit risk: IRB approach, items 252 to 281

Column number	Description
15	Credit exposure value In the absence of an eligible master netting agreement, this column shall reflect the current value of all relevant credit exposures related to securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
16	Collateral value In the absence of an eligible master netting agreement, this column shall reflect the current value of eligible financial collateral obtained by the reporting bank in respect of all relevant securities financing transactions, after the effect of any relevant haircut has been taken into consideration.
17	Netting benefits This column shall reflect the aggregate amount of all relevant netting benefits arising from eligible master netting agreements taken into consideration in the calculation of the reporting bank's relevant adjusted credit exposure amount related to securities financing transactions.
18	Effective expected positive exposure Based on the relevant requirements specified in subregulation (19)(a), this column shall reflect the relevant required effective expected positive exposure amount related to OTC derivative instruments.
19	Stressed effective expected positive exposure Based on the relevant requirements specified in, amongst others, subregulations (15) and (19) of these Regulations, this column shall reflect the relevant required effective expected positive exposure amount related to OTC derivative instruments in terms of a stressed scenario.
20	Effective expected positive exposure Based on the relevant requirements specified in subregulation (19)(a), this column shall reflect the relevant required effective expected positive exposure amount related to securities financing transactions.
21	Stressed effective expected positive exposure Based on the relevant requirements specified in, amongst others, subregulations (15) and (19) of these Regulations, this column shall reflect the relevant required effective expected positive exposure amount related to securities financing transactions in terms of a stressed scenario.

Columns relating to counterparty credit risk: IRB approach, items 252 to 281

Column number	Description
22	Adjusted exposure amount - OTC derivative instruments This column shall reflect the relevant required exposure or EAD amount for OTC derivative instruments, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
23	Adjusted exposure amount - securities financing transactions This column shall reflect the relevant required exposure or EAD amount for securities financing transactions, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
24	Default risk - OTC derivative instruments This column shall reflect the relevant required risk weighted exposure amount for OTC derivative instruments, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
25	Default risk - securities financing transactions This column shall reflect the relevant required risk weighted exposure amount for securities financing transactions, calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method, which amount shall be net of any relevant incurred CVA loss amount.
26	Standardised approach for CVA Based on the relevant requirements specified in subregulation (15), this column shall reflect the relevant required risk weighted exposure amount for CVA risk, calculated in terms of the standardised approach, provided that, when required by the Registrar, this column shall include any relevant amount related to CVA loss exposures arising from securities financing transactions.

Columns relating to counterparty credit risk: IRB approach, items 252 to 281

Column number	Description
27	<p>Advanced approach for CVA</p> <p>Based on the relevant requirements specified in subregulation (19), this column shall reflect the relevant required risk weighted exposure amount for CVA risk, calculated in terms of the advanced approach, provided that, when required by the Registrar, this column shall include any relevant amount related to CVA loss exposures arising from securities financing transactions.</p>
28	<p>Total risk weighted exposure</p> <p>This column shall reflect the relevant required aggregate amount of risk weighted exposure for counterparty credit risk, including any relevant amount of risk weighted exposure-</p> <ul style="list-style-type: none"> (a) arising from OTC derivative instruments and securities financing transactions; (b) calculated in terms of the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method; (c) related to CVA risk; (d) related to central counterparties.

Items relating to counterparty credit risk analysis of netting: IRB approach

Item number	Description
282	<p>Replacement cost</p> <p>This item shall reflect the relevant required netting benefit taken into consideration for calculating the relevant net replacement cost in respect of OTC derivative instruments.</p>
283	<p>Potential future exposure add-on</p> <p>This item shall reflect the relevant required netting benefit taken into consideration for calculating the relevant net potential future exposure add-on amount in respect of OTC derivative instruments.</p>
284	<p>Securities financing transactions</p> <p>This items shall reflect the relevant required netting benefit taken into consideration in respect of securities financing transactions.</p>
285	<p>Cross-product netting</p> <p>This item shall reflect the relevant required cross-product netting amount taken into consideration by a bank that obtained the approval of the Registrar to use the internal model method for counterparty credit risk.</p>

Columns relating to counterparty credit risk analysis of standardised CVA risk weighted exposure: IRB approach, items 287 to 294

Column number	Description
2	<p>EAD</p> <p>This column shall reflect the relevant exposure or EAD amount, calculated in terms of the relevant requirements specified in these Regulations, after the application of any relevant discount factor.</p>
3	<p>Single-name CDS</p> <p>This column shall reflect the relevant required notional amount, after the application of any relevant discount factor, of a purchased single-name CDS, single-name contingent CDS and/or other eligible instrument used to hedge CVA risk.</p>
4	<p>Index CDS</p> <p>This column shall reflect the relevant required notional amount, after the application of any relevant discount factor, of an eligible purchased index CDS used to hedge CVA risk.</p>
5	<p>Standardised CVA risk weighted exposure</p> <p>This column shall reflect the relevant required risk weighted exposure amount related to CVA risk, calculated in terms of the relevant requirements specified in these Regulations for the standardised approach.</p>

Columns relating to analysis of central counterparty trade exposure: IRB approach, items 295 to 298

Column number	Description
1	<p>Trade exposure</p> <p>This column shall reflect the current and potential future exposure amount of a clearing member or a client to a central counterparty arising from any relevant OTC derivative instrument, exchange traded derivative transaction or securities financing transaction, calculated in accordance with the relevant requirements specified in subregulation (15) read with the relevant requirements respectively specified in subregulations (17) to (19) of these Regulations for the current exposure method, the standardised method or the internal model method.</p>

Columns relating to analysis of central counterparty trade exposure: IRB approach, items 295 to 298

Column number	Description
3	<p>Risk weighted exposure</p> <p>This column shall reflect the relevant required risk weighted exposure amount of a clearing member or a client to a central counterparty arising from any relevant OTC derivative instrument, exchange traded derivative transaction or securities financing transaction, calculated in accordance with the relevant requirements specified in subregulation (15) read with the relevant requirements respectively specified in subregulations (17) to (19) of these Regulations for the current exposure method, the standardised method or the internal model method.</p>
4	<p>Calculated in terms of the standardised approach</p> <p>This column shall reflect the relevant required risk weighted exposure amount calculated in terms of the standardised approach for the measurements of the bank's exposure to credit risk with regards to trade exposures to non-qualifying central counterparties.</p>

Columns relating to analysis of qualifying central counterparty default fund guarantees: IRB approach, items 299 and 300

Column number	Description
1	<p>Initial margin collateral posted with a central counterparty</p> <p>Based on the relevant requirements specified in these Regulations, this column shall reflect the relevant aggregate amount related to a clearing member's or client's funded collateral posted or provided to a central counterparty to mitigate the potential future exposure of the central counterparty to the clearing member arising from the possible future change in the value of their transactions, provided that, in accordance with the relevant requirements specified in these Regulations, initial margin shall exclude any relevant amount related to contributions to a central counterparty in terms of any mutualised loss sharing arrangement, that is, when a central counterparty uses initial margin to mutualise losses among the clearing members, the relevant amount shall be treated as a default fund exposure.</p>
2	<p>Prefunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to any prefunded default fund contributions made by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.</p>

Columns relating to analysis of qualifying central counterparty default fund guarantees: IRB approach, items 299 and 300

Column number	Description
3	<p>Trade exposure</p> <p>This column shall reflect the relevant aggregate amount related to the current and potential future exposure of a clearing member or a client to a central counterparty arising from OTC derivatives, exchange traded derivatives transactions or securities financing transactions, calculated in accordance with the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method.</p>
4	<p>Risk weighted exposure</p> <p>Based on the relevant requirements specified in subregulation (15)(d), this column shall reflect the relevant risk weighted exposure amount calculated in terms of either method 1 or method 2.</p>

Columns relating to analysis of non-qualifying central counterparty default fund guarantees: IRB approach, items 301 and 302

Column number	Description
1	<p>Prefunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to any prefunded default fund contribution by a clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.</p>
2	<p>Unfunded default fund contribution</p> <p>This column shall reflect the relevant aggregate amount related to unfunded default fund contributions, which contributions-</p> <ul style="list-style-type: none"> (a) are liable to be paid by a clearing member when required by the relevant central counterparty; (b) will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce any central counterparty loss.
3	<p>Trade exposure</p> <p>This column shall reflect the relevant aggregate amount related to the current and potential future exposure of a clearing member or a client to a central counterparty, arising from OTC derivatives, exchange traded derivatives transactions or securities financing transactions, calculated in accordance with the relevant requirements specified in these Regulations for the current exposure method, the standardised method or the internal model method.</p>

Columns relating to analysis of non-qualifying central counterparty default fund guarantees: IRB approach, items 301 and 302

Column number	Description
4	<p>Risk weighted exposure</p> <p>This column shall reflect the relevant aggregate risk weighted exposure amount equivalent to a deduction against capital and reserve funds.</p>

Columns relating to analysis of performing credit exposure, that is, EAD, analysed by effective maturity, items 318 to 329

Column number	Description
3 to 28	<p>EAD per specified asset class and effective maturity</p> <p>Based on the relevant principles contained in, and the relevant requirements specified in, regulation 23(13)(d)(ii)(B),but disregarding any specified prudential floor or ceiling, these columns shall reflect the bank's performing credit exposure, that is, the relevant EAD amounts, according to the specified effective maturity bands.</p>

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CREDIT RISK
 (Confidential and not available for inspection by the public)
 Name of bank:
 Quarter ended: (yyyy/mm/dd)

BA 210
 Quarterly

Country:

Credit risk mitigation ²										
		Unfunded credit protection		Funded credit protection		Redistribution of net exposure after netting			Net exposure after netting and credit risk mitigation redistribution effects (col 2+7+8 -9-10)	
		Original credit and counterparty exposure	Net exposure after netting agreements	Credit derivatives	Guarantees	Collateral pledged on deposit by third party	Total inflow (+)	Total outflow (-)	Standardised approach	IRB approach
Asset class	Line no.	1	2	3	4	5	6	7	8	9
Corporate exposure (total of items 2 and 3)	1									11
Corporate	2									
SME corporate	3									
Public sector entities	4									
Local government and municipalities	5									
Sovereign (including central governments and central bank)	6									
Banks	7									
Securities firms	8									
Retail exposure (total of items 10, 11, 13 and 16)	9									
Residential mortgage advances	10									
Retail revolving credit ⁴	11									
of which: credit cards	12									
SME retail (total of items 14 and 15)	13									
Secured lending	14									
Unsecured lending	15									
Retail – other	16									
of which: vehicle and asset finance	17									
unsecured lending ^{5,6}	18									
\$ R30 000										
unsecured lending ⁵										
> R30 000	19									

1. Exposure value before the application of any credit conversion factor (CCF), credit risk mitigation (CRM) and any volatility adjustment.

2. Including redistribution effects.

3. The aggregate amount of total outflows shall be equal to the sum of amounts reported in columns 3 to 6.

4. As defined in regulation 23(1)(c)(iv)(B)(ii).

5. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

6. Including loans in respect of which the maximum NCA rate applies.

		Credit risk mitigation ²						Net exposure after netting and credit risk mitigation redistribution effects (col 2+7+8 -9-10)			
		Unfunded credit protection		Funded credit protection		Redistribution of net exposure after netting		Total outflow ³ (-)			
		Original credit and counterparty exposure ¹	Net exposure after netting agreements	Credit derivative instruments	Guarantees	Collateral: simple method	Collateral: pledged on deposit by third party	Standardised approach	IRB approach	Standardised approach	IRB approach
Asset class		1	2	3	4	5	6	7	8	9	10
Securitisation and resecuritisation exposure		20									
Total (of items 1, 4 to 9 and 20)		21									

1. Also refer to regulation 35 and the form BA500.

		Credit risk mitigation affecting exposure amount			Funded credit protection: financial collateral i.t.o comprehensive method			Credit exposure value post credit risk mitigation ¹ (E ^r) (col 11+12-13)					
					<i>Memorandum items: volatility and maturity adjustments</i>								
Asset class	Line no.	Volatility adjustment in respect of exposure	Adjusted value of financial collateral	Total (col 15+16+17)	In respect of collateral	Currency mismatch	Maturity mismatch	Total	14	15	16	17	18
Corporate exposure (total of items 2 and 3)	1												
Corporate	2												
SME corporate	3												
Public sector entities	4												
Local government and municipalities	5												
Sovereign (including central governments and central bank)	6												
Banks	7												
Securities firms	8												
Retail exposure (total of items 10, 11, 13 and 16)	9												
Residential mortgage advances	10												
Retail revolving credit ²	11												
of which: credit cards	12												
SME retail (total of items 14 and 15)	13												
Secured lending	14												
Unsecured lending	15												
Retail – other	16												
of which: vehicle and asset finance	17												
unsecured lending ^{3,4}													
≤ R30 000	18												
unsecured lending ³													
> R30 000	19												
Securitisation and resecuritisation exposure⁵	20												
Total (of items 1, 4 to 9 and 20)	21												

- (All amounts to be rounded off to the nearest R'000)
1. Before the application of any relevant credit conversion factor (CCF).
 2. As defined in regulation 23(1)(c)(iv)(B)(ii).
 3. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.
 4. Including loans in respect of which the maximum NCA rate applies.
 5. Also refer to regulation 35 and the form BA500.

Standardised approach: Restructured credit exposure ¹	Line no.	Actual number of restructured credit exposure transactions in this reporting quarter	Exposure value of restructured credit exposure transactions in this reporting quarter (R'000)	Restructured credit exposure as percentage of asset class exposure (%)
Asset class		1	2	3
Corporate exposure (total of items 23 and 24)	22			
Corporate	23			
SME corporate	24			
Public sector entities	25			
Local government and municipalities	26			
Sovereign (including central governments and central bank)	27			
Banks	28			
Securities firms	29			
Retail exposure (total of items 31, 32, 34 and 37)	30			
Residential mortgage advances	31			
Retail revolving credit ²	32			
of which: credit cards	33			
SME retail (total of items 35 and 36)	34			
Secured lending	35			
Unsecured lending	36			
Retail – other	37			
of which: vehicle and asset finance	38			
unsecured lending ^{3, 4}				
≤ R30 000	39			
unsecured lending ³				
> R30 000	40			
Securitisation and resecuritisation exposure⁵	41			
Total (of items 22, 25 to 30 and 41)	42			

1. As defined in regulation 67. When new terms, conditions or concessions are not formalised in writing, the relevant exposure or facility shall be regarded as impaired.

