EUROPEAN COMMISSION

Brussels, 20.7.2011
COM(2011) 452 final

2011/0202 (COD)

PROPOSAL FOR A

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on prudential requirements for credit institutions and investment firms

PART II

(Text with EEA relevance)

{SEC(2011) 949 final}
{SEC(2011) 950 final}

SECTION 3
EXPECTED LOSS AMOUNTS

Article 154
Treatment by exposure type

1. The calculation of expected loss amounts shall be based on the same input figures of PD, LGD and the exposure value for each exposure as being used for the calculation of risk-weighted exposure amounts in accordance with Article 146. For defaulted exposures, where institutions use own estimates of LGDs, expected loss ('EL') shall be the institution's best estimate of EL ('EL_{BE},') for the defaulted exposure, in accordance with Article 177(1)(h).

2. The expected loss amounts for securitised exposures shall be calculated in accordance with Chapter 5.

3. The expected loss amount for exposures belonging to the 'other non credit obligations assets' exposure class referred to in point (g) of Article 142(2) shall be zero.

4. The expected loss amounts for exposures in the form of a collective investment undertaking referred to in Article 147 shall be calculated in accordance with the methods set out in this Article.

5. The expected loss amounts for exposures to corporates, institutions, central governments and central banks and retail exposures shall be calculated according to the following formulae:

$$Expected\ loss\ (EL) = PD \cdot LGD$$

$$Expected\ \ loss\ amount = EL \cdot exposure\ value$$

For defaulted exposures (PD =1) where institutions use own estimates of LGDs, EL shall be EL_{BE}, the institution's best estimate of expected loss for the defaulted exposure according to Article 177(1)(h).

For exposures subject to the treatment set out in Article 148(3), EL shall be 0.

6. The EL values for specialised lending exposures where institutions use the methods set out in Article 148(6) for assigning risk weights shall be assigned according to Table 2.

Table 2					
Remaining Maturity	Category 1	Category 2	Category 3	Category 4	Category 5
Less than 2,5 years	0 %	0,4 %	2,8 %	8 %	50 %
Equal to or more than 2,5 years	0,4 %	0,8 %	2,8 %	8 %	50 %

7. The expected loss amounts for equity exposures where the risk weighted exposure amounts are calculated according to simple risk weight approach shall be calculated according to the following formula:

$$Expected\ loss\ amount = EL \cdot exposure\ value$$

The EL values shall be the following:

Expected loss (EL) = 0,8 % for private equity exposures in sufficiently diversified portfolios

Expected loss (EL) = 0,8 % for exchange traded equity exposures

Expected loss (EL) = 2,4 % for all other equity exposures.

8. The expected loss amounts for equity exposures where the risk weighted exposure amounts are calculated according to the PD/LGD approach shall be calculated according to the following formulae:

$$Expected\ loss\left(EL\right) = PD \cdot LGD$$

$$Expected\ loss\ amount = EL \cdot exposure\ value$$

9. The expected loss amounts for equity exposures where the risk weighted exposure amounts are calculated according to the internal models approach shall be 0 %.

10. The expected loss amounts for dilution risk of purchased receivables shall be calculated according to the following formula:

$$Expected\ loss\left(EL\right) = PD \cdot LGD$$

$$Expected\ loss\ amount = EL \cdot exposure\ value$$

11. For exposures arising from OTC derivatives, an institution calculating the risk-weighted exposure amounts in accordance with this Chapter may reduce the expected loss amounts for a given netting set by the amount of the credit valuation adjustment for that netting set, which has already been recognised by the institution as an incurred write-down. The resulting expected loss amount shall not be lower than zero.

Article 155
Treatment of expected loss amounts

Institutions shall subtract the expected loss amounts calculated in accordance with Article 154(2)(3) and (7) from the general and specific credit risk adjustments related to these exposures. Discounts on balance sheet exposures purchased when in default according to Article 162(1) shall be treated in the same manner as specific credit risk adjustments Specific credit risk adjustments on exposures in default shall not be used to cover expected loss on other exposures. Expected loss amounts for securitised exposures and general and specific credit risk adjustments related to these exposures shall not be included in this calculation.

SECTION 4
PD, LGD AND MATURITY

SUB-SECTION 1
EXPOSURES TO CORPORATES, INSTITUTIONS AND CENTRAL GOVERNMENTS AND CENTRAL BANKS

Article 156
Probability of default (PD)

1. The PD of an exposure to a corporate or an institution shall be at least 0,03 %.

2. For purchased corporate receivables in respect of which an institution is not able to estimate PDs or institution's PD estimates do not meet the requirements set out in Section 6, the PDs for these exposures shall be determined according to the following methods:

   (a) for senior claims on purchased corporate receivables PD shall be the institutions estimate of EL divided by LGD for these receivables;

   (b) for subordinated claims on purchased corporate receivables PD shall be the institution's estimate of EL;

   (c) an institution that has received the permission of the competent authority to use own LGD estimates for corporate exposures pursuant to Article 138 and it can decompose its EL estimates for purchased corporate receivables into PDs and LGDs in a manner that the competent authority considers to be reliable, may use PD estimate that results from this decomposition.

3. The PD of obligors in default shall be 100 %.

4. Institutions may take into account unfunded credit protection in the PD in accordance with the provisions of Chapter 4. For dilution risk, in addition to the protection providers referred to in Article 197(1)(g) the seller of the purchased receivables is eligible if the following conditions are met:

   (a) the corporate entity has a credit assessment by a recognised ECAI which has been determined by the EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to corporates under Chapter 2;

   (b) the corporate entity, in the case of institutions calculating risk-weighted exposure amounts and expected loss amounts under the IRB Approach, does not have a credit assessment by a recognised ECAI and are internally rated as having a PD equivalent to that associated with the credit assessments of ECAIs determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to corporate under Chapter 2.

5. Institutions using own LGD estimates may recognise unfunded credit protection by adjusting PDs subject to Article 157(3).