2. As defined in regulation 23(1)(c)(iv)(B)(ii).

3. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

4. Including loans in respect of which the maximum NCA rate applies.

5. Also refer to regulation 35 and the form BA500.

Asset class	Line no.	Total gross credit exposure, collateral and specific impairment										Total gross credit exposure (col. 1+4+7+10)	
		Special mention		Sub-standard		Doubtful		Loss					
		Gross exposure	Collateral	Specific credit impairment	Gross exposure	Collateral	Specific credit impairment	Gross exposure	Collateral	Specific credit impairment	Specific credit impairment		
Standardised approach:													
Credit risk classification and impairment													
Corporate exposure (total of items 44 and 45)	43												
Corporate	44												
SME corporate	45												
Public sector entities	46												
Local government and municipalities	47												
Sovereign (including central governments and central bank)	48												
Banks	49												
Securities firms	50												
Retail exposure (total of items 52, 53, 55 and 58)	51												
Residential mortgage advances	52												
Retail revolving credit ¹	53												
of which: credit cards	54												
SME retail (total of items 56 and 57)	55												
Secured lending	56												
Unsecured lending	57												
Retail – other	58												
of which: vehicle and asset finance	59												
unsecured lending ^{2,3}	60												
≤ R30 000													
unsecured lending ²													
> R30 000													
Securitisation and resecuritisation exposure⁴	61												
Total (of items 43, 46 to 51 and 62)	62												
	63												

1. As defined in regulation 23(1)(c)(iv)(B)(ii).

2. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

3. Including loans in respect of which the maximum NCA rate applies.

4. Also refer to regulation 35 and the form BA500.

Asset class	Line no.	Total (col. 15+16)	of which: specific credit impairment (col. 3+6+9+12)	Total impairment		
				14	15	16
Corporate exposure (total of items 44 and 45)						
Corporate	43			43		
SME corporate	44			44		
Public sector entities	45			45		
Local government and municipalities	46			46		
Sovereign (including central governments and central bank)	47			47		
Banks	48			48		
Securities firms	49			49		
Retail exposure (total of items 52, 53, 55 and 58)						
Residential mortgage advances	51			51		
Retail revolving credit ¹	52			52		
of which: credit cards	53			53		
SME retail (total of items 56 and 57)	54			54		
Secured lending	55			55		
Unsecured lending	56			56		
Retail – other	57			57		
of which: vehicle and asset finance	58			58		
unsecured lending ^{2,3}	59			59		
≤ R30 000	60			60		
unsecured lending ²						
> R30 000						
Securitisation and resecuritisation exposure⁴						
Total (of items 43, 46 to 51 and 62)	61			61		
	62			62		
	63			63		

1. As defined in regulation 23(1)(c)(iv)(B)(ii).
 2. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.
 3. Including loans in respect of which the maximum NCA rate applies.
 4. Also refer to regulation 35 and the form BA500.

Original credit and counterparty exposure ³									
Total credit exposure									
Memorandum items:									
									Total credit exposure as % of qualifying capital and reserve funds
									Additional capital requirement
Standardised approach: Credit concentration risk - large exposure to a person ¹									
Name of person	Line no.	Asset class ²	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 2 to 5)	of which: defaulted	
Private-sector non bank: total (Specify)	64	1	2	3	4	5	6	7	8
65									
66									
67									
Bank/regulated securities firm: total (Specify)	68	69	70	71	72	73	74	75	76
Other: total (Specify)	77								
Total (of items 64, 68 and 72)	77								

1. Refer to section 73 of the Act and regulations 24(6) to 24(8).

2. Based on the following specified keys: 1 = Corporate; 2 = SME corporate; 3 = Public sector entities; 4 = Local government and municipalities; 5 = Sovereign (including central governments and central bank); 6 = Banks; 7 = Securities firms; 8 = Retail; 9 = SME retail 10 = Securitisation exposure

3. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

		(All amounts to be rounded off to the nearest R'000)						
		Credit risk mitigation		Redistribution of reduced exposures		Net exposure after credit risk mitigation		Risk weighted value as % of qualifying capital and reserve funds
	Line no.	Eligible financial collateral	Unfunded credit protection	Credit derivative instruments	Outflows (-)	Inflows (+)	Specific credit impairment	Risk weighted value of net exposure
Standardised approach:								
Credit concentration risk - large exposure to a person ¹								
Name of person	11	12	13	14	15	16	17	19
Private-sector non bank total (Specify)	64 65 66 67							
Bank/regulated securities firm total (Specify)	68 69 70 71							
Other: total (Specify)	72 73 74 75 76 77							
Total (of items 64, 68 and 72)								

1. Refer to section 73 of the Act and regulations 24(6) to 24(8).

Approved by:

Board of Directors

Registrar of Banks*

Date

Date

* solely relates to the relevant deduction from capital and reserve funds

Original credit and counterparty exposure ²										Total impairment		
										Total (col. 10+11)	specific credit impairment	portfolio credit impairment
										Risk weighted value of net exposure	Memorandum items:	
	On- balance sheet exposure	Off- balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Total (col. 1 to 4)	of which: defaulted	Total equity exposure				
	1	2	3	4	5	6	7	8	9	10	9	11
Agriculture, hunting, forestry and fishing	78											
Mining and quarrying	79											
Manufacturing	80											
Electricity, gas and water supply	81											
Construction	82											
Wholesale and retail trade, repair of specified items, hotels and restaurants	83											
Transport, storage and communication	84											
Financial intermediation and insurance	85											
Real estate	86											
Business services	87											
Community, social and personal services	88											
Private households	89											
Other	90											
Total (of items 78 to 90)	91											
<i>of which:</i>												
Sovereign (central government and central bank)												
Public sector entities	92											
Local government and municipalities	93											
	94											

1. The classification of credit exposure according to the sectors or industries specified in items 78 to 90 shall be based on the directives and industries specified in the Standard Industrial Classification of all Economic Activities, issued by Statistics South Africa from time to time.
 2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

Standardised approach: Credit concentration risk Herfindahl-Hirschman Index (HHI) Wholesale - Industry¹	Line no.	Risk weighted exposure (R'000)	Risk weighted exposure as % of total risk weighted exposure (col. 1/ total RWE) (%)	Squared value (%) (col. 2)*(col.2) ²
			1	2
Total (of items 96 to 108)	95			
Agriculture, hunting, forestry and fishing	96			
Mining and quarrying	97			
Manufacturing	98			
Electricity, gas and water supply	99			
Construction	100			
Wholesale and retail trade, repair of specified items, hotels and restaurants	101			
Transport, storage and communication	102			
Financial intermediation and insurance	103			
Real estate	104			
Business services	105			
Community, social and personal services	106			
Private households	107			
Other	108			
of which total:				
Sovereign (central government and central bank)	109			
Public sector entities	110			
Local government and municipalities	111			
Herfindahl-Hirschman Index (HHI)				
Retail - Product³				
		Risk weighted exposure (R'000)	Number of clients	Average risk weighted exposure per client as % of total RWE ⁴ (%)
				Squared value (%) * number of clients (col. 3)*(col.3)*(col.2) ⁵
Total (of items 113 to 117)	112			
Credit cards	113			
Current accounts	114			
Mortgages	115			
Instalment sales	116			
Personal and term loans	117			

1. The wholesale HHI shall be based on specified industries.
2. Means the squared value of the percentage reported in column 2.
3. The retail HHI shall be based on specified products.
4. Means (the amount reported in column 1 divided by the number reported in column 2) divided by the total risk weighted exposure amount in column 1.
5. Means the squared value of the percentage reported in column 3, multiplied with the number of clients reported in column 2.

Standardised approach: Credit concentration risk, geographical distribution ¹	Original credit and counterparty exposure ²						Total impairment of which:		Total (col. 10+11)	Portfolio credit impairment		
	Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total credit exposure		Risk weighted value of net exposure				
						Total (col. 1 to 4)	Memorandum items: of which: defaulted					
South Africa	118					5	5	8	9	10		
Other African countries (total of items 120 to 126)	119											
AAA to AA-	120											
A+ to A-	121											
BBB+ to BBB-	122											
BB+ to B-	123											
Below B-	124											
Unrated ³	125											
In default	126											
Europe (total of items 128 to 134)	127											
AAA to AA-	128											
A+ to A-	129											
BBB+ to BBB-	130											
BB+ to B-	131											
Below B-	132											
Unrated ³	133											
In default	134											
Asia (total of items 136 to 142)	135											
AAA to AA-	136											
A+ to A-	137											
BBB+ to BBB-	138											
BB+ to B-	139											
Below B-	140											
Unrated ³	141											
In default	142											

1. Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.

2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.
 3. Not to include any exposure in default.

		(All amounts to be rounded off to the nearest R'000)							
		Original credit and counterparty exposure ²						Total impairment of which:	
		Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total credit exposure	Total (col. 10+11)	specific credit impairment
			1	2	3	4	5	6	7
Standardised approach:									
Credit concentration risk ¹									
geographical distribution									
North America (total of items 144 to 150)		143							
AAA to AA-		144							
A+ to A-		145							
BBB+ to BBB-		146							
BB+ to B-		147							
Below B-		148							
Unrated ³		149							
In default		150							
South America (total of items 152 to 158)		151							
AAA to AA-		152							
A+ to A-		153							
BBB+ to BBB-		154							
BB+ to B-		155							
Below B-		156							
Unrated ³		157							
In default		158							
Other total of items 160 to 166)		159							
AAA to AA-		160							
A+ to A-		161							
BBB+ to BBB-		162							
BB+ to B-		163							
Below B-		164							
Unrated ³		165							
In default		166							

1. Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.

2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

3. Not to include any exposure in default.

		Original credit and counterparty exposure ²				Total impairment	
		On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Memorandum items: of which: Total equity exposure
Standardised approach:	Line no.					Risk weighted value of net exposure	Total (col. 10+11) specific credit impairment
Credit concentration risk - geographical distribution ¹							
Total, including South Africa (of items 168 to 174)	167						
AAA to AA-	168						
A+ to A-	169						
BBB+ to BBB-	170						
BB+ to B-	171						
Below B-	172						
Unrated ³	173						
In default	174						

1. Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.
 2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.
 3. Not to include any exposure in default.

Standardised approach: Other selected geographical information		Original credit and counterparty exposure ²				Total credit exposure			Total impairment of which: portfolio credit impairment raised in respect of specific country	
Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Memorandum items: Total equity exposure	Total (col. 9 plus 10)	Specific credit impairment	10	
Advanced economies, excluding China	175									
of which: United Kingdom	176									
Emerging market and developing countries, including China (total of items 178, 179, 185 to 187 and 190 to 192)	177									
South Africa	178									
African countries, excluding South Africa	179									
of which: Sub-Saharan Africa	180									
of which:	181									
Nigeria	182									
Kenya	183									
Namibia	184									
Mozambique	185									
Central and Eastern Europe	186									
Commonwealth of Independent States and Mongolia	187									
Developing Asia, including China of which: People's Republic of China	188									
India	189									
Middle East	190									
Western Hemisphere	191									
Other ³ (Specify)	192									
Total (of items 175 and 177)	193									

1. Based on the regional classification contained in the World Economic Outlook Report issued by the International Monetary Fund from time to time, and the residence or place of incorporation of the relevant person or counterparty.

2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

3. Means any country other than the countries specified above and in the World Economic Outlook Report issued by the International Monetary Fund from time to time.

(All amounts to be rounded off to the nearest R'000)

Standardised approach: Credit concentration risk - 20 largest exposures in debt and with equity exposure ¹ Name of person	Line no.	Debt exposure	Total (of col. 3+4)	Total equity exposure		Total debt and equity exposure (col. 1+2)
				of which: privately held equity exposure	of which: publicly traded equity exposure	
Total (of items 195 to 214) (Specify)	194		1	2	3	4
	195					5
	196					
	197					
	198					
	199					
	200					
	201					
	202					
	203					
	204					
	205					
	206					
	207					
	208					
	209					
	210					
	211					
	212					
	213					
	214					

1. This table shall be completed based on the total debt and equity exposures.

Standardised approach: Watch list ¹		(All amounts to be rounded off to the nearest R'000)				
Name of person	Line no.	Asset class ²	Exposure amount	Risk weighted value of net exposure	Specific impairment	Comments
Total (Please submit required details on separate list)	1	2	3	4	5	
	215					
	216					
	217					
	218					
	219					
	220					
	221					
	222					
	223					
	224					
	225					
	226					
	227					
	228					

1. Means credit exposures in excess of 1% of qualifying capital and reserve funds reported in item 38 of form BA 700, which credit exposures are not in default but categorised as at least special mention due to particular circumstances that warrant more than normal attention from the reporting bank's senior management.

2. Based on the following specified keys: 1 = Corporate; 2 = SME corporate; 3 = Public sector entities; 4 = Local government and municipalities; 5 = Sovereign (including central governments and central bank); 6 = Banks; 7 = Securities firms; 8 = Retail; 9 = SME retail; 10 = Securitisation exposure

(All amounts to be rounded off to the nearest R'000)									
		Credit risk mitigation ²							
		Unfunded credit protection not subject to double default		Redistribution of net exposure after netting					
		Net exposure after netting agreement		Total inflows ³				Total outflows ⁴	
		Guarantees		Credit derivative instruments		Standardised approach		IRB approach	
IRB approach: Credit risk mitigation		Original credit and counterparty exposure ¹		(+)		(-)		IRB approach	
Asset class		Line no.		Net exposure after netting agreement		Standardised approach		IRB approach	
		1		2		3		4	
Corporate exposure (total of items 230 to 237)		229							
Corporate		230							
Specialised lending - high volatility commercial real estate (property development)		231							
Specialised lending - income producing real estate		232							
Specialised lending - object finance		233							
Specialised lending - commodities		234							
Specialised lending - project Finance		235							
SME corporate		236							
Purchased receivables - corporate		237							
Public sector entities		238							
Local government and municipalities		239							
Sovereign (including central government and central bank)		240							
Banks		241							
Securities firms		242							

1. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

2. Including redistribution effects.

3. Column 6 shall be equal to outflows under the standardised approach.

4. The aggregate amount of outflows reported in columns 7 and 8 shall be equal to the aggregate amount of items reported in columns 3 and 4.

5. Before the application of any relevant credit conversion factor.

IRB approach: Credit risk mitigation		Original credit and counterparty exposure ¹ Line no.	Net exposure after netting agreement	Unfunded credit protection not subject to double default		Credit risk mitigation ²			Credit risk mitigation subject to requirements of double default		
Asset class	Guarantees			Credit derivative instruments		Total inflows ³ (+)	Total outflows ⁴ (-)	Standardised approach	IRB approach	Standardised approach	IRB approach
	1	2	3	4	5	6	7	8	9	10	11
Retail exposure (total of items 244, 245, 247, 250 and 254)											
Residential mortgage advances	243										
Retail revolving credit ⁶	244										
of which: credit cards	245										
SME retail (total of items 248 and 249)	246										
Secured lending	247										
Unsecured lending	248										
Retail – other	249										
of which: vehicle and asset finance	250										
unsecured lending ^{7, 8}	251										
≤ R30 000	252										
unsecured lending ⁷	253										
> R30 000	254										
Purchased receivables – retail											
Securitisation and resecuritisation exposures ⁹	255										
Total (of items 229, 238 to 243, and 255)	256										

1. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

2. Including redistribution effects.

3. Column 6 shall be equal to outflows under the standardised approach.

4. The aggregate amount of outflows reported in columns 7 and 8 shall be equal to the aggregate amount of items reported in columns 3 and 4.

5. Before the application of any relevant credit conversion factor.

6. As defined in regulation 23(1)(c)(iv)(B)(ii).

7. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

8. Including loans in respect of which the maximum NCA rate applies.

9. Also refer to regulation 35 and the form BA500.

IRB approach:		Credit risk mitigation affecting LGD estimates							
Credit risk mitigation		Unfunded credit protection		Eligible financial collateral		Other eligible collateral			
Asset class	Line no.	Total (nominal amounts) (col. 13+14+15+18)	Guarantees	Credit derivative instruments	Total	of which: subject to maturity mismatch	Total	of which: residential real estate	of which: commercial real estate
Corporate exposure (total of items 230 to 237)	229								
Corporate	230								
Specialised lending - high volatility commercial real estate (property development)	231								
Specialised lending - income producing real estate	232								
Specialised lending - object finance	233								
Specialised lending - commodities finance	234								
Specialised lending - project finance	235								
SME corporate	236								
Purchased receivables - corporate	237								
Public sector entities	238								
Local government and municipalities	239								
Sovereign (including central government and central bank)	240								
Banks	241								
Securities firms	242								
Retail exposure (total of items 244, 245, 247, 250 and 254)	243								
Residential mortgage advances	244								
Retail revolving credit ¹	245								
of which: credit cards	246								
SME retail (total of items 248 and 249)	247								
Secured lending	248								
Unsecured lending	249								
Retail – other	250								
of which: vehicle and asset finance	251								
unsecured lending ^{2,3}	252								
≤ R30 000									
unsecured lending ²									
> R30 000									
Purchased receivables - retail	253								
Securitisation and resecuritisation exposures ⁴	254								
Total (of items 229, 238 to 243, and 255)	255								
	256								

1. As defined in regulation 23(1)(c)(iv)(B)(ii).

2. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

3. Including loans in respect of which the maximum NCA rate applies.

4. Also refer to regulation 35 and the form BA50.

Asset class	Line no.	Actual number of restructured credit exposure transactions in this reporting quarter	Exposure value of restructured credit exposure transactions in this reporting quarter (R'000)	Restructured credit exposure as percentage of asset class exposure (%)
		1	2	3
Corporate exposure (total of items 258 to 265)				
Corporate	257			
Specialised lending - high volatility commercial real estate (property development)	258			
Specialised lending - income producing real estate	259			
Specialised lending - object finance	260			
Specialised lending - commodities finance	261			
Specialised lending - project finance	262			
SME corporate	263			
Purchased receivables - corporate	264			
Public sector entities	265			
Local government and municipalities	266			
Sovereign (including central government and central bank)	267			
Banks	268			
Securities firms	269			
Retail exposure (total of items 272, 273, 275, 278 and 282)	270			
Residential mortgage advances	271			
Retail revolving credit ²	272			
of which: credit cards	273			
SME retail (total of items 276 and 277)	274			
Secured lending	275			
Unsecured lending	276			
Retail – other	277			
of which: vehicle and asset finance	278			
unsecured lending ^{3, 4} ≤ R30 000	279			
unsecured lending ^{3, 5} > R30 000	280			
Purchased receivables – retail	281			
Securitisation and resecuritisation exposures ⁵	282			
Total (of items 257, 266 to 271 and 283)	283			
	284			

1. As defined in regulation 67. When new terms, conditions or concessions are not formalised in writing, the relevant exposure or facility shall be regarded as impaired.

2. As defined in regulation 23(1)(c)(iv)(B)(ii).

3. Relates to the relevant original exposure amount, excluding relevant retail revolving credit exposure and SME retail exposure.

4. Including loans in respect of which the maximum NCA rate applies.

5. Also refer to regulation 35 and the form BA500.

Original credit and counterparty exposure ³											
Total credit exposure											
Memorandum items:											
IRB approach: Credit concentration risk - large exposure to a person ¹	Asset class ²	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 2 to 5)	of which: defaulted	Total equity exposure	Exposure value (EAD)	PD (%)	LGD (%)
Name of person	Line no.	1	2	3	4	5	6	7	8	9	10
Private-sector non bank: total (Specify)	285										
	286										
	287										
	288										
	289										
Bank/regulated securities firm: total (Specify)	290										
	291										
	292										
	293										
	294										
	295										
Other: total (Specify)	296										
	297										
	298										
	299										
Total (of items 285, 290 and 295)	300										

1. Refer to section 73 of the Act and regulations 24(6) to 24(8).

2. Based on the following specified keys: 1 = Corporate; 2 = Specialised lending – high volatility commercial real estate (property development); 3 = Specialised lending – income producing real estate; 4 = Specialised lending – object finance; 5 = Specialised lending – commodities finance; 6 = SME corporate; 8 = Purchased receivables – corporate; 9 = Public sector entities; 10 = Local government and municipalities; 11 = Sovereign (including central government and central bank); 12 = Banks; 13 = Securities firms; 14 = Retail mortgages (including any home equity line of credit); 15 = Retail revolving credit; 16 = Retail – other; 17 = SME retail; 18 = Purchased receivables – retail; 19 = Securitisation exposure.

3. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

(All amounts to be rounded off to the nearest R'000)									
IRB approach: Credit concentration risk - large exposure to a person ¹	Line no.	Credit risk mitigation				Redistribution of reduced exposures		Risk weighted value as % of qualifying capital and reserve fund	Additional capital requirement
		Total (col. 14 to 17)	Eligible financial collateral	Other eligible collateral	Guarantees	Credit derivative instruments	Outflows (-)	Inflows (+)	
Name of person	13	14	15	16	17	18	19	20	21
Private-sector non bank: total (Specify)	285								24
	286								
	287								
	288								
	289								
Bank/regulated securities firm: total (Specify)	290								
	291								
	292								
	293								
	294								
Other: total (Specify)	295								
	296								
	297								
	298								
	299								
Total (of items 285, 290 and 295)	300								

1. Refer to section 73 of the Act and regulations 24(6) to 24(8).

Approved by:

Board of Directors

Registrar of Banks*

Date _____

Date _____

* Solely relates to the relevant deduction from capital and reserve funds

(All amounts to be rounded off to the nearest R'000)										
IRB approach: Credit concentration risk - sectoral distribution ¹	Line no.	Original credit and counterparty exposure ²			Total credit exposure			Exposure value (EAD)	EAD weighted average PD (%)	Risk weighted value as % of qualifying capital and reserve fund
		On- balance sheet exposure	Off- balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Memorandum items: Total equity exposure			
		1	2	3	4	5	6			
Agriculture, hunting, forestry and fishing	301									
Mining and quarrying	302									
Manufacturing	303									
Electricity, gas and water supply	304									
Construction	305									
Wholesale and retail trade, repair of specified items, hotels and restaurants	306									
Transport, storage and communication	307									
Financial intermediation and insurance	308									
Real estate	309									
Business services	310									
Community, social and personal services	311									
Private households	312									
Other	313									
Total (of items 301 to 313) of which:	314									
Sovereign (central government and central bank)										
Public sector entities	315									
Local government and municipalities	316									
	317									

1. The classification of credit exposure according to the sectors or industries specified in items 301 to 313 shall be based on the directives and industries specified in the Standard Industrial Classification of all Economic Activities, issued by Statistics South Africa from time to time.

2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

IRB approach: Credit concentration risk Herfindahl-Hirschman Index (HHI)	Line no.	Risk weighted exposure (R'000)	Risk weighted exposure as % of total risk weighted exposure (col. 1/ total RWE) (%)	Squared value (%) (col. 2)*(col.2) ²
			1	2
Total (of items 319 to 331)	318			
Agriculture, hunting, forestry and fishing	319			
Mining and quarrying	320			
Manufacturing	321			
Electricity, gas and water supply	322			
Construction	323			
Wholesale and retail trade, repair of specified items, hotels and restaurants	324			
Transport, storage and communication	325			
Financial intermediation and insurance	326			
Real estate	327			
Business services	328			
Community, social and personal services	329			
Private households	330			
Other	331			
of which total:				
Sovereign (central government and central bank)	332			
Public sector entities	333			
Local government and municipalities	334			
Herfindahl-Hirschman Index (HHI)		Risk weighted exposure (R'000)	Number of clients	Average risk weighted exposure per client as % of total RWE ⁴ (%)
Retail - Product³				Squared value (%) * number of clients (col. 3)*(col.3) * (col.2) ⁵
		1	2	3
Total (of items 336 to 340)	335			
Credit cards	336			
Current accounts	337			
Mortgages	338			
Instalment sales	339			
Personal and term loans	340			

1. The wholesale HHI shall be based on specified industries.
2. Means the squared value of the percentage reported in column 2.
3. The retail HHI shall be based on specified products.
4. Means (the amount reported in column 1 divided by the number reported in column 2) divided by the total risk weighted exposure amount in column 1.
5. Means the squared value of the percentage reported in column 3, multiplied with the number of clients reported in column 2.

IRB approach: Credit concentration risk – geographical distribution	Original credit and counterparty exposure										Total credit exposure				Credit impairment			
	Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Memorandum items			EAD weighted average PD (%)	Exposure value (EAD)	EAD weighted average LGD (%)	Risk weighted value as % of qualifying capital and reserve funds	Memorandum items:					
						Total (col. 1 to 4)	Defaulted	Equity exposure					Total (col. 14 and 15)	of which: specific impairment	of which: portfolio impairment			
South Africa	341	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Other African countries (items 343 to 349)	342																	
AAA to AA-	343																	
A+ to A-	344																	
BBB+ to BBB-	345																	
BB+ to B-	346																	
Below B-	347																	
Unrated ³	348																	
In default	349																	
Europe (items 351 to 357)	350																	
AAA to AA-	351																	
A+ to A-	352																	
BBB+ to BBB-	353																	
BB+ to B-	354																	
Below B-	355																	
Unrated ³	356																	
In default	357																	
Asia (items 359 to 365)	358																	
AAA to AA-	359																	
A+ to A-	360																	
BBB+ to BBB-	361																	
BB+ to B-	362																	
Below B-	363																	
Unrated ³	364																	
In default	365																	

1. Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.
 2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.
 3. Not to include any exposure in default.

IRB approach: Credit concentration risk – geographical distribution	Original credit and counterparty exposure ¹										Total credit exposure				Credit impairment			
	Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Memorandum items		EAD weighted average PD (%)	Exposure value (EAD)	EAD weighted average LGD (%)	Risk weighted value	Risk weighted value as % of qualifying capital and reserve funds	Total (of col. 14 and 15)	of which: specific impairment	of which: portfolio impairment	Memorandum items:	
							Defaulted	Equity exposure										
North America (Items 367 to 373)	366																	
AAA to AA-	367																	
A+ to A-	368																	
BBB+ to BBB-	369																	
BB+ to B-	370																	
Below B-	371																	
Unrated ³	372																	
In default	373																	
South America (Items 375 to 381)	374																	
AAA to AA-	375																	
A+ to A-	376																	
BBB+ to BBB-	377																	
BB+ to B-	378																	
Below B-	379																	
Unrated ³	380																	
In default	381																	
Other (Items 383 to 389)	382																	
AAA to AA-	383																	
A+ to A-	384																	
BBB+ to BBB-	385																	
BB+ to B-	386																	
Below B-	387																	
Unrated ³	388																	
In default	389																	

¹ Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.² Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.³ Not to include any exposure in default.

IRB approach: Credit concentration risk – geographical distribution	Line no.	Original credit and counterparty exposure ¹				Total credit exposure				EAD weighted average PD (%)				EAD weighted average LGD (%)				Risk weighted value as % of qualifying capital and reserve funds				Credit impairment			
		On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instrument s	Memorandum items of which:			Total (col. 1 to 4)	Memorandum items of which:			Defaulted	Equity exposure			Total (of col. 14 and 15)	of which: portfolio impairment			Memorandum items:	of which: specific impairment			
						Exposure value (EAD)	EAD	Risk weighted value		Risk weighted average PD (%)	EAD	Risk weighted average LGD (%)		Total (of col. 14 and 15)	of which: portfolio impairment	of which: specific impairment									
Total, including South Africa (of items 391 to 397)	390	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15									
AAA to AA-	391																								
A+ to A-	392																								
BBB+ to BBB-	393																								
BB+ to B-	394																								
Below B-	395																								
Unrated ³	396																								
In default	397																								

1. Based on the rating assigned to the relevant country in which the relevant obligor is domiciled.
 2. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.
 3. Not to include any exposure in default.