6. For dilution risk of purchased corporate receivables, PD shall be set equal to the EL estimate of the institution for dilution risk. An institution that has received permission from the competent authority pursuant to Article 138 to use own LGD estimates for corporate exposures that can decompose its EL estimates for dilution risk of purchased corporate receivables into PDs and LGDs in a manner that the competent authority considers to be reliable, may use the PD estimate that results from this decomposition. Institutions may recognise unfunded credit protection in the PD in accordance with the provisions of Chapter 4. For dilution risk, in addition to the protection providers referred to in Article 197(1)(g), the seller of the purchased receivables is eligible provided that the conditions set out in paragraph 4 are met.

7. By derogation to Article 197(1)(g), the corporate entities that meet the conditions set out in paragraph 4 are eligible

An institution that has received the permission of the competent authority pursuant to Article 138 to use own LGD estimates for dilution risk of purchased corporate receivables, may recognise unfunded credit protection by adjusting PDs subject to Article 157(3).

Article 157
Loss Given Default (LGD)

1. Institutions shall use the following LGD values in accordance with Article 146(8):

   (a) senior exposures without eligible collateral: 45 %;

   (b) subordinated exposures without eligible collateral: 75 %;

   (c) institutions may recognise funded and unfunded credit protection in the LGD in accordance with Chapter 4;

   (d) covered bonds as defined in Article 124 may be assigned an LGD value of 11,25 %;

   (e) for senior purchased corporate receivables exposures where institution's PD estimates do not meet the requirements set out in Section 6: 45 %;

   (f) for subordinated purchased corporate receivables exposures where an institution is not able to estimate PDs or the institution's PD estimates do not meet the requirements set out in Section 6: 100 %;

   (g) For dilution risk of purchased corporate receivables: 75 %.

2. For dilution and default risk if an institution has received permission from the competent authority to use own LGD estimates for corporate exposures pursuant to Article 138 and it can decompose its EL estimates for purchased corporate receivables into PDs and LGDs in a manner the competent authority considers to be reliable, the LGD estimate for purchased corporate receivables may be used.

3. If an institution has received the permission of the competent authority to use own LGD estimates for exposures to corporates, institutions, central governments and central banks pursuant to Article 138, unfunded credit protection may be recognised by adjusting PD or LGD subject to requirements as specified in Section 6 and permission of the competent authorities. An institution shall not assign guaranteed exposures an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the guarantor.

4. For the purposes of the undertakings referred to in Article 148(3), the LGD of a comparable direct exposure to the protection provider shall either be the LGD associated with an unhedged facility to the guarantor or the unhedged facility of the obligor, depending upon whether in the event both the guarantor and obligor default during the life of the hedged transaction, available evidence and the structure of the guarantee indicate that the amount recovered would depend on the financial condition of the guarantor or obligor, respectively.

Article 158
Maturity

1. Institutions that have not received permission to use own LGDs and conversion factor for exposures to corporates, institutions or central governments and central banks shall assign to exposures arising from repurchase transactions or securities or commodities lending or borrowing transactions a maturity value (M) of 0.5 years and to all other exposures an M of 2,5 years.

   Alternatively, as part of the permission referred to in Article 138, the competent authorities shall decide on whether the institution shall use maturity (M) for each exposure as set out under paragraph 2.

2. Institutions that have received the permission of the competent authority to use own LGDs and own conversion factors for exposures to corporates, institutions or central governments and central banks pursuant to Article 138 shall calculate M for each of these exposures as set out in (a) to (e) and subject to paragraphs 3 to 5. In all cases, M shall be no greater than 5 years:

   (a) for an instrument subject to a cash flow schedule, M shall be calculated according to the following formula:

$$M = \max\left\{1, \min\left\{\frac{\sum_t t \cdot CF_t}{\sum_t CF_t}, 5\right\}\right\}$$

   where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the obligor in period t;

   (b) for derivatives subject to a master netting agreement, M shall be the weighted average remaining maturity of the exposure, where M shall be at least 1 year, and the notional amount of each exposure shall be used for weighting the maturity;

(c) for exposures arising from fully or nearly-fully collateralised derivative instruments (listed in Annex II) transactions and fully or nearly-fully collateralised margin lending transactions which are subject to a master netting agreement, M shall be the weighted average remaining maturity of the transactions where M shall be at least 10 days;

(d) for repurchase transactions or securities or commodities lending or borrowing transactions which are subject to a master netting agreement, M shall be the weighted average remaining maturity of the transactions where M shall be at least 5 days. The notional amount of each transaction shall be used for weighting the maturity;

(e) an institution that has received the permission of the competent authority pursuant to Article 138 to use own PD estimates for purchased corporate receivables, for drawn amounts M shall equal the purchased receivables exposure weighted average maturity, where M shall be at least 90 days. This same value of M shall also be used for undrawn amounts under a committed purchase facility provided the facility contains effective covenants, early amortisation triggers, or other features that protect the purchasing institution against a significant deterioration in the quality of the future receivables it is required to purchase over the facility's term. Absent such effective protections, M for undrawn amounts shall be calculated as the sum of the longest-dated potential receivable under the purchase agreement and the remaining maturity of the purchase facility, where M shall be at least 90 days;

(f) for any other instrument than those mentioned in this point or when an institution is not in a position to calculate M as set out in (a), M shall be the maximum remaining time (in years) that the obligor is permitted to take to fully discharge its contractual obligations, where M shall be at least 1 year;

(g) for institutions using the Internal Model Method set out in Section 6 of Chapter 6 to calculate the exposure values, M shall be calculated for exposures to which they apply this method and for which the maturity of the longest-dated contract contained in the netting set is greater than one year according to the following formula:

$$M = \min\left\{\frac{\sum_k EffectiveEE_{t_k} \cdot \Delta t_k \cdot df_{t_k} \cdot s_{t_k} + \sum_k EE_{t_k} \cdot \Delta t_k \cdot df_{t_k} \cdot \left(1 - s_{t_k}\right)}{\sum_k EffectiveEE_{t_k} \cdot \Delta t_k \cdot df_{t_k} \cdot s_{t_k}}, 5\right\}$$

where:

s_{t_k} = a dummy variable whose value at future period t_k is equal to 0 if $t_k > 1$ year and to 1 if $t_k \leq 1$

EE_{t_k} = the expected exposure at the future period t_k;

$EffectiveEE_{t_k}$ = the effective expected exposure at the future period t_k ;

df_{t_k} = the risk-free discount factor for future time period t_k;

$$\Delta t_k = t_k - t_{k-1}$$

(h) an institution that uses an internal model to calculate a one-sided credit valuation adjustment (CVA) may use, subject to the permission of the competent authorities, the effective credit duration estimated by the internal model as M.