		Original credit and counterparty exposure ²						Total impairment of which:					
		Line no.	On-balance sheet exposure	Off-balance sheet exposure	Repurchase and resale agreements	Derivative instruments	Total (col. 1 to 4)	Memorandum items: Total equity exposure	Exposure value (EAD)	Total (col. 10 plus 11)	specific credit impairment	portfolio credit impairment	
IRB approach:													
Other selected geographical information¹													
Advanced economies, excluding China	398												
of which: United Kingdom	399												
Emerging market and developing countries, including China (total of items 401, 402, 408 to 410 and 413 to 415)	400												
South Africa	401												
African countries, excluding South Africa	402												
of which:	403												
Sub-Saharan Africa													
of which:	404												
Nigeria	405												
Kenya	406												
Namibia	407												
Mozambique													
Central and Eastern Europe Commonwealth of Independent States and Mongolia	408												
Developing Asia, including China	409												
of which:	410												
People's Republic of China	411												
India	412												
Middle East	413												
Western Hemisphere	414												
Other ³ (Specify)	415												
Total (of items 398 and 400)										416			

(All amounts to be rounded off to the nearest R'000)
¹ Based on the regional classification contained in the World Economic Outlook Report issued by the International Monetary Fund from time to time, and the residence or place of incorporation of the relevant person or counterparty.
² Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.
³ Means any country other than the countries specified above and in the World Economic Outlook Report issued by the International Monetary Fund from time to time.

(All amounts to be rounded off to the nearest R'000)						
			Total equity exposure	Total debt and equity exposure (col. 1+2)	Total debt and equity exposure (col. 1+2)	Expected loss
		Debt exposure	Total (of col. 3+4)	of which: privately held equity exposure	of which: publicly traded equity exposure	PD (%)
	Line no.		1	2	3	4
IRB approach:						
Credit concentration risk - 20 largest exposures in debt and with equity exposure ¹						
Name of person						
Total (of items 418 to 437) (Specify)	417					
	418					
	419					
	420					
	421					
	422					
	423					
	424					
	425					
	426					
	427					
	428					
	429					
	430					
	431					
	432					
	433					
	434					
	435					
	436					
	437					

1. This table shall be completed based on the total debt and equity exposures.

IRB approach: Watch list ¹		(All amounts to be rounded off to the nearest R'000)						
Name of person	Line no.	Asset class ²	PD rating ³ (%)	Credit exposure ⁴	Expected loss	Risk weighted value of EAD	Specific impairment	Comment
Total (Please submit required details on separate list)	438	1	2	3	4	5	6	7
	439							
	440							
	441							
	442							
	443							
	444							
	445							
	446							
	447							
	448							
	449							
	450							
	451							
	452							

1. Includes credit exposure in respect of which the expected loss exceeds 1% of qualifying capital and reserve funds reported in item 88 of form BA 700, which credit exposure is not yet classified as being in default.

2. Based on the following specified keys: 1 = Corporate; 2 = Specialised lending – income producing real estate; 4 = Specialised lending – object finance; 5 = Specialised lending – commodities finance; 6 = Specialised lending – project finance; 7 = SME corporates; 8 = Purchased receivables – corporate; 9 = Public sector entities; 10 = Local government and municipalities; 11 = Sovereign (including central government and central bank); 12 = Banks; 13 = Securities firms; 14 = Retail mortgages (including any home equity line of credit); 15 = Retail revolving credit; 16 = Retail – other; 17 = SME retail; 18 = Purchased receivables – retail; 19 = Securitisation exposure.

3. Means the relevant PD rating (%) assigned by the reporting bank.

4. Before the application of any credit conversion factor, credit risk mitigation or volatility adjustment.

(All amounts to be rounded off to the nearest R'000)										Responses to questions in notes 2a to 2c							
Standardised and IRB approaches Exposure to related person ¹ Exposure to:	Current period exposure					Prior period exposure		Current exposure as % of qualifying capital and reserve funds ¹	Variance in exposure (col. 5 minus 7)	2a. At arm's-length	2b. Board monitoring	2c. Risk mitigation					
	On-balance sheet exposure		Off-balance sheet exposure	Total (col. 3+4)	On-balance sheet exposure	Total exposure											
	Line no.	Investments and loans	Other	Total (col. 1+2)													
	1	2	3	4	5	6	7	8	9	10	11	12					
Significant shareholder (Specify ¹)	453																
	454																
Member of the board of directors (Specify ¹)	455																
Member of senior management (Specify ¹)	456																
Company controlled by significant shareholder (Specify ¹)	457																
Associate of the bank or controlling company (Specify ¹)	458																
Other related persons (Specify ¹)	459																
Total (of items 453, 456, 459, 462, 465 and 468)	460																
	461																
	462																
	463																
	464																
	465																
	466																
	467																
	468																
	469																
	470																
	471																

Notes:

- 1 The required details shall be reported separately in respect of an exposure to a related person equal to or exceeding 0.1% of qualifying capital and reserve funds as reported in item 88 column 1 of the form BA 700.
 Exposures to related persons individually not equal to or exceeding 0.1% of the said amount of qualifying capital and reserve funds may be grouped together and the aggregate amount reported under "other".
- 2a. Are loans and advances to related persons conducted on an arm's-length basis? (Yes = 1; no = 2)
 When no, a separate schedule of all exposure to related persons not at arm's length shall on request be submitted in writing.
- 2b. Does the board of directors of the relevant bank or controlling company effectively monitor extension of credit to related persons? (Yes = 1; no = 2)
 2c. Are appropriate steps taken to control or mitigate the risks relating to related person exposure? (Yes = 1; no = 2)

IRB approach: Analysis of total credit extended ¹ , analysed by PD band	Prescribed rating scale	Prescribed										Asset class						
		Corporate exposure ^{1,2}					Specialised lending					Public sector entities ^{1, 2}		Local government and municipaliti es ^{1, 2}				
		Line no.	Lower bound (%)	Upper bound (%)	Corpo rate rate	High volatility commercial real estate (property development)	Income producing real estate	Object finance	Commo dity finance	Project finance	SME corpo rate	Purcha sed corpor ate receiva bles	Total corporate exposure (total of col. 3 to 10)	11	12	13	14	15
Performing (total of items 473 to 498)	472																	
00	473	0.00000																
01	474	0.00011	0.01120															
02	475	0.01121	0.01170															
03	476	0.01711	0.02400															
04	477	0.02441	0.03400															
05	478	0.03441	0.04800															
06	479	0.04811	0.06700															
07	480	0.06711	0.09500															
08	481	0.09511	0.13500															
09	482	0.13511	0.19000															
10	483	0.19011	0.26900															
11	484	0.26911	0.38100															
12	485	0.38111	0.53800															
13	486	0.53811	0.76100															
14	487	0.76111	1.07600															
15	488	1.07611	1.52200															
16	489	1.52211	2.15300															
17	490	2.15311	3.04400															
18	491	3.04411	4.30500															
19	492	4.30511	6.08900															
20	493	6.08911	8.61100															
21	494	8.61111	12.17700															
22	495	12.17711	17.22200															
23	496	17.22211	24.35500															
24	497	24.35511	34.44300															
25	498	34.44311	99.99999															
Default	499	100.000	100.000															
Total (of items 472 and 499)			500															

- (All amounts to be rounded off to the nearest R'000)
1. Not on an EAD basis.
 2. In respect of the relevant specified PD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate total amount of credit extended.

(All amounts to be rounded off to the nearest R'000)

IRB approach: Analysis of total credit extended ¹ , analysed by PD band	Line no.	Asset class						Total credit extended (col. 11 to 17)	
		Retail exposure ^{1,2}			Retail other				
		Total retail exposure	Retail revolving credit	SME retail	Total (of columns 18, 19, 21, 24 and 28)	of which: credit cards	Total (of columns 22 and 23)		
Prescribed PD band	17	18	19	20	21	22	23	Purchased retail receivables	
Performing (total of items 473 to 498)	472								
00	473								
01	474								
02	475								
03	476								
04	477								
05	478								
06	479								
07	480								
08	481								
09	482								
10	483								
11	484								
12	485								
13	486								
14	487								
15	488								
16	489								
17	490								
18	491								
19	492								
20	493								
21	494								
22	495								
23	496								
24	497								
25	498								
Default	499								
Total (of items 472 and 499)	500								

1. Not on an EAD basis.

2. In respect of the relevant specified PD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate total amount of credit extended.

IRB approach:	Prescribed rating scale		Asset class														
			Corporate exposure ¹				Specialised lending				Local government and municipalities ¹						
	Line no.	Lower bound (%)	Upper bound (%)	Corpo rate	High volatility commercial real estate (property development)	Income producing real estate	Object finance	Commo dity finance	Project finance	SME corpo rate	Corporate exposure average LGD (%)	Purchased corporate receivables	Public sector entities ¹	Sovereign ¹ (including central government and central banks)	Banks ¹	Securities firms ¹	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
EAD weighted average LGD (percentage)	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	
Prescribed PD band	00	0.0000	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350
Performing (total of items 502 to 527)	01	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350
02	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
03	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
04	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
05	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
06	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
07	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
08	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
09	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
10	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
11	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
12	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
13	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
14	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
15	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
16	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
17	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
18	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
19	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
20	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
21	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
22	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
23	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
24	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
25	0.0001	0.0001	0.0120	0.0121	0.0170	0.0171	0.0240	0.0241	0.0340	0.0341	0.0480	0.0481	0.0670	0.0671	0.0950	0.1350	0.1900
Default	527	34.4431	99.9999	528	100.000	100.000	529	529	529	529	529	529	529	529	529	529	529
Total (of items 501 and 528)																	

1. In respect of the relevant specified PD bands and asset classes, a bank shall report the EAD weighted average LGD percentage relating to the relevant credit exposure, calculated in accordance with the relevant requirements specified in these Regulations.

IRB approach:	EAD weighted average LGD (percentage)	Asset class										Total EAD weighted average LGD (%)	
		Retail exposure ¹											
		Retail revolving credit		SME retail		Retail other		Purchased retail receivables					
Total retail exposure	Line no.	Residential mortgage advances	Total of which: credit cards	Total	of which: secured lending	Total	of which: vehicle and asset finance	Total	of which: unsecured lending ≤ R30 000	26	27	28	
EAD weighted average LGD (%)													
Prescribed PD band	501	17	18	19	20	21	22	23	24	25	26	29	
Performing (total of items 502 to 527)	00	502											
	01	503											
	02	504											
	03	505											
	04	506											
	05	507											
	06	508											
	07	509											
	08	510											
	09	511											
	10	512											
	11	513											
	12	514											
	13	515											
	14	516											
	15	517											
	16	518											
	17	519											
	18	520											
	19	521											
	20	522											
	21	523											
	22	524											
	23	525											
	24	526											
	25	527											
Default	528												
Total (of items 501 and 528)	529												

1. In respect of the relevant specified PD bands and asset classes, a bank shall report the EAD weighted average LGD percentage relating to the relevant credit exposure, calculated in accordance with the relevant requirements specified in these Regulations.

IRB approach: Expected loss Prescribed PD band	Prescribed rating scale		Corporate exposure						Asset class									
	Line no.	Lower bound (%)	Upper bound (%)	Corpo rate	Specialised lending			Commmodity finance	Object producing real estate	Project finance	SME corporate rate	Purchased corporate receivables	Total corporate expected loss (total of col. 3 to 10)	Public sector entities ¹	Local government and municipalities ¹	Sovereign ¹ (including central government and central banks)	Banks ¹	Securities firms ¹
					1	2	3											
Performing (total of items 531 to 556) 00	530	0.0000																
01	531	0.0000																
02	532	0.0001		0.0120														
03	533	0.0121		0.0170														
04	534	0.0171		0.0240														
05	535	0.0241		0.0340														
06	536	0.0341		0.0480														
07	537	0.0481		0.0670														
08	538	0.0671		0.0950														
09	539	0.0951		0.1350														
10	540	0.1351		0.1900														
11	541	0.1901		0.2690														
12	542	0.2691		0.3810														
13	543	0.3811		0.5380														
14	544	0.5381		0.7610														
15	545	0.7611		1.0760														
16	546	1.0761		1.5220														
17	547	1.5221		2.1530														
18	548	2.1531		3.0440														
19	549	3.0441		4.3050														
20	550	4.3051		6.0890														
21	551	6.0891		8.6110														
22	552	8.6111		12.1770														
23	553	12.1771		17.2220														
24	554	17.2221		24.3550														
25	555	24.3551		34.4430														
	556	34.4431		99.9999														
	557	100.0000		100.0000														
		558																
		Total expected loss (total of items 530 and 557)																

1. In respect of the relevant specified PD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate amount of expected loss.

2. Means the reporting bank's best estimate of the relevant expected loss amount.

IRB approach: Expected loss Prescribed PD band	Asset class										Total expected loss (col. 11 to 17)
	Retail exposure ¹										
	Total retail expected loss (total of columns 18, 19, 21, 24 and 28)	Residential mortgage advances	Retail revolving credit		SME retail		Retail other		Purchased retail receivables		
Line no.		Total	of which:	credit cards	Total	of which:	unsecured lending	Total	of which:	of which:	
		17	18	19	20	21	22	23	24	25	26
Performing (total of items 531 to 556)	530										
00	531										
01	532										
02	533										
03	534										
04	535										
05	536										
06	537										
07	538										
08	539										
09	540										
10	541										
11	542										
12	543										
13	544										
14	545										
15	546										
16	547										
17	548										
18	549										
19	550										
20	551										
21	552										
22	553										
23	554										
24	555										
25	556										
	Default ²										
	Total expected loss (total of items 530 and 557)										
		558									

1. In respect of the relevant specified PD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate amount of expected loss.
 2. Means the reporting bank's best estimate of the relevant expected loss amount.