Subject to paragraph 2 , for netting sets in which all contracts have an original maturity of less than one year the formula in point (a) shall apply;

(i) for institutions using the Internal Model Method set out in Section 6 of Chapter 6, to calculate the exposure values and having an internal model permission for specific risk associated with traded debt positions in accordance with Part Three, Title IV, Chapter 5, M shall be set to 1 in the formula laid out in Article 148(1), provided that an institution can demonstrate to the competent authorities that its internal model for Specific risk associated with traded debt positions applied in Article 373 contains effects of rating migrations;

(j) for the purposes of Article 148(3), M shall be the effective maturity of the credit protection but at least 1 year.

3. Where the documentation requires daily re-margining and daily revaluation and includes provisions that allow for the prompt liquidation or set off of collateral in the event of default or failure to remargin, M shall be at least one-day for:

(a) fully or nearly-fully collateralised derivative instruments listed in Annex II;

(b) fully or nearly-fully collateralised margin lending transactions;

(c) repurchase transactions, securities or commodities lending or borrowing transactions.

In addition, for qualifying short-term exposures which are not part of the institution's ongoing financing of the obligor, M shall be at least one-day. Qualifying short term exposures shall include the following:

(a) exposures to institutions arising from settlement of foreign exchange obligations;

(b) self-liquidating short-term trade financing transactions, import and export letters of credit and similar transactions with a residual maturity of up to one year;

(c) exposures arising from settlement of securities purchases and sales within the usual delivery period or two business days;

(d) exposures arising from cash settlements by wire transfer and settlements of electronic payment transactions and prepaid cost, including overdrafts arising from failed transactions that do not exceed a short, fixed agreed number of business days.

4. For exposures to corporates situated in the Union and having consolidated sales and consolidated assets of less than EUR 500 million, institutions may choose to consistently set M as set out in paragraph 1 instead of applying paragraph 2. Institutions may replace EUR 500

million total assets with EUR 1000 million total assets for corporates which primarily own and let non-speculative residential property.

5. Maturity mismatches shall be treated as specified in Chapter 4.

SUB-SECTION 2
RETAIL EXPOSURES

Article 159
Probability of default

1. PD of an exposure shall be at least 0.03 %.

2. The PD of obligors or, where an obligation approach is used, of exposures in default shall be 100 %.

3. For dilution risk of purchased receivables PD shall be set equal to EL estimates for dilution risk. If an institution can decompose its EL estimates for dilution risk of purchased receivables into PDs and LGDs in a manner the competent authorities consider to be reliable, the PD estimate may be used.

4. Unfunded credit protection may be taken into account by adjusting PDs subject to Article 160(2). For dilution risk, in addition to the protection providers referred to in Article 197(1)(g) , the seller of the purchased receivables is eligible if the conditions set out in Article 156(4) are met.

Article160
Loss Given Default (LGD)

1. Institutions shall provide own estimates of LGDs subject to requirements as specified in Section 6 and permission of the competent authorities granted in accordance with Article 138. For dilution risk of purchased receivables, an LGD value of 75 % shall be used. If an institution can decompose its EL estimates for dilution risk of purchased receivables into PDs and LGDs in a reliable manner, the institution may use its own LGD estimate.

2. Unfunded credit protection may be recognised as eligible by adjusting PD or LGD estimates subject to requirements as specified in Article 179(1)(2) and (3) and permission of the competent authorities either in support of an individual exposure or a pool of exposures. An institution shall not assign guaranteed exposures an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the guarantor.

3. For the purposes of Article 149(2), the LGD of a comparable direct exposure to the protection provider shall either be the LGD associated with an unhedged facility to the guarantor or the unhedged facility of the obligor, depending upon whether, in the event both the guarantor and obligor default during the life of the hedged transaction, available evidence and the structure of the guarantee indicate that the amount recovered would depend on the financial condition of the guarantor or obligor, respectively.

4. The exposure weighted average LGD for all retail exposures secured by residential property and not benefiting from guarantees from central governments shall not be lower than 10%

The exposure weighted average LGD for all retail exposures secured by commercial immovable property and not benefiting from guarantees from central governments shall not be lower than 15%

SUB-SECTION 3
EQUITY EXPOSURES SUBJECT TO PD/LGD METHOD

Article 161
Equity exposures subject to the PD/LGD method

1. PDs shall be determined according to the methods for corporate exposures.

The following minimum PDs shall apply:

(a) 0.09 % for exchange traded equity exposures where the investment is part of a long-term customer relationship;

(b) 0.09 % for non-exchange traded equity exposures where the returns on the investment are based on regular and periodic cash flows not derived from capital gains;

(c) 0.40 % for exchange traded equity exposures including other short positions as set out in Article 150(2);

(d) 1.25 % for all other equity exposures including other short positions as set out in Article 150(2).

2. Private equity exposures in sufficiently diversified portfolios may be assigned an LGD of 65 %. All other such exposures shall be assigned an LGD of 90 %.

3. M assigned to all exposures shall be 5 years.

SECTION 5
EXPOSURE VALUE

Article162
Exposures to corporates, institutions, central governments and central banks and retail exposures

1. Unless noted otherwise, the exposure value of on-balance sheet exposures shall be the accounting value measured without taking into account any credit risk adjustments made.

This rule also applies to assets purchased at a price different than the amount owed.

For purchased assets, the difference between the amount owed and the accounting value remaining after specific credit risk adjustments have been applied that has been recorded on the balance-sheet of the institutions when purchasing the asset is denoted discount if the amount owed is larger, and premium if it is smaller.

2. Where institutions use Master netting agreements in relation to repurchase transactions or securities or commodities lending or borrowing transactions, the exposure value shall be calculated in accordance with Chapter 4.

3. For on-balance sheet netting of loans and deposits, institutions shall apply for the calculation of the exposure value the methods set out in Chapter 4.