(All amounts to be rounded off to the nearest R'000)

IRB approach:	Prescribed rating scale		Corporate exposure ¹						Asset class							
	Analysis of risk weighted exposure, analysed by PD band	Line no.	Lower bound (%)	Upper bound (%)	Corpo rate	Specialised lending		Commmodity finance	Project finance	SME corpo rate	Purchas ed corpo rate receivable	Total corporate risk weighted exposure (total of cols. 3 to 10)	Local government and municipalities ¹	Sovereign (including central government and central banks) ¹	Banks ¹	Securities firms ¹
						High volatility commercial real estate (property development)	Income producing real estate									
Prescribed PD band	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Performing (total of items 560 to 585)	559	560	0.0000													
00	561	0.0001	0.0120													
01	562	0.0121	0.0170													
02	563	0.0171	0.0240													
03	564	0.0241	0.0340													
04	565	0.0341	0.0480													
05	566	0.0481	0.0670													
06	567	0.0671	0.0950													
07	568	0.0951	0.1350													
08	569	0.1351	0.1900													
09	570	0.1901	0.2690													
10	571	0.2691	0.3810													
11	572	0.3811	0.5380													
12	573	0.5381	0.7610													
13	574	0.7611	1.0760													
14	575	1.0761	1.5220													
15	576	1.5221	2.1530													
16	577	2.1531	3.0440													
17	578	3.0441	4.3050													
18	579	4.3051	6.0890													
19	580	6.0891	8.6110													
20	581	8.6111	12.1770													
21	582	12.1771	17.2220													
22	583	17.2221	24.3550													
23	584	24.3551	34.4430													
24	585	34.4431	99.9999													
25	586	100.0000	100.0000													
Default																
Total (of items 559 and 586)	587															

1. In respect of the relevant specified PD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate amount of risk weighted exposure.

IRB approach:	Analysis of risk weighted exposure, analysed by PD band	Asset class										Total risk weighted exposure (col. 11 to 17)	
		Retail exposure ¹					Retail other						
		Total retail risk weighted exposure (total of columns 18, 19, 21, 24 and 28)	Residential mortgage advances	Retail revolving credit	Total of which: credit cards	Total (of columns 22 and 23)	Total of which: secured lending	Total of which: unsecured lending	Total	of vehicle and asset finance	of which: unsecured lending ≤ R30 000	of which: unsecured lending > R30 000	
Prescribed PD band	Performing (total of items 560 to 585)	559											
	00	560											
	01	561											
	02	562											
	03	563											
	04	564											
	05	565											
	06	566											
	07	567											
	08	568											
	09	569											
	10	570											
	11	571											
	12	572											
	13	573											
	14	574											
	15	575											
	16	576											
	17	577											
	18	578											
	19	579											
	20	580											
	21	581											
	22	582											
	23	583											
	24	584											
	25	585											
	Default	586											
	Total (of items 559 and 586)	587											

1. In respect of the relevant specified FD bands and asset classes, based on the relevant requirements specified in these Regulations, a bank shall report its relevant aggregate amount of risk weighted exposure.

IRB approach:	Prescribed rating scale		Corporate exposure ¹										Asset class ²											
	Line no.	Lower bound (%)	Upper bound (%)	Corpo rate	High volatility commercial real estate (property development)			Income producing real estate			Object finance		Commo dity finance		SME corpo rate	Project corpo rate	Purcha sed corpo rate receivable s	Total corpo rate receivable s	Local govern ment and municip alities	Public sector entities ¹	Sovereign ¹ (including central government and central banks)	Banks ¹	Securities firms	Total ³
					1	2	3	4	5	6	7	8	9	10										
Analysis of average effective maturity, analysed by PD band	588																							
Prescribed PD band	589	0.0000																						
Performing (total of items 589 to 614)	590	0.0001	0.0120																					
00	591	0.0121	0.0170																					
01	592	0.0171	0.0240																					
02	593	0.0241	0.0340																					
03	594	0.0341	0.0480																					
04	595	0.0481	0.0670																					
05	596	0.0671	0.0950																					
06	597	0.0951	0.1350																					
07	598	0.1351	0.1900																					
08	599	0.1901	0.2690																					
09	600	0.2691	0.3810																					
10	601	0.3811	0.5380																					
11	602	0.5381	0.7610																					
12	603	0.7611	1.0760																					
13	604	1.0761	1.5220																					
14	605	1.5221	2.1530																					
15	606	2.1531	3.0440																					
16	607	3.0441	4.3050																					
17	608	4.3051	6.0890																					
18	609	6.0891	8.6110																					
19	610	8.6111	12.1170																					
20	611	12.1171	17.2220																					
21	612	17.2221	24.3550																					
22	613	24.3551	34.4430																					
23	614	34.4431	99.9999																					
24	615	100.0000	100.0000																					
Default																								
Total (of items 588 and 615)	616																							

1. In respect of the relevant specified PD bands and asset classes, a bank shall report the EAD weighted effective maturity of the relevant asset class calculated in accordance with the relevant requirements specified in regulation 23(1)(d)(ii)(B), which average effective maturity shall be expressed in years and rounded to two decimal places.

2. Excluding retail exposure to which an effective maturity of 2.5 years applies and any exposure other than retail exposure in respect of which a specific maturity is specified in these Regulations, in which case the said specified maturity shall be reported.

3. Means the total EAD weighted average effective maturity in respect of all relevant asset classes, including retail exposure (refer note 1), but excluding securitisation exposure.

24. Credit risk - Directives and interpretations for completion of the quarterly return concerning credit risk (Form BA 210)

- (1) The content of the return is confidential and not available for inspection by the public.
- (2) The purpose of the return is to obtain selected information in respect of:
 - (a) credit risk mitigation;
 - (b) restructured credit exposure;
 - (c) credit risk classification and related credit impairment or allowance for credit impairment raised by a bank that adopted the standardised approach for the measurement of the bank's exposure to credit risk;
 - (d) credit concentration risk;
 - (e) large exposure to a person;
 - (f) exposures included on a watch list of the reporting bank in order to duly manage the said exposures due to particular circumstances that warrant more than normal attention from the reporting bank's senior management;
 - (g) connected lending or lending to a related person.
- (3) Unless specifically otherwise provided or specified in writing by the Registrar, a bank shall in all cases other than the items specified below complete the form BA 210 based on the outstanding amount at the end of the reporting month, provided that in respect of the items specified below and any related eligible credit risk mitigation in respect of that specified item, instead of the outstanding amount at the end of the reporting month, the bank shall report the average daily balance of the said specified item and the average daily balance related to any eligible credit risk mitigation in respect of that specified item in respect of the reporting month.
 - (a) Any credit card or overdraft facility.
 - (b) Any corporate exposure related to working capital or an overdraft facility.
 - (c) Any SME working capital facility or overdraft.
 - (d) Any money market exposure to a financial institution.
 - (e) Any call or overnight loan.

(4) Matters relating to valuation of security/ collateral

(a) *Tangible security*

(i) The value of tangible security means the net realisable value of the security, that is, the current market value of the security less any realisation costs. The reporting bank shall base the market value on a reliable valuation, that is, the price at which the relevant asset might be sold on the valuation date assuming-

- a willing buyer and seller;
- the transaction is conducted at arm's length;
- a reasonable period for the sale has been allowed; and
- the asset is freely exposed to the market.

(ii) The reporting bank-

(A) shall on a regular basis but not less frequently than once a year monitor the value of its collateral received, provided that the bank shall on a more frequent basis than once a year monitor the value of its collateral received when the market value of the said collateral is subject to significant change;

(B) may apply statistical methods of evaluation such as reference to house price indices or sampling-

- (i) to update its valuation estimates; or
- (ii) to identify collateral in respect of which the value materially may have declined and which collateral value may need to be re-assessed,

provided that the bank shall make use of a duly qualified professional person to evaluate any relevant property when relevant information indicates that the value of the said collateral materially may have declined relative to general market prices, or when a credit event such as default occurs.

(b) *Intangible security*

The reporting bank shall include intangible security only when certainty exists in respect of the legal enforceability and value of the relevant security.

(c) *Principles that may influence the value of tangible and intangible security*

Principles that may influence the value of tangible and intangible security to be reported on the form BA 210 include the matters specified below:

(i) *Prudence*

Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated.

(ii) *Reliability*

In order to be useful, information must also be **reliable**. Information has the quality of reliability when it is free of material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent. Information may be relevant but so unreliable in nature or representation that its recognition potentially may be misleading.

(iii) *Completeness*

In order to be reliable, the information reported in the risk returns shall be **complete** within the bounds of materiality and cost. An omission may cause information to be false or misleading and thus unreliable and deficient in terms of its relevance.

(d) When the value of any relevant security or collateral exceeds the relevant exposure value to which it relates, the reporting bank shall limit the said valuation amount to be reported on the form BA 210 to the said exposure amount.

(5) For purposes of this regulation 24 and the completion of items 43 to 63 of the form BA 210, a bank that adopted the standardised approach for the measurement of the bank's exposure to credit risk shall classify all relevant exposures in accordance with the relevant requirements specified below:

(a) Any credit exposure, including on-balance-sheet items, off-balance-sheet items or credit exposure arising from repo-style transactions or derivative instruments-

(i) shall in the case of exposures other than retail exposures be classified per person and not per account;

(ii) may in the case of retail exposures be classified per account.

- (b) Classification of any relevant credit exposure amount shall take into account-
- (i) the current financial condition and payment capacity of the relevant obligor;
 - (ii) the payment record of the relevant obligor;
 - (iii) the current value of any relevant collateral; and
 - (iv) other factors that affect the prospects for the collection of principal and interest amounts due.

(c) *Classification categories*

(i) **Special mention**

Included in the category of special mention are credit exposures in respect of which the obligor is experiencing difficulties that may threaten the bank's position. Ultimate loss is not expected, but may occur if adverse conditions persist.

As a minimum, credit exposure that exhibits one or more of the characteristics specified below shall be included in the category of special mention:

- (A) Early signs of liquidity problems exist, such as delay in the servicing of loans.
- (B) Loan information is inadequate or incomplete. For example, the reporting bank is unable to obtain from the relevant obligor annual audited financial statements or such statements are not available.
- (C) The condition of and control over collateral is questionable.
- (D) The bank fails to obtain proper documentation from or co-operation by the obligor or finds it difficult to maintain contact with the obligor.
- (E) There is a slowdown in business activity or an adverse trend in the obligor's operations that signals a potential weakness in the financial strength of the obligor, but which may not necessarily have reached a point that threatens the ongoing servicing of the relevant exposure.
- (F) Volatility in economic or market conditions is likely to negatively affect the obligor in the future.
- (G) Poor performance persists in the industry in which the obligor conducts business.

- (H) The relevant obligor, or, in the case of a corporate borrower, a key executive, is in ill health.
- (I) The obligor is subject to litigation that is likely to have a significant impact on the financial position of the said obligor.
- (J) The obligor is experiencing difficulty with the servicing of other loans from either the reporting bank or other banks.

Provided that any relevant credit exposure amount that is overdue for more than 60 days shall as a minimum be classified as special mention.

(ii) Substandard

Any credit exposure that reflects an underlying, well defined weakness that may lead to probable loss if not corrected should be included in the category of substandard. The risk that such credit exposure may become an impaired asset is probable, and the bank is relying, to a large extent, on available security.

The primary sources of repayment are insufficient to service the remaining contractual principal and interest amounts, and the bank has to rely on secondary sources for repayment, which secondary sources may include collateral, the sale of a fixed asset, refinancing and further capital.

Credit exposures classified as substandard are likely to exhibit one or more of the characteristics specified below:

- (A) Repayment of the principal amount and/or accrued interest has been overdue for more than 90 days, and the net realisable value of security is insufficient to cover the payment of the principal amount and accrued interest.
- (B) The principal amount and accrued interest are fully secured, but the repayment of the principal amount and/or accrued interest has been overdue for more than 12 months.
- (C) Significant deficiencies exist that threaten the obligor's business, cash flow or payment capability, which deficiencies may include the items specified below:
 - (i) The credit history or performance record of the obligor is not satisfactory.
 - (ii) Labour disputes or unresolved management problems may affect the business, production or profitability of the obligor.

- (iii) Increased borrowings are not in proportion with the obligor's business.
- (iv) The obligor is experiencing difficulty with the repayment of obligations to other creditors.
- (v) Construction delays or other unplanned adverse events resulting in cost overruns are likely to require loan restructuring.
- (vi) The obligor is unemployed.

(iii) Doubtful

Credit exposure in the category of doubtful is considered to be impaired, but is not yet considered final loss due to some pending factors, such as a merger, new financing or capital injection, which factors may strengthen the quality of the relevant exposure.

Doubtful credit exposures exhibit not only all the weaknesses inherent in credit exposures classified as substandard but also have the added characteristics that the said exposures are not duly secured. The said weaknesses make collection in full, on the basis of currently existing facts, conditions and values, highly questionable and improbable. The possibility of loss is high, but due to certain important and reasonably specific factors that may strengthen the asset, the classification of the asset as an estimated loss is deferred until a more exact status may be determined.

Credit exposures classified as doubtful exhibit one or more of the characteristics specified below:

- (A) Repayment of the principal amount and/or accrued interest has been overdue for more than 180 days, and the net realisable value of security is insufficient to cover the payment of the principal amount and accrued interest.
- (B) In the case of unsecured or partially secured credit exposures that have been overdue for less than 180 days, other serious deficiencies, such as default, death, bankruptcy or liquidation of the obligor, are detected or the obligor's whereabouts are unknown.

Credit exposures that have been overdue for 180 days and longer are usually classified as doubtful unless the said exposures are well secured, legal action has actually commenced, and timely realisation of the collateral or enforcement of guarantees obtained will result in the repayment of the relevant principal and interest amounts due, including payments in respect of amounts overdue.