4. The exposure value for leases shall be the discounted minimum lease payments. Minimum lease payments shall comprise the payments over the lease term that the lessee is or can be required to make and any bargain option (i.e. option the exercise of which is reasonably certain). If a party other than the lessee may be required to make a payment related to the residual value of a leased asset and this payment obligation fulfils the set of conditions in Article 197 regarding the eligibility of protection providers as well as the requirements for recognising other types of guarantees provided in Article 208, the payment obligation may be taken into account as unfunded credit protection in accordance with Chapter 4.

5. In the case of any item listed in Annex II, the exposure value shall be determined by the methods set out in Chapter 6 and shall not take into account any credit risk adjustment made.

6. The exposure value for the calculation of risk weighted exposure amounts of purchased receivables shall be the value according to paragraph 1 minus the own funds requirements for dilution risk prior to credit risk mitigation.

7. Where an exposure takes the form of securities or commodities sold, posted or lent under repurchase transactions or securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions, the exposure value shall be the value of the securities or commodities determined in accordance with Article 94. Where the Financial Collateral Comprehensive Method as set out under Article 218 is used, the exposure value shall be increased by the volatility adjustment appropriate to such securities or commodities, as set out therein. The exposure value of repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions may be determined either in accordance with Chapter 6 or Article 215(2).

8. The exposure value for the following items shall be calculated as the committed but undrawn amount multiplied by a conversion factor. Institutions shall use the following conversion factors in accordance with Article 146(8):

   (a) for credit lines that are unconditionally cancellable at any time by the institution without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's credit worthiness, a conversion factor of 0 % shall apply. To apply a conversion factor of 0 %, institutions shall actively monitor the financial condition of the obligor, and their internal control systems shall enable them to immediately detect deterioration in the credit quality of the obligor. Undrawn credit lines may be considered

as unconditionally cancellable if the terms permit the institution to cancel them to the full extent allowable under consumer protection and related legislation;

(b) for short-term letters of credit arising from the movement of goods, a conversion factor of 20 % shall apply for both the issuing and confirming institutions;

(c) for undrawn purchase commitments for revolving purchased receivables that are able to be unconditionally cancelled or that effectively provide for automatic cancellation at any time by the institution without prior notice, a conversion factor of 0 % shall apply. To apply a conversion factor of 0 %, institutions shall actively monitor the financial condition of the obligor, and their internal control systems shall enable them to immediately detect a deterioration in the credit quality of the obligor;

(d) for other credit lines, note issuance facilities (NIFs), and revolving underwriting facilities (RUFs), a conversion factor of 75 % shall apply;

(e) institutions which meet the requirements for the use of own estimates of conversion factors as specified in Section 6 may use their own estimates of conversion factors across different product types as mentioned in points (a) to (d), subject to permission of the competent authorities.

9. Where a commitment refers to the extension of another commitment, the lower of the two conversion factors associated with the individual commitment shall be used.

10. For all off-balance sheet items other than those mentioned in points 1 to 8, the exposure value shall be the following percentage of its value:

(a) 100 % if it is a full risk item;

(b) 50 % if it is a medium-risk item;

(c) 20 % if it is a medium/low-risk item;

(d) 0 % if it is a low-risk item.

For the purposes of this paragraph the off-balance sheet items shall be assigned to risk categories as indicated in Annex I.

Article 163
Equity exposures

1. The exposure value of equity exposures shall be the accounting value remaining after specific credit risk adjustment have been applied.

2. The exposure value of off-balance sheet equity exposures shall be its nominal value after reducing its nominal value by specific credit risk adjustments for this exposure.

Article 164
Other non credit-obligation assets

The exposure value of other non credit-obligation assets shall be the accounting value remaining after specific credit risk adjustment have been applied

SECTION 6
REQUIREMENTS FOR THE IRB APPROACH

SUB-SECTION 1
RATING SYSTEMS

Article 165
General principles

1. Where an institution uses multiple rating systems, the rationale for assigning an obligor or a transaction to a rating system shall be documented and applied in a manner that appropriately reflects the level of risk.

2. Assignment criteria and processes shall be periodically reviewed to determine whether they remain appropriate for the current portfolio and external conditions.

3. Where an institution uses direct estimates of risk parameters these may be seen as the outputs of grades on a continuous rating scale.

Article 166
Structure of rating systems

1. The structure of rating systems for exposures to corporates, institutions and central governments and central banks shall comply with the following requirements:

   (a) a rating system shall take into account obligor and transaction risk characteristics;

   (b) a rating system shall have an obligor rating scale which reflects exclusively quantification of the risk of obligor default. The obligor rating scale shall have a minimum of 7 grades for non-defaulted obligors and one for defaulted obligors;

   (c) an institution shall document the relationship between obligor grades in terms of the level of default risk each grade implies and the criteria used to distinguish that level of default risk;

   (d) institutions with portfolios concentrated in a particular market segment and range of default risk shall have enough obligor grades within that range to avoid undue concentrations of obligors in a particular grade. Significant concentrations within a single grade shall be supported by convincing empirical evidence that the obligor grade

covers a reasonably narrow PD band and that the default risk posed by all obligors in the grade falls within that band;

(e) to be permitted to be used for own funds requirement calculation of own estimates of LGDs, a rating system shall incorporate a distinct facility rating scale which exclusively reflects LGD related transaction characteristics. The facility grade definition shall include both a description of how exposures are assigned to the grade and of the criteria used to distinguish the level of risk across grades;

(f) significant concentrations within a single facility grade shall be supported by convincing empirical evidence that the facility grade covers a reasonably narrow LGD band, respectively, and that the risk posed by all exposures in the grade falls within that band.

2. Institutions using the methods set out in IRB6(5) for assigning risk weights for specialised lending exposures are exempt from the requirement to have an obligor rating scale which reflects exclusively quantification of the risk of obligor default for these exposures. These institutions shall have for these exposures at least 4 grades for non-defaulted obligors and at least one grade for defaulted obligors.

3. The structure of rating systems for retail exposures shall comply with the following requirements:

(a) rating systems shall reflect both obligor and transaction risk, and shall capture all relevant obligor and transaction characteristics;

(b) the level of risk differentiation shall ensure that the number of exposures in a given grade or pool is sufficient to allow for meaningful quantification and validation of the loss characteristics at the grade or pool level. The distribution of exposures and obligors across grades or pools shall be such as to avoid excessive concentrations;

(c) the process of assigning exposures to grades or pools shall provide for a meaningful differentiation of risk, for a grouping of sufficiently homogenous exposures, and shall allows for accurate and consistent estimation of loss characteristics at grade or pool level. For purchased receivables the grouping shall reflect the seller's underwriting practices and the heterogeneity of its customers;

4. Institutions shall consider the following risk drivers when assigning exposures to grades or pools.

(a) obligor risk characteristics;

(b) transaction risk characteristics, including product or collateral types or both. Institutions shall explicitly address cases where several exposures benefit from the same collateral;

(c) delinquency, except where institution demonstrates to the satisfaction of its competent authority that delinquency is not a material driver of risk for the exposure.

Article 167
Assignment to grades or pools

1. An institution shall have specific definitions, processes and criteria for assigning exposures to grades or pools within a rating system that comply with the following requirements:

   (a) the grade or pool definitions and criteria shall be sufficiently detailed to allow those charged with assigning ratings to consistently assign obligors or facilities posing similar risk to the same grade or pool. This consistency shall exist across lines of business, departments and geographic locations;

   (b) the documentation of the rating process shall allow third parties to understand the assignments of exposures to grades or pools, to replicate grade and pool assignments and to evaluate the appropriateness of the assignments to a grade or a pool;

   (c) the criteria shall also be consistent with the institution's internal lending standards and its policies for handling troubled obligors and facilities.

2. An institution shall take all relevant information into account in assigning obligors and facilities to grades or pools. Information shall be current and shall enable the institution to forecast the future performance of the exposure. The less information an institution has, the more conservative shall be its assignments of exposures to obligor and facility grades or pools. If an institution uses an external rating as a primary factor determining an internal rating assignment, the institution shall ensure that it considers other relevant information.

Article 168
Assignment of exposures

1. For exposures to corporates, institutions and central governments and central banks, assignment of exposures shall be carried out in accordance with the following criteria:

   (a) each obligor shall be assigned to an obligor grade as part of the credit approval process;

   (b) for those institutions that have received the permission of the competent authority to use own estimates of LGDs and conversion factors pursuant to Article 138,each exposure shall also be assigned to a facility grade as part of the credit approval process;

   (c) institutions using the methods set out in Article 148(5) for assigning risk weights for specialised lending exposures shall assign each of these exposures to a grade in accordance with Article 166(2);

   (d) each separate legal entity to which the institution is exposed shall be separately rated. An institution shall have appropriate policies regarding the treatment of individual obligor clients and groups of connected clients;

   (e) separate exposures to the same obligor shall be assigned to the same obligor grade, irrespective of any differences in the nature of each specific transaction. However, where separate exposures are allowed to result in multiple grades for the same obligor, the following shall apply:

(i) country transfer risk, this being dependent on whether the exposures are denominated in local or foreign currency;

(ii) where the treatment of associated guarantees to an exposure may be reflected in an adjusted assignment to an obligor grade;

(iii) where consumer protection, bank secrecy or other legislation prohibit the exchange of client data.

2. For retail exposures, each exposure shall be assigned to a grade or a pool as part of the credit approval process.

3. For grade and pool assignments institutions shall document the situations in which human judgement may override the inputs or outputs of the assignment process and the personnel responsible for approving these overrides. Institutions shall document these overrides and note down the personnel responsible. Institutions shall analyse the performance of the exposures whose assignments have been overridden. This analysis shall include an assessment of the performance of exposures whose rating has been overridden by a particular person, accounting for all the responsible personnel.

Article 169
Integrity of assignment process

1. For exposures to corporates, institutions and central governments and central banks, the assignment process shall meet the following requirements of integrity:

(a) Assignments and periodic reviews of assignments shall be completed or approved by an independent party that does not directly benefit from decisions to extend the credit;

(b) Institutions shall update assignments at least annually. High risk obligors and problem exposures shall be subject to more frequent review. Institutions shall undertake a new assignment if material information on the obligor or exposure becomes available;

(c) An institution shall have an effective process to obtain and update relevant information on obligor characteristics that affect PDs, and on transaction characteristics that affect LGDs or conversion factors.

2. For retail exposures, an institution shall at least annually update obligor and facility assignments or review the loss characteristics and delinquency status of each identified risk pool, whichever applicable. An institution shall also at least annually review in a representative sample the status of individual exposures within each pool as a means of ensuring that exposures continue to be assigned to the correct pool.

3. EBA shall develop regulatory technical standards to specify the conditions according to which institutions shall ensure the integrity of the assignment process and the regular and independent assessment of risks.

EBA shall submit the draft regulatory technical standards referred to in the first sub-paragraph to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 170
Use of models

If an institution uses statistical models and other mechanical methods to assign exposures to obligors or facilities grades or pools, the following requirements shall be met:

(a) the model shall have good predictive power and capital requirements shall not be distorted as a result of its use. The input variables shall form a reasonable and effective basis for the resulting predictions. The model shall not have material biases;

(b) the institution shall have in place a process for vetting data inputs into the model, which includes an assessment of the accuracy, completeness and appropriateness of the data;

(c) the data used to build the model shall be representative of the population of the institution's actual obligors or exposures;

(d) the institution shall have a regular cycle of model validation that includes monitoring of model performance and stability; review of model specification; and testing of model outputs against outcomes;

(e) the institution shall complement the statistical model by human judgement and human oversight to review model-based assignments and to ensure that the models are used appropriately. Review procedures shall aim at finding and limiting errors associated with model weaknesses. Human judgements shall take into account all relevant information not considered by the model. The institution shall document how human judgement and model results are to be combined.

Article 171
Documentation of rating systems

1. The institutions shall document the design and operational details of its rating systems. The documentation shall provide evidence of compliance with the requirements in this Section, and address topics including portfolio differentiation, rating criteria, responsibilities of parties that rate obligors and exposures, frequency of assignment reviews, and management oversight of the rating process.

2. The institution shall document the rationale for and analysis supporting its choice of rating criteria. An institution shall document all major changes in the risk rating process, and such documentation shall support identification of changes made to the risk rating process subsequent to the last review by the competent authorities. The organisation of rating assignment including the rating assignment process and the internal control structure shall also be documented.