When an account is classified as doubtful, unless particular circumstances pertaining to the relevant obligor dictate otherwise, interest shall no longer be accrued or accrued interest shall be impaired.

(iv) Loss

Credit exposures classified as loss are considered to be uncollectable once collection efforts, such as realisation of collateral and institution of legal proceedings, have been unsuccessful. The relevant exposures are considered of such little value that the said exposures should no longer be included in the net assets of the bank.

This classification does not necessarily mean that the asset has no recovery value. Instead, it is neither practical nor desirable to defer writing off this basically worthless asset even though partial recovery may be effected in the future, that is, banks should not retain exposures on their books while attempting long-term recoveries.

Non-performing credit exposures that have been overdue for at least one year shall be classified as loss unless such exposures are well secured, legal action has actually commenced, and timely realisation of the collateral or enforcement of guarantees obtained will result in the repayment of the relevant principal and interest amounts due, including payment in respect of amounts overdue.

When an account is classified as loss, unless particular circumstances pertaining to the relevant obligor dictate otherwise, interest shall no longer be accrued or accrued interest shall be impaired.

(6) *Matters specifically related to credit concentration risk*

The purpose of items 64 to 77 and 285 to 300 of the form BA 210, amongst other things, is-

- (a) to obtain the approval of the Registrar, as contemplated in section 73(2)(a) of the Act, of any transaction in the form of an investment with or a loan, advance or other direct or indirect credit facility granted to a private-sector non-bank person, as defined in regulation 67, which transaction results in the reporting bank, controlling company, branch or branch of a bank being exposed to that person to an amount exceeding an amount representing the percentage of capital and reserve funds specified in subregulation (7)(b);
- (b) to inform the Registrar, as contemplated in section 73(2)(b) of the Act, of any transaction in the form of an investment with or a loan, advance or other direct or indirect credit facility granted to a person other than a person referred to in paragraph (a), which transaction results in the reporting bank, controlling company, branch or branch of a bank being exposed to that person to an amount exceeding an amount representing the percentage of capital and reserve funds specified in subregulation (7)(b).

(7) *Prescribed percentages relating to specified concentration risk*

The prescribed percentage of a specified amount contemplated in-

- (a) section 73(1)(a) of the Act shall in the case of a bank, controlling company, branch or branch of a bank be 10 per cent of the respective amounts specified in subparagraphs (i) to (iv) below:
- (i) In the case of a bank, joint venture or foreign subsidiary of a bank reporting on a solo basis, the specified amount shall be 10 per cent of the qualifying common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds of the said reporting bank, joint venture or foreign subsidiary of the bank, as the case may be, as reported in item 88 of the form BA 700, as at the month-end preceding the reporting date to which the form BA 210 relates;
 - (ii) In the case of a bank or controlling company reporting on a consolidated basis, the specified amount shall be 10 per cent of the consolidated net amount of qualifying capital and reserve funds of the said reporting bank or controlling company, as the case may be, as reported in item 88 of the form BA 700, at the latest date for which the relevant statement was submitted;
 - (iii) In the case of a foreign institution that conducts the business of a bank through a branch in the Republic, the specified amount shall be 10 per cent of the qualifying capital and reserve funds of the said foreign institution that conducts the business of a bank through its branch in the Republic;
 - (iv) In the case of a branch of a bank, the specified amount shall be 10 per cent of the qualifying common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds of the parent bank in the Republic, as reported in item 88 of the form BA 700, as at the month-end preceding the reporting date to which the form BA 210 relates.
- (b) section 73(2) of the Act shall in the case of a bank, controlling company, branch or branch of a bank be 25 per cent of the respective amounts specified in subparagraphs (i) to (iv) below:
- (i) In the case of a bank, joint venture or foreign subsidiary of a bank reporting on a solo basis, the specified amount shall be 25 per cent of the qualifying common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds of the said reporting bank, joint venture or foreign subsidiary of the bank, as the case may be, as reported in item 88 of the form BA 700, as at the month-end preceding the reporting date to which the form BA 210 relates;

- (ii) In the case of a bank or controlling company reporting on a consolidated basis, the specified amount shall be 25 per cent of the consolidated net amount of qualifying capital and reserve funds of the said reporting bank or controlling company, as the case may be, as reported in item 88 of the form BA 700, at the latest date for which the relevant statement was submitted;
- (iii) In the case of a foreign institution that conducts the business of a bank through a branch in the Republic, the specified amount shall be 25 per cent of the qualifying capital and reserve funds of the said foreign institution that conducts the business of a bank through its branch in the Republic;
- (iv) In the case of a branch of a bank, the specified amount shall be 25 per cent of the qualifying common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds of the parent bank in the Republic, as reported in item 88 of the form BA 700, as at the month-end preceding the reporting date to which the form BA 210 relates.

(8) *Matters specifically related to exempt exposure*

For purposes of this regulation 24, exempt exposure includes any exposure specified in writing by the Registrar, which exempt exposure shall be reported under "other exposures", in item 72 or 295, as the case may be, of the form BA 210.

(9) *Matters specifically related to connected lending or lending to a related person*

- (a) In order to prevent any potential abuse arising from connected lending or lending to a related person, every bank and every controlling company shall have in place robust processes, procedures, systems and board-approved policies to ensure, among other things, that-
 - (i) the bank or controlling company, as the case may be, lends money to a related person on an arm's-length basis, that is, no exposure to a connected or related person of a bank or controlling company shall be extended on terms or under conditions more favourable than a corresponding loan or exposure to a person not related or connected to the said reporting bank or controlling company, which terms or conditions may relate to matters such as credit assessment, tenor, interest rate or a requirement for collateral, unless the related person is an employee of the bank or controlling company and the relevant loan or exposure that is granted on beneficial terms forms part of that person's remuneration package;
 - (ii) no person benefiting from a particular loan or exposure is responsible for the preparation of the loan assessment or credit decision, or the subsequent management of the exposure or any relevant matter related to that exposure;

- (iii) the monitoring and the reporting of individual and aggregate exposure(s) to related persons are subject to an independent credit review process;
 - (iv) any transaction with a related person and the write-off of any related-party exposure exceeding one per cent of the bank or controlling company's qualifying common equity tier 1 capital and reserve funds, as reported in item 64 of the form BA 700, or otherwise posing special risks, is subject to the prior written approval of the board of directors of that bank or controlling company;
 - (v) any extension of credit to a related person is duly documented and monitored;
 - (vi) the bank or controlling company takes appropriate steps to control or mitigate any risk arising from an exposure granted to a related person.
- (b) When the Registrar is of the opinion that the bank or controlling company's policies, processes, procedures and systems related to connected lending or lending to a related person are inadequate, the Registrar may require the relevant bank or controlling company-
- (i) to deduct from its capital and reserve funds such amount relating to the said transactions or exposure as may be specified in writing by the Registrar; and/or
 - (ii) to obtain adequate collateral in respect of the relevant exposure.
- (c) For the purposes of this regulation 24 "related person" means a related person as defined in regulation 36(6).

(10) Instructions relating to the completion of the quarterly form BA 210 are furnished with reference to the headings and item descriptions of certain columns and line item numbers appearing on form BA 210, as follows:

Columns relating to credit risk mitigation: standardised approach, items 1 to 21

Column number	Description
1	<p>Original credit and counterparty exposure</p> <p>In respect of the specified asset class this column shall reflect the relevant aggregate credit exposure amount relating to the reporting bank's-</p> <ul style="list-style-type: none"> (a) on-balance-sheet exposure, gross of any valuation adjustment or credit impairment; (b) off-balance-sheet exposure, including amounts in respect of irrevocable commitments, prior to the application of any relevant credit-conversion factor; (c) exposure in respect of derivative instruments, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19); (d) exposure in respect of any repurchase or resale agreement.
2	<p>Net exposure after netting</p> <p>In respect of the specified asset class this column shall reflect the reporting bank's net credit exposure amount after the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulations 23(7)(a), 23(9)(a), 23(17) or 23(18) has been taken into consideration.</p>
3	<p>Unfunded credit protection: guarantees</p> <p>In respect of the specified asset class this column shall reflect the aggregate amount in respect of guarantees obtained as credit protection, which amount shall include any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained.</p>
4	<p>Unfunded credit protection: credit derivative instruments</p> <p>In respect of the specified asset class this column shall reflect the aggregate amount in respect of credit derivative instruments obtained as credit protection, which amount shall include any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained.</p>

Column number	Description
5	Funded credit protection: Collateral - simple method In respect of the specified asset class this column shall reflect the aggregate amount in respect of collateral obtained by the reporting bank, which collateral complies with the relevant requirements specified in regulation 23(9)(b).
7 and 8	Redistribution of net exposure after netting: inflows In respect of the specified asset class this column shall reflect the aggregate net amount, that is, the relevant amount after the effect of netting has been taken into consideration, in respect of protected credit exposure that are redistributed to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios, or any transfer of exposure from the IRB approach to the standardised approach.
9 and 10	Redistribution of net exposure after netting: outflows In respect of the specified asset class this column shall reflect the aggregate net amount, that is, the relevant amount after the effect of netting has been taken into consideration, in respect of protected credit exposure that are deducted or redistributed from the original obligor's exposure class to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios, or any transfer of exposure to the IRB approach.
12	Volatility adjustment in respect of exposure In respect of the specified asset class this column shall reflect the relevant volatility adjustment that relates to the reporting bank's relevant credit exposure amount.
13	Adjusted value of financial collateral obtained In respect of the specified asset class this column shall reflect the relevant adjusted value of financial collateral obtained by the reporting bank in respect of its exposure to credit risk.
14 to 17	Memorandum items in respect of financial collateral In respect of the specified asset class these columns shall reflect the relevant required adjustments specified on the form BA 210 relating to financial collateral obtained by the reporting bank in respect of its exposure to credit risk.

Column number	Description
18	<p>Credit exposure value post credit risk mitigation</p> <p>In respect of the specified asset class this column shall reflect the reporting bank's relevant credit exposure amount, which credit exposure amount-</p> <ul style="list-style-type: none"> (a) shall not incorporate the effect of any relevant credit conversion factor relating to an off-balance-sheet item; (b) shall incorporate the effect of any relevant adjustment relating to financial collateral or other eligible credit risk mitigation instrument obtained by the reporting bank in respect of its said exposure to credit risk.

Columns relating to restructured credit exposure: standardised approach, items 22 to 42

Column number	Description
1	<p>Actual number of restructured credit exposure transactions in this reporting quarter</p> <p>In respect of the specified asset class this column shall reflect the aggregate number of transactions in respect of which the reporting bank allowed a restructuring of the relevant credit exposure.</p>
2	<p>Exposure value of restructured credit exposure transactions in this reporting quarter</p> <p>In respect of the specified asset class this column shall reflect the aggregate drawn amount relating to transactions in respect of which the reporting bank allowed a restructuring of the relevant credit exposure.</p>
3	<p>Restructured credit exposure as percentage of asset class exposure and total credit exposure</p> <p>In respect of the specified asset class this column shall reflect the relevant percentage calculated by dividing the aggregate drawn amount relating to restructured credit exposure by the aggregate gross drawn amount in respect of the relevant asset class.</p>

Items relating to credit risk classification and impairment: standardised approach

Item number	Description
43 to 63	<p>Credit risk classification and impairment</p> <p>Based on, amongst other things, the relevant requirements specified in subregulation (5), a bank shall complete items 43 to 63 of the form BA 210.</p>

Columns relating to credit risk classification and impairment: standardised approach, items 43 to 63

Column number	Description
1, 4, 7 and 10	Gross exposure Based on the specified asset classes, these columns shall reflect the aggregate amount in respect of the reporting bank's gross credit exposure.
2, 5, 8 and 11	Collateral Based on the specified asset classes and the relevant requirements specified in subregulation (4), these columns shall reflect the aggregate amount in respect of collateral obtained by the reporting bank in respect of the bank's gross credit exposure.
3, 6, 9 and 12	Specific credit impairment Based on the specified asset classes, these columns shall reflect the aggregate amount in respect of specific credit impairment raised by the reporting bank in accordance with financial reporting standards issued from time to time.

Items relating to credit concentration risk– large exposure to a person: standardised approach

Item number	Description
64 to 77	Credit concentration risk – large exposure to a person Based on, amongst other things, the relevant requirements specified in subregulations (6) to (8), a bank that adopted the standardised approach for the measurement of the bank's exposure to credit risk shall complete items 64 to 77 of the form BA 210.

Columns relating to credit concentration risk– large exposure to a person: standardised approach, items 64 to 77

Column number	Description
2	On-balance-sheet exposure This column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure to a person, other than any credit exposure arising from a derivative instrument or repo-style transaction, which amount shall be gross of any valuation adjustment or credit impairment.
3	Off-balance-sheet exposure This column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure to a person, other than any credit exposure arising from a derivative instrument or repo-style transaction, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.

Column number	Description
4	<p>Repurchase and resale agreements</p> <p>This column shall reflect the aggregate amount in respect of any credit exposure to a person arising from a repurchase or resale agreement concluded with the said person by the reporting bank.</p>
5	<p>Derivative instruments</p> <p>This column shall reflect the aggregate amount in respect of any credit exposure to a person arising from a transaction concluded in respect of a derivative instrument, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19).</p>
9	<p>Total credit exposure as a percentage of qualifying capital and reserve funds</p> <p>This column shall reflect the relevant required percentage by dividing the total credit exposure amount to a person reported in column 6 by the aggregate amount of qualifying tier 1 and tier 2 capital and reserve funds of the reporting bank as reported in item 88 of the form BA 700.</p>
10	<p>Additional capital requirement</p> <p>This column shall reflect the aggregate additional required amount of capital and reserve funds in respect of concentration risk arising from an exposure to a private-sector non-bank person, calculated in accordance with the relevant requirements specified in subregulations (6) to (8) read with the relevant provisions of section 73 of the Act, and such further requirements as may be specified in writing by the Registrar.</p>
11	<p>Eligible financial collateral</p> <p>This column shall reflect the current market value of eligible financial collateral obtained by the reporting bank after the effect of any relevant haircut has been taken into consideration.</p>
12 and 13	<p>Unfunded credit protection</p> <p>These columns shall reflect the relevant required aggregate amounts in respect of unfunded eligible credit protection obtained by the reporting bank in respect of the bank's relevant exposure to credit risk.</p>
14	<p>Redistribution of reduced exposure: outflows</p> <p>This column shall reflect the aggregate amount after the effect of netting has been taken into consideration in respect of protected credit exposure that are deducted or redistributed from the original obligor's exposure class to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios.</p>

Column number	Description
15	Redistribution of reduced exposure: inflows This column shall reflect the aggregate amount after the effect of netting has been taken into consideration in respect of protected credit exposure that are redistributed to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios.
16	Specific credit impairment This column shall reflect the aggregate amount relating to any specific credit impairment raised by the reporting bank in accordance with the relevant requirements of financial reporting standards issued from time to time.
17	Net exposure after credit risk mitigation In respect of any relevant credit exposure to a person, this column shall reflect the reporting bank's net exposure amount after the effect of any relevant netting, credit risk mitigation or redistribution of exposure due to risk mitigation, and the application of any relevant credit-conversion factor, have been taken into consideration.
18	Risk weighted value of net exposure In respect of any relevant credit exposure to a person, this column shall reflect the reporting bank's relevant risk weighted net exposure amount, that is, the sum of the various types of exposure to the said person, multiplied by the respective risk weights.

Items relating to credit concentration risk– sectoral distribution: standardised approach

Item number	Description
78 to 90	Sectoral distribution Based on, amongst others, the relevant specified sectors or industries, read with the relevant directives contained in the Standard Industrial Classification of all Economic Activities issued by Statistics South Africa from time to time, a bank that adopted the standardised approach for the measurement of its exposure to credit risk shall complete the information specified in items 78 to 90.

**Columns relating to credit concentration risk- sectoral distribution:
standardised approach, items 78 to 94**

Column number	Description
1	On-balance-sheet exposure Based on the specified sectors, this column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, which amount shall be gross of any valuation adjustment or credit impairment.
2	Off-balance-sheet exposure Based on the specified sectors, this column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.
3	Repurchase and resale agreements Based on the specified sectors, this column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase or resale agreement concluded by the reporting bank.
4	Derivative instruments Based on the specified sectors, this column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments.
8	Risk weighted value of net exposure Based on the specified sectors, this column shall reflect the reporting bank's relevant risk weighted net exposure amount, that is, the sum of the various types of credit exposure relating to counterparties assigned to the said sector, multiplied by the respective risk weights.
10 and 11	Credit impairment Based on the specified sectors, these columns shall respectively reflect the aggregate amount relating to specific credit impairment and portfolio credit impairment raised by the reporting bank in accordance with the relevant requirements of financial reporting standards issued from time to time.

Items relating to credit concentration risk- Herfindahl-Hirschman Index (HHI): standardised approach

Item number	Description
95 to 111	<p>Wholesale HHI</p> <p>In order to identify potential concentration in the reporting bank's relevant credit portfolios, the bank shall, based on its risk weighted assets calculated in accordance with the relevant requirements specified in these Regulations, calculate its relevant Herfindahl-Hirschman Index, which index-</p> <ul style="list-style-type: none"> (a) is defined as $HHI = S$ (proportion of total value)² (b) shall in the case of wholesale exposure be based on specified industries; (c) may range in value, with the most diversified portfolio reflecting a calculated value close to zero and the most concentrated portfolio reflecting a calculated value close or equal to 100 per cent.
112 to 117	<p>Retail HHI</p> <p>In order to identify potential concentration in the reporting bank's relevant credit portfolios, the bank shall, based on its risk weighted assets calculated in accordance with the relevant requirements specified in these Regulations, calculate its relevant Herfindahl-Hirschman Index-</p> <ul style="list-style-type: none"> (a) which risk weighted assets shall be divided by the relevant number of clients in order to determine the relevant average amount of risk weighted assets per client; (b) which index is defined as $HHI = S$ (proportion of total value)² (c) which index shall in the case of retail exposure be based on specified products; (d) which index may range in value, with the most diversified portfolio reflecting a calculated value close to zero and the most concentrated portfolio reflecting a calculated value close or equal to 100 per cent.

***Columns relating to credit concentration risk – geographical distribution:
standardised approach, items 118 to 174***

Column number	Description
1	On-balance-sheet exposure Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, which amount shall be gross of any valuation adjustment or credit impairment.
2	Off-balance-sheet exposure Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.
3	Repurchase and resale agreements Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase or resale agreement concluded by the reporting bank.
4	Derivative instruments Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments.
8	Risk weighted value of net exposure Based on the specified geographical areas, this column shall reflect the reporting bank's relevant risk weighted net exposure amount, that is, the sum of the various types of credit exposure relating to the relevant counterparties assigned to the specified geographical area, after the effects of netting, other forms of eligible credit risk mitigation, redistribution effects or relevant credit conversion factors have been taken into consideration, multiplied by the respective risk weights.
10 and 11	Credit impairment Based on the specified geographical areas, these columns shall respectively reflect the aggregate amount relating to specific credit impairment and portfolio credit impairment raised by the reporting bank in accordance with the relevant requirements of financial reporting standards issued from time to time.

Columns relating to credit concentration risk – 20 largest exposures in debt and with equity exposure: standardised approach, items 194 to 214

Column number	Description
1	<p>Debt exposure</p> <p>This column shall reflect the aggregate amount relating to the reporting bank's twenty largest debt exposures, which debt exposures also have equity exposure of which the relevant amounts are included in columns 2 to 4, calculated as the sum of any-</p> <ul style="list-style-type: none"> (a) on-balance-sheet exposure, gross of any valuation adjustment or credit impairment; (b) off-balance-sheet exposure, including any relevant amount relating to an irrevocable commitment, prior to the application of any relevant credit-conversion factor; (c) exposure in respect of any repurchase or resale agreement; and (d) exposure in respect of any relevant derivative instrument, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19); <p>which debt exposure amount reported in column 1 shall exclude the book value of any investment held by the reporting bank deemed to be an equity exposure in accordance with the relevant requirements specified in regulation 31.</p>
2	<p>Equity exposure</p> <p>This column shall reflect the relevant aggregate equity exposure amount relating to the reporting bank's twenty largest debt exposures which also have equity exposure, gross of any valuation adjustment or credit impairment, including any publicly or privately held instrument deemed to be an equity exposure in accordance with the relevant requirements specified in regulation 31.</p>

Columns relating to watch list: standardised approach, items 215 to 228

Column number	Description
2	<p>Exposure amount</p> <p>This column shall reflect the aggregate gross credit exposure amount in respect of the relevant obligor included in the reporting bank's watch list.</p>
3	<p>Risk weighted value of net exposure</p> <p>This column shall reflect the reporting bank's relevant risk weighted net credit exposure amount, that is, the sum of the various types of credit exposure relating to the relevant counterparties on the bank's watch list, after the effects of netting, other forms of eligible credit risk mitigation, redistribution effects or relevant credit conversion factors have been taken into consideration, multiplied by the respective risk weights.</p>

Columns relating to credit risk mitigation: IRB approach, items 229 to 256

Column number	Description
1	<p>Original credit and counterparty exposure</p> <p>In respect of the specified asset class this column shall reflect the relevant aggregate credit exposure amount relating to the reporting bank's-</p> <ul style="list-style-type: none"> (a) on-balance-sheet exposure, gross of any valuation adjustment or credit impairment; (b) off-balance-sheet exposure, including amounts in respect of irrevocable commitments, prior to the application of any relevant credit-conversion factor; (c) exposure in respect of derivative instruments, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19); (d) exposure in respect of any repurchase or resale agreement.
2	<p>Net exposure after netting agreements</p> <p>In respect of the specified asset class this column shall reflect the reporting bank's net credit exposure amount after the risk reducing effect of any netting agreement that complies with the relevant requirements specified in regulations 23(12)(a), 23(14)(a) or 23(17) to 23(19) has been taken into consideration.</p>

Columns relating to credit risk mitigation: IRB approach, items 229 to 256

Column number	Description
3	<p>Unfunded credit protection: guarantees</p> <p>In respect of the specified asset class this column shall reflect the relevant aggregate nominal amount in respect of guarantees obtained as credit protection, other than guarantees obtained that are subject to the provisions of regulations 23(12)(g) or 23(14)(f) relating to double default-</p> <ul style="list-style-type: none"> (a) which amount shall exclude any relevant adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained; (b) which protection has not already been incorporated into an estimate of LGD; (c) the relevant value of which protection shall in no case exceed the value of the relevant exposure to which it relates.
4	<p>Unfunded credit protection: credit derivative instruments</p> <p>In respect of the specified asset class this column shall reflect the relevant aggregate nominal amount in respect of credit-derivative instruments obtained as credit protection, other than credit-derivative instruments obtained that are subject to the provisions of regulation 23(12)(g) or 23(14)(f) relating to double default-</p> <ul style="list-style-type: none"> (a) which amount shall exclude any relevant adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained; (b) which protection has not already been incorporated into an estimate of LGD; (c) the relevant value of which protection shall in no case exceed the value of the relevant exposure to which it relates.

Columns relating to credit risk mitigation: IRB approach, items 229 to 256

Column number	Description
5 and 6	Redistribution of net exposure after netting: inflows In respect of the specified asset class these columns shall include the aggregate net amount, that is, the relevant amount after the effect of netting has been taken into consideration, in respect of protected credit exposure that are deducted or redistributed from the relevant obligor's exposure class to the asset class relating to the relevant protection provider, including any redistribution in similar asset classes or sub-portfolios, or any transfer of exposure from the standardised approach to the IRB approach.
7 and 8	Redistribution of net exposure after netting: outflows In respect of the specified asset class these columns shall include the aggregate net amount, that is, the relevant amount after the effect of netting has been taken into consideration, in respect of protected credit exposure that are redistributed to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios, or any transfer of exposure from the IRB approach to the standardised approach.
10	Credit risk mitigation subject to double default: guarantees In respect of the specified asset class this column shall reflect the aggregate nominal amount in respect of guarantees qualifying as credit protection in accordance with the relevant requirements relating to double default specified in regulation 23(12)(g) or 23(14)(f), which amount shall exclude any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained and which protection has not already been incorporated into an estimate of LGD.
11	Credit risk mitigation subject to double default: credit derivative instruments In respect of the specified asset class this column shall reflect the aggregate nominal amount in respect of credit derivative instruments qualifying as credit protection in accordance with the relevant requirements relating to double default specified in regulation 23(12)(g) or 23(14)(f), which amount shall exclude any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained and which protection has not already been incorporated into an estimate of LGD.

Column number	Description
13	<p>Unfunded credit protection: guarantees</p> <p>In respect of the specified asset class this column shall reflect the aggregate nominal amount in respect of guarantees obtained as credit protection, other than guarantees obtained that are subject to the provisions of regulation 23(12)(g) or 23(14)(f) relating to double default, which amount shall exclude any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained and which protection has been incorporated into an estimate of LGD.</p>
14	<p>Unfunded credit protection: credit derivative instruments</p> <p>In respect of the specified asset class this column shall reflect the aggregate nominal amount in respect of credit-derivative instruments obtained as credit protection, other than credit-derivative instruments obtained that are subject to the provisions of regulation 23(12)(g) or 23(14)(f) relating to double default, which amount shall exclude any adjustment in respect of any mismatch between the relevant credit exposure and the protection obtained and which protection has been incorporated into an estimate of LGD.</p>
15 to 17	<p>Eligible financial collateral</p> <p>In respect of the specified asset class, these columns shall reflect the current market value of eligible financial collateral obtained by the reporting bank as protection against an exposure to credit risk, including any eligible financial collateral subject to adjustment due to a maturity or currency mismatch, the respective aggregate amounts of which shall separately be reported as specified on the form BA 210.</p>
18 to 20	<p>Other eligible collateral</p> <p>In respect of the specified asset class, these columns shall reflect the current market value of any eligible collateral, other than eligible financial collateral, obtained by the reporting bank as protection against an exposure to credit risk, including any relevant residential real estate or commercial real estate, the respective aggregate amounts of which shall separately be reported as specified on the form BA 210.</p>

Columns relating to restructured credit exposure: IRB approach, items 257 to 284

Column number	Description
1	Actual number of restructured credit exposure transactions in this reporting quarter In respect of the specified asset class this column shall reflect the aggregate number of transactions in respect of which the reporting bank allowed a restructuring of the relevant credit exposure.
2	Exposure value of restructured credit exposure transactions in this reporting quarter In respect of the specified asset class this column shall reflect the aggregate drawn amount relating to transactions in respect of which the reporting bank allowed a restructuring of the relevant credit exposure.
3	Restructured credit exposure as percentage of asset class exposure and total credit exposure In respect of the specified asset class this column shall reflect the relevant percentage calculated by dividing the aggregate drawn amount relating to restructured credit exposure by the aggregate gross drawn amount in respect of the relevant asset class.

Items relating to credit concentration risk– large exposure to a person: IRB approach

Item number	Description
285 to 300	Credit concentration risk – large exposure to a person Based on, amongst other things, the relevant requirements specified in subregulations (6) to (8), a bank that adopted the IRB approach for the measurement of the bank's exposure to credit risk shall complete items 285 to 300 of the form BA 210.