3. The institutions shall document the specific definitions of default and loss used internally and ensure consistency with the definitions set out in this Regulation.

4. Where the institution employs statistical models in the rating process, the institution shall document their methodologies. This material shall:

   (a) provide a detailed outline of the theory, assumptions and mathematical and empirical basis of the assignment of estimates to grades, individual obligors, exposures, or pools, and the data source(s) used to estimate the model;

   (b) establish a rigorous statistical process including out-of-time and out-of-sample performance tests for validating the model;

   (c) indicate any circumstances under which the model does not work effectively.

5. An institution shall demonstrate to the satisfaction of the competent authority that the requirements of this Article are met, where an institution has obtained a rating system, or model used within a rating system, from a third-party vendor and that vendor refuses or restricts the access of the institution to information pertaining to the methodology of that rating system or model, or underlying data used to develop that methodology or model, on the basis that such information is proprietary.

Article 172
Data maintenance

1. Institutions shall collect and store data on aspects of their internal ratings as required under Part Eight.

2. For exposures to corporates, institutions and central governments and central banks, institutions shall collect and store:

   (a) complete rating histories on obligors and recognised guarantors;

   (b) the dates the ratings were assigned;

   (c) the key data and methodology used to derive the rating;

   (d) the person responsible for the rating assignment;

   (e) the identity of obligors and exposures that defaulted;

   (f) the date and circumstances of such defaults;

   (g) data on the PDs and realised default rates associated with rating grades and ratings migration.

3. Institutions not using own estimates of LGDs and conversion factors shall collect and store data on comparisons of realised LGDs to the values as set out in Article 157(1) and realised conversion factors to the values as set out in Article 162(8).

4. Institutions using own estimates of LGDs and conversion factors shall collect and store:

(a) complete histories of data on the facility ratings and LGD and conversion factor estimates associated with each rating scale;

(b) the dates the ratings were assigned and the estimates were done;

(c) the key data and methodology used to derive the facility ratings and LGD and conversion factor estimates;

(d) the person who assigned the facility rating and the person who provided LGD and conversion factor estimates;

(e) data on the estimated and realised LGDs and conversion factors associated with each defaulted exposure;

(f) data on the LGD of the exposure before and after evaluation of the effects of a guarantee/or credit derivative, for those institutions that reflect the credit risk mitigating effects of guarantees or credit derivatives through LGD;

(g) data on the components of loss for each defaulted exposure.

5. For retail exposures, institutions shall collect and store:

(a) data used in the process of allocating exposures to grades or pools;

(b) data on the estimated PDs, LGDs and conversion factors associated with grades or pools of exposures;

(c) the identity of obligors and exposures that defaulted;

(d) for defaulted exposures, data on the grades or pools to which the exposure was assigned over the year prior to default and the realised outcomes on LGD and conversion factor;

(e) data on loss rates for qualifying revolving retail exposures.

Article 173
Stress tests used in assessment of capital adequacy

1. An institution shall have in place sound stress testing processes for use in the assessment of its capital adequacy. Stress testing shall involve identifying possible events or future changes in economic conditions that could have unfavourable effects on an institution's credit exposures and assessment of the institution's ability to withstand such changes.

2. An institution shall regularly perform a credit risk stress test to assess the effect of certain specific conditions on its total capital requirements for credit risk. The test shall be one chosen by the institution, subject to supervisory review. The test to be employed shall be meaningful and consider the effects of a severe, but plausible, recession scenarios. An institution shall

assess migration in its ratings under the stress test scenarios. Stressed portfolios shall contain the vast majority of an institution's total exposure.

3. Institutions using the treatment set out in Article 148(3) shall consider as part of their stress testing framework the impact of a deterioration in the credit quality of protection providers, in particular the impact of protection providers falling outside the eligibility criteria.

4. EBA shall develop draft implementing technical standards to specify in greater detail the meaning of severe but plausible recession scenarios referred to in paragraph 2.

EBA shall submit those draft implementing technical standards to the Commission by 1 January 2013.

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with the procedure laid down in Article 15 of Regulation (EU) No 1093/2010.

SUB-SECTION 2
RISK QUANTIFICATION

Article 174
Default of an obligor

1. In quantifying the risk parameters to be associated with rating grades and pools, institutions shall apply the following approach to determining when an obligor has defaulted. For the purposes of this Chapter, a default shall occur with regard to a particular obligor when either of the following has taken place:

(a) the institution considers that the obligor is unlikely to pay its credit obligations to the institution, the parent undertaking or any of its subsidiaries in full, without recourse by the institution to actions such as realising security;

(b) the obligor is past due more than 90 days on any material credit obligation to the institution, the parent undertaking or any of its subsidiaries.

For overdrafts, days past due commence once an obligor has breached an advised limit, has been advised a limit smaller than current outstandings, or has drawn credit without authorisation and the underlying amount is material.

In the case of retail exposures, default at facility level shall also be considered for the purposes of paragraph 2.

An advised limit comprises any credit limit determined by the institution and about which the obligor has been informed by the institution.

Days past due for credit cards commence on the minimum payment due date.

In all cases, the exposure past due shall be above a threshold, defined by the competent authorities. This threshold shall reflect a level of risk that the competent authority considers to be reasonable.

Institutions shall have documented policies in respect of the counting of days past due, in particular in respect of the re-ageing of the facilities and the granting of extensions, amendments or deferrals, renewals, and netting of existing accounts. These policies shall be applied consistently over time, and shall be in line with the internal risk management and decision processes of the institution.

2. For the purpose of point (a) of the paragraph 1, elements to be taken as indications of unlikeliness to pay shall include:

(a) the institution puts the credit obligation on non-accrued status;

(b) the institution recognises a specific credit adjustment resulting from a significant perceived decline in credit quality subsequent to the institution taking on the exposure;

(c) the institution sells the credit obligation at a material credit-related economic loss;

(d) the institution consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or, where relevant fees. This includes, in the case of equity exposures assessed under a PD/LGD Approach, distressed restructuring of the equity itself;

(e) the institution has filed for the obligor's bankruptcy or a similar order in respect of an obligor's credit obligation to the institution, the parent undertaking or any of its subsidiaries;

(f) the obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of a credit obligation to the institution, the parent undertaking or any of its subsidiaries.