Columns relating to credit concentration risk – large exposure to a person: IRB approach, items 285 to 300

Column number	Description
2	<p>On-balance-sheet exposure</p> <p>This column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure to a person, other than any credit exposure arising from a derivative instrument or repo-style transaction, which amount shall be gross of any valuation adjustment or credit impairment.</p>
3	<p>Off-balance-sheet exposure</p> <p>This column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure to a person, other than any credit exposure arising from a derivative instrument or repo-style transaction, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.</p>
4	<p>Repurchase and resale agreements</p> <p>This column shall reflect the aggregate amount in respect of any credit exposure to a person arising from a repurchase or resale agreement concluded with the said person by the reporting bank.</p>
5	<p>Derivative instruments</p> <p>This column shall reflect the aggregate amount in respect of any credit exposure to a person arising from a transaction concluded in respect of a derivative instrument, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19).</p>
9	<p>Total credit exposure as a percentage of qualifying capital and reserve funds</p> <p>This column shall reflect the relevant required percentage by dividing the relevant total credit exposure amount reported in column 6 by the relevant amount of qualifying tier 1 and tier 2 capital and reserve funds of the reporting bank as reported in item 88 of the form BA 700.</p>
14	<p>Eligible financial collateral</p> <p>This column shall reflect the current market value of eligible financial collateral obtained by the reporting bank after the effect of any relevant haircut has been taken into consideration.</p>

Column number	Description
15	Other eligible collateral In respect of the relevant person this column shall reflect the current market value of any eligible collateral, other than eligible financial collateral, obtained by the reporting bank as protection against a large exposure to credit risk, including any relevant residential real estate or commercial real estate.
16 and 17	Unfunded credit protection These columns shall reflect the aggregate amount in respect of unfunded eligible credit protection obtained by the reporting bank in respect of the bank's relevant large exposure to credit risk.
18	Redistribution of reduced exposure: outflows This column shall reflect the aggregate amount after the effect of netting has been taken into consideration in respect of protected credit exposure that are deducted or redistributed from the original obligor's exposure class to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios.
19	Redistribution of reduced exposure: inflows This column shall reflect the aggregate amount after the effect of netting has been taken into consideration in respect of protected credit exposure that are redistributed to the asset class relating to the protection provider, including any redistribution in similar asset classes or sub-portfolios.
20	Specific credit impairment This column shall reflect the aggregate amount relating to any specific credit impairment raised by the reporting bank in accordance with the relevant requirements of financial reporting standards issued from time to time.

Items relating to credit concentration risk – sectoral distribution: IRB approach

Item number	Description
301 to 314	Sectoral distribution Based on, amongst others, the relevant specified sectors or industries, read with the relevant directives contained in the Standard Industrial Classification of all Economic Activities issued by Statistics South Africa from time to time, a bank that adopted the IRB approach for the measurement of its exposure to credit risk shall complete the relevant information specified in items 301 to 314.

Columns relating to credit concentration risk – sectoral distribution: IRB approach, items 301 to 317

Column number	Description
1	<p>On-balance-sheet exposure</p> <p>Based on the specified sectors, this column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, which amount shall be gross of any valuation adjustment or credit impairment.</p>
2	<p>Off-balance-sheet exposure</p> <p>Based on the specified sectors, this column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.</p>
3	<p>Repurchase and resale agreements</p> <p>Based on the specified sectors, this column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase or resale agreement concluded by the reporting bank.</p>
4	<p>Derivative instruments</p> <p>Based on the specified sectors, this column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments.</p>
11	<p>Risk weighted value</p> <p>Based on the specified sectors, this column shall reflect the reporting bank's relevant aggregate risk weighted credit exposure amount calculated in accordance with the relevant IRB approach adopted by the bank for the measurement of its exposure to credit risk.</p>
13	<p>Specific credit impairment</p> <p>This column shall reflect the aggregate amount relating to any specific credit impairment raised by the reporting bank in accordance with the relevant requirements of financial reporting standards issued from time to time.</p>

***Items relating to credit concentration risk- Herfindahl-Hirschman Index (HHI):
IRB approach***

Item number	Description
318 to 334	<p>Wholesale HHI</p> <p>In order to identify potential concentration in the reporting bank's relevant credit portfolios, the bank shall, based on its risk weighted assets calculated in accordance with the relevant requirements specified in these Regulations, calculate its relevant Herfindahl-Hirschman Index, which index-</p> <ul style="list-style-type: none"> (a) is defined as $HHI = S$ (proportion of total value)² (b) shall in the case of wholesale exposure be based on specified industries; (c) may range in value, with the most diversified portfolio reflecting a calculated value close to zero and the most concentrated portfolio reflecting a calculated value close or equal to 100 per cent.
335 to 340	<p>Retail HHI</p> <p>In order to identify potential concentration in the reporting bank's relevant credit portfolios, the bank shall, based on its risk weighted assets calculated in accordance with the relevant requirements specified in these Regulations, calculate its relevant Herfindahl-Hirschman Index-</p> <ul style="list-style-type: none"> (a) which risk weighted assets shall be divided by the relevant number of clients in order to determine the relevant average amount of risk weighted assets per client; (b) which index is defined as $HHI = S$ (proportion of total value)² (c) which index shall in the case of retail exposure be based on specified products; (d) which index may range in value, with the most diversified portfolio reflecting a calculated value close to zero and the most concentrated portfolio reflecting a calculated value close or equal to 100 per cent.

Columns relating to credit concentration risk – geographical distribution: IRB approach, items 341 to 397

Column number	Description
1	On-balance-sheet exposure Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of the reporting bank's on-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, which amount shall be gross of any valuation adjustment or credit impairment.
2	Off-balance-sheet exposure Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of the reporting bank's off-balance-sheet credit exposure, other than any credit exposure arising from a repurchase or resale agreement, or derivative instrument, including any relevant exposure amount in respect of an irrevocable commitment, prior to the application of any relevant credit conversion factor.
3	Repurchase and resale agreements Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of any credit exposure arising from a repurchase or resale agreement concluded by the reporting bank.
4	Derivative instruments Based on the specified geographical areas, this column shall reflect the aggregate amount in respect of any credit exposure arising from derivative instruments.
11	Risk weighted value Based on the specified geographical areas, this column shall reflect the reporting bank's relevant aggregate risk weighted credit exposure amount calculated in accordance with the relevant IRB approach adopted by the bank for the measurement of its exposure to credit risk.
14 and 15	Credit impairment Based on the specified geographical areas, these columns shall respectively reflect the relevant aggregate amount relating to specific credit impairment and portfolio credit impairment raised by the reporting bank in accordance with the relevant requirements of Financial Reporting Standards issued from time to time.

Columns relating to credit concentration risk – 20 largest exposures in debt and with equity exposure: IRB approach, items 417 to 437

Column number	Description
1	<p>Debt exposure</p> <p>This column shall reflect the aggregate amount relating to the reporting bank's twenty largest debt exposures, which debt exposures also have equity exposure of which the relevant amounts are included in columns 2 to 4, calculated as the sum of any-</p> <ul style="list-style-type: none"> (a) on-balance-sheet exposure, gross of any valuation adjustment or credit impairment; (b) off-balance-sheet exposure, including any relevant amount relating to an irrevocable commitment, prior to the application of any relevant credit-conversion factor; (c) exposure in respect of any repurchase or resale agreement; and (d) exposure in respect of any relevant derivative instrument, calculated in accordance with the relevant requirements specified in regulations 23(15) to 23(19); <p>which debt exposure amount reported in column 1 shall exclude the book value of any investment held by the reporting bank deemed to be an equity exposure in accordance with the relevant requirements specified in regulation 31.</p>
2 to 4	<p>Equity exposure</p> <p>These columns shall reflect the relevant required aggregate equity exposure amounts relating to the reporting bank's twenty largest debt exposures which also have equity exposure, gross of any valuation adjustment or credit impairment, including any publicly or privately held instrument deemed to be an equity exposure in accordance with the relevant requirements specified in regulation 31.</p>
6	<p>PD (%)</p> <p>In respect of the reporting bank's relevant exposure to an obligor in respect of whom the relevant debt exposure amount is included in column 1, this column shall reflect the reporting bank's relevant internally calculated PD ratio, which PD ratio shall be expressed as a percentage and shall be rounded to two decimal places.</p>

Column number	Description
7	<p>Expected loss</p> <p>In respect of the reporting bank's relevant exposure to an obligor in respect of whom the relevant debt exposure amount is included in column 1, this column shall reflect the reporting bank's relevant expected loss amount, calculated in accordance with the relevant requirements specified in these Regulations.</p>

Columns relating to watch list: IRB approach, items 438 to 452

Column number	Description
5	<p>Risk weighted value of EAD</p> <p>In respect of the total credit exposure amount relating to the relevant obligor included in the reporting bank's watch list, this column shall reflect the relevant risk weighted amount, calculated in accordance with the relevant requirements specified in these Regulations.</p>
6	<p>Specific credit impairment</p> <p>In respect of the relevant obligor included in the reporting bank's watch list, this column shall reflect the relevant aggregate amount relating to any specific credit impairment raised by the reporting bank in accordance with the relevant requirements of Financial Reporting Standards issued from time to time.</p>

CREDIT RISK
 (Confidential and not available for inspection by the public)
 Name of bank:
 Six months ended: (yyyy/mm/dd)

BA 220
Six monthly

Country:

(All amounts to be rounded off to the nearest R'000)									
Standardised and IRB approaches: Assets bought-in	Line no.	Date bought in/acquired ¹	Number of shares held	Type of shares held	Percentage interest held	Historic cost to date	Market value at date of return	Net asset value of company	Credit facilities provided by bank to each company
									Granted
Companies acquired and immovable assets bought-in									Utilised
Name of company or description of asset									Attributable share of profit/(loss)
Companies¹ - total (Specify)	1		2	3	4	5	6	7	8
1									
2									
3									
4									
5									
6									
Immovable assets² - total (Specify)	7		8						
7									
8									
9									
10									
11									
Total (of items 1 and 6)	12								

1. Report separate details in respect of all investments in companies bought-in, including the date on which the approval for the acquisition of the company was obtained from the Registrar, and the nature of business.
2. Report separate details of any immovable asset bought-in, in respect of which the historic cost to date exceeds 1 per cent of the reporting bank's qualifying capital and reserve funds reported in item 88 of the form BA 700 as at the month-end preceding the month to which this form BA 220 relates, and which asset has not been disposed of at the end of the reporting period.

25. Credit risk - Directives and interpretations for completion of the six-monthly return concerning credit risk (Form BA 220)

- (1) The content of the return is confidential and not available for inspection by the public.
- (2) The purpose of the return is to obtain selected information in respect of assets bought-in.
- (3) The relevant calculation of the reporting bank's required amount of capital and reserve funds in respect of assets bought-in is contained in the form BA 200. Instead of providing any information related to the required amount of capital and reserve funds in respect of assets bought-in, the form BA 220 merely provides selected credit risk related information in respect of such assets bought-in.
- (4) Instructions relating to the completion of the six-monthly form BA 220 are furnished with reference to specific headings and item descriptions appearing on the form BA 220, as follows:

Item number

1 to 5 Companies acquired

These items shall reflect the relevant aggregate amounts relating to companies acquired or bought-in during the preceding five years in order to protect an investment, loan or advance and which companies have not been disposed of at the end of the reporting period. After a lapse of five years any relevant company bought-in shall no longer be regarded as an asset bought-in to protect an advance or investment, and shall be reclassified to the appropriate asset class.

6 to 11 Immovable assets

These items shall reflect the relevant aggregate amounts relating to immovable assets acquired or bought-in during the preceding five years in order to protect a loan or advance and which immovable assets have not been disposed of at the end of the reporting period. After a lapse of five years any relevant asset bought-in shall no longer be regarded as an asset bought-in to protect a loan or advance, and shall be reclassified to the appropriate asset class.

LIQUIDITY RISK

	<u>Page no.</u>
1. Form BA 300 - Liquidity risk	478
2. Regulation 26 - Directives, definitions and interpretations for completion of monthly return concerning liquidity risk (Form BA 300)	489

Liquidity Risk Confidential and not available for inspection by the public) Name of bank..... Month ended..... (xxx)

BA 300
Monthly

(All amounts to be rounded off to the nearest R'000)										
		Line no.	Total	Next day	8 days to 1 month	More than 1 month to 2 months	3 months to 6 months	More than 6 months to 1 year	More than 1 year to 2 years	More than 2 years to 3 years
Business as usual (BaU) balance sheet mismatch¹		1	2	3	4	5	6	7	8	9
BaU maturity of assets (items 19 to 21)	18									
Advances	19									
Trading, hedging and other investment instruments	20									
Other assets	21									
BaU maturity of liabilities (items 23 to 26)	22									
Stable deposits	23									
Volatile deposits	24									
Trading and hedging instruments	25									
Other liabilities	26									
Onbalance sheet BaU mismatch (item 18 less item 22)	27									
Cumulative on-balance sheet BaU mismatch	28									
Off-balance-sheet exposure to liquidity risk of which:	29									
Liquidity facilities provided to off-balance sheet vehicles	30									
Undrawn commitments (items 32 to 34)	31									
Unutilised portion of irrevocable lending facilities	32									
Unutilised portion of irrevocable letters of credit	33									
Indemnities and guarantees	34									

¹ Please separately submit assumptions made and any other relevant information.

	Line no.	(All amounts to be rounded off to the nearest R'000)				
		Total ²	Next day	2 to 7 days	8 days to 1 month	More than 1 month to 2 months
Bank-specific stress mismatch¹	35					
Stressed maturity of assets (items 36 to 38)	36					
Advances	37					
Trading, hedging and other investment instruments	38					
Stressed maturity of liabilities (items 40 to 43)	39					
Stable deposits	40					
Volatile deposits	41					
Trading and hedging instruments	42					
Other liabilities	43					
On-balance sheet stress mismatch (item 35 less item 39)	44					
Cumulative on-balance sheet stress mismatch	45					
Stressed outflows arising from off-balance-sheet exposure³ of which:	46					
Liquidity facilities provided to off-balance sheet vehicles	47					
Undrawn commitments (items 49 to 51)	48					
Unutilised portion of irrevocable lending facilities	49					
Unutilised portion of irrevocable letters of credit	50					
Indemnities and guarantees	51					
Cumulative stressed outflows	52					

- ¹ Please separately submit assumptions made and any other relevant information.
² Means the total for the specified item, and not the mathematical total of the specified columns.
³ Report as absolute amounts.

CONTINUES ON PAGE 482—PART 4