3. Institutions that use external data that is not itself consistent with the determination of default laid down in paragraph 1, shall make appropriate adjustments to achieve broad equivalence with the definition of default.

4. If the institution considers that a previously defaulted exposure is such that no trigger of default continues to apply, the institution shall rate the obligor or facility as they would for a non-defaulted exposure. Should the definition of default subsequently be triggered, another default would be deemed to have occurred.

5. EBA shall develop draft regulatory technical standards to specify the conditions according to which a competent authority shall set the threshold referred to in paragraph 1 which an exposure shall qualify as past due.

EBA shall submit those draft regulatory technical standards to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

6. EBA shall issue guidelines on the application of this Article. Those guidelines shall be adopted in accordance with Article 16 of Regulation (EU) No 1093/2010.

Article 175
Overall requirements for estimation

1. In quantifying the risk parameters to be associated with rating grades or pools, institutions shall apply the following requirements:

(a) an institution's own estimates of the risk parameters PD, LGD, conversion factor and EL shall incorporate all relevant data, information and methods. The estimates shall be derived using both historical experience and empirical evidence, and not based purely on judgemental considerations. The estimates shall be plausible and intuitive and shall be based on the material drivers of the respective risk parameters. The less data an institution has, the more conservative it shall be in its estimation;

(b) an institution shall be able to provide a breakdown of its loss experience in terms of default frequency, LGD, conversion factor, or loss where EL estimates are used, by the factors it sees as the drivers of the respective risk parameters. The institution's estimates shall be representative of long run experience;

(c) any changes in lending practice or the process for pursuing recoveries over the observation periods referred to in Articles 176(1)(h), IRB 34(2)(e), IRB 35(2) and IRB 35(3) shall be taken into account. An institution's estimates shall reflect the implications of technical advances and new data and other information, as it becomes available. Institutions shall review their estimates when new information comes to light but at least on an annual basis;

(d) the population of exposures represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics shall be comparable with those of the institution's exposures and standards. The economic or market conditions that underlie the data shall be relevant to current and foreseeable conditions. The number of exposures in the sample and the data period used for quantification shall be sufficient to provide the institution with confidence in the accuracy and robustness of its estimates;

(e) for purchased receivables the estimates shall reflect all relevant information available to the purchasing institution regarding the quality of the underlying receivables, including data for similar pools provided by the seller, by the purchasing institution, or by external sources. The purchasing institution shall evaluate any data relied upon which is provided by the seller;

(f) an institution shall add to its estimates a margin of conservatism that is related to the expected range of estimation errors. Where methods and data are considered to be less

satisfactory by the institution or the competent authority,the expected range of errors is larger, the margin of conservatism shall be larger.

Where institutions use different estimates for the calculation of risk weights and for internal purposes, it shall be documented and be reasonable. If institutions can demonstrate to their competent authorities that for data that have been collected prior to 1 January 2007 appropriate adjustments have been made to achieve broad equivalence with the determination of default laid down in Article 174 or loss, competent authorities may permit the institutions some flexibility in the application of the required standards for data.

2. Where an institution uses data that is pooled across institutions it shall meet the following requirements :

(a) the rating systems and criteria of other institutions in the pool are similar with its own;

(b) the pool is representative of the portfolio for which the pooled data is used;

(c) the pooled data is used consistently over time by the institution for its estimates;

(d) the institution shall remain responsible for the integrity of its rating systems;

(e) the institution shall maintain sufficient in-house understanding of its rating systems, including the ability to effectively monitor and audit the rating process.

Article 176
Requirements specific to PD estimation

1. In quantifying the risk parameters to be associated with rating grades or pools, institutions shall apply the following requirements specific to PD estimation to exposures to corporates, institutions and central governments and central banks:

(a) institutions shall estimate PDs by obligor grade from long run averages of one-year default rates. PD estimates for obligors that are highly leveraged or for obligors whose assets are predominantly traded assets shall reflect the performance of the underlying assets based on periods of stressed volatilities;

(b) for purchased corporate receivables institutions may estimate the Expected Loss (hereinafter EL) by obligor grade from long run averages of one-year realised default rates;

(c) if an institution derives long run average estimates of PDs and LGDs for purchased corporate receivables from an estimate of EL, and an appropriate estimate of PD or LGD, the process for estimating total losses shall meet the overall standards for estimation of PD and LGD set out in this part, and the outcome shall be consistent with the concept of LGD as set out in Article 177(1)(a);

(d) institutions shall use PD estimation techniques only with supporting analysis. Institutions shall recognise the importance of judgmental considerations in combining

results of techniques and in making adjustments for limitations of techniques and information;

(e) to the extent that an institution uses data on internal default experience for the estimation of PDs, the estimates shall be reflective of underwriting standards and of any differences in the rating system that generated the data and the current rating system. Where underwriting standards or rating systems have changed, the institution shall add a greater margin of conservatism in its estimate of PD;

(f) to the extent that an institution associates or maps its internal grades to the scale used by an ECAI or similar organisations and then attributes the default rate observed for the external organisation's grades to the institution's grades, mappings shall be based on a comparison of internal rating criteria to the criteria used by the external organisation and on a comparison of the internal and external ratings of any common obligors. Biases or inconsistencies in the mapping approach or underlying data shall be avoided. The criteria of the external organisation underlying the data used for quantification shall be oriented to default risk only and not reflect transaction characteristics. The analysis undertaken by the institution shall include a comparison of the default definitions used, subject to the requirements in Article 174. The institution shall document the basis for the mapping;

(g) to the extent that an institution uses statistical default prediction models it is allowed to estimate PDs as the simple average of default-probability estimates for individual obligors in a given grade. The institution's use of default probability models for this purpose shall meet the standards specified in Article 28;

(h) irrespective of whether an institution is using external, internal, or pooled data sources, or a combination of the three, for its PD estimation, the length of the underlying historical observation period used shall be at least five years for at least one source. If the available observation period spans a longer period for any source, and this data is relevant, this longer period shall be used. This point also applies to the PD/LGD Approach to equity. Subject to the permission of competent authorities, institutions which have not received the permission of the competent authority pursuant to Article 138 to use own estimates of LGDs or conversion factors may use, when they implement the IRB Approach, relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

2. for retail exposures, the following requirements shall apply:

(a) institutions shall estimate PDs by obligor grade or pool from long run averages of one-year default rates;

(b) PD estimates may also be derived from realised losses and appropriate estimates of LGDs;

(c) institutions shall regard internal data for assigning exposures to grades or pools as the primary source of information for estimating loss characteristics. Institutions may use

external data (including pooled data) or statistical models for quantification provided a strong link exists between the following:

(i) the institution's process of assigning exposures to grades or pools and the process used by the external data source;

(ii) the institution's internal risk profile and the composition of the external data;

(d) if an institution derives long run average estimates of PD and LGD for retail from an estimate of total losses and an appropriate estimate of PD or LGD, the process for estimating total losses shall meet the overall standards for estimation of PD and LGD set out in this part, and the outcome shall be consistent with the concept of LGD as set out in point (a) of Article 177(1);

(e) irrespective of whether an institution is using external, internal or pooled data sources or a combination of the three, for their estimation of loss characteristics, the length of the underlying historical observation period used shall be at least five years for at least one source. If the available observation spans a longer period for any source, and these data are relevant, this longer period shall be used. An institution need not give equal importance to historic data if more recent data is a better predictor of loss rates. Subject to the permission of the competent authorities, institutions may use, when they implement the IRB Approach, relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years;

(f) institutions shall identify and analyse expected changes of risk parameters over the life of credit exposures (seasoning effects).

For purchased retail receivables, institutions may use external and internal reference data. Institutions shall use all relevant data sources as points of comparison.

3. EBA shall develop draft regulatory technical standards to specify the following:

(a) the conditions according to which competent authorities may grant the permissions referred to in point (h) of paragraph 1 and point (e) of paragraph 2;

(b) the conditions according to which competent authorities shall assess the methodology of an institution for estimating PD pursuant to Article 138.

EBA shall submit the draft regulatory technical standards referred to in the first sub-paragraph to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 177
Requirements specific to own-LGD estimates

1. In quantifying the risk parameters to be associated with rating grades or pools, institutions shall apply the following requirements specific to own-LGD estimates:

(a) institutions shall estimate LGDs by facility grade or pool on the basis of the average realised LGDs by facility grade or pool using all observed defaults within the data sources (default weighted average);

(b) institutions shall use LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a rating system is expected to deliver realised LGDs at a constant level by grade or pool over time, institutions shall make adjustments to their estimates of risk parameters by grade or pool to limit the capital impact of an economic downturn;

(c) an institution shall consider the extent of any dependence between the risk of the obligor with that of the collateral or collateral provider. Cases where there is a significant degree of dependence shall be addressed in a conservative manner;

(d) currency mismatches between the underlying obligation and the collateral shall be treated conservatively in the institution's assessment of LGD;

(e) to the extent that LGD estimates take into account the existence of collateral, these estimates shall not solely be based on the collateral's estimated market value. LGD estimates shall take into account the effect of the potential inability of institutions to expeditiously gain control of their collateral and liquidate it;

(f) to the extent that LGD estimates take into account the existence of collateral, institutions shall establish internal requirements for collateral management, legal certainty and risk management that are generally consistent with those set out in Chapter 4, Section 3;

(g) to the extent that an institution recognises collateral for determining the exposure value for counterparty credit risk according to Chapter 6, Section 5 or 6, any amount expected to be recovered from the collateral shall not be taken into account in the LGD estimates;

(h) for the specific case of exposures already in default, the institution shall use the sum of its best estimate of expected loss for each exposure given current economic circumstances and exposure status and the possibility of additional unexpected losses during the recovery period;

(i) to the extent that unpaid late fees have been capitalised in the institution's income statement, they shall be added to the institution's measure of exposure and loss;

(j) for exposures to corporates, institutions and central governments and central banks, estimates of LGD shall be based on data over a minimum of five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period shall be used.

2. For retail exposures, institutions may do the following:

(a) derive LGD estimates from realised losses and appropriate estimates of PDs;

(b) reflect future drawings either in their conversion factors or in their LGD estimates;

(c) For purchased retail receivables use external and internal reference data to estimate LGDs.

For retail exposures, estimates of LGD shall be based on data over a minimum of five years. An institution needs not give equal importance to historic data if more recent data is a better predictor of loss rates. Subject to the permission of the competent authorities, institutions may use, when they implement the IRB Approach, relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

3. EBA shall develop draft regulatory technical standards to specify the following:

(a) the nature, severity and duration of an economic downturn referred to in paragraph 1;

(b) the conditions according to which a competent authority may permit and institution pursuant to paragraph 3 to use relevant data covering a period of two years when the institution implements the IRB approach.

EBA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 178
Requirements specific to own-conversion factor estimates

1. In quantifying the risk parameters to be associated with rating grades or pools, institutions shall apply the following requirements specific to own-conversion factor estimates:

(a) institutions shall estimate conversion factors by facility grade or pool on the basis of the average realised conversion factors by facility grade or pool using the default weighted average resulting from all observed defaults within the data sources;

(b) institutions shall use conversion factor estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a rating system is expected to deliver realised conversion factors at a constant level by grade or pool over time, institutions shall make adjustments to their estimates of risk parameters by grade or pool to limit the capital impact of an economic downturn;

(c) institutions' estimates of conversion factors shall reflect the possibility of additional drawings by the obligor up to and after the time a default event is triggered. The

conversion factor estimate shall incorporate a larger margin of conservatism where a stronger positive correlation can reasonably be expected between the default frequency and the magnitude of conversion factor;

(d) in arriving at estimates of conversion factors institutions shall consider their specific policies and strategies adopted in respect of account monitoring and payment processing. Institutions shall also consider their ability and willingness to prevent further drawings in circumstances short of payment default, such as covenant violations or other technical default events;

(e) institutions shall have adequate systems and procedures in place to monitor facility amounts, current outstandings against committed lines and changes in outstandings per obligor and per grade. The institution shall be able to monitor outstanding balances on a daily basis;

(f) if institutions use different estimates of conversion factors for the calculation of risk weighted exposure amounts and internal purposes it shall be documented and be reasonable.

2. For exposures to corporates, institutions and central governments and central banks, estimates of conversion factors shall be based on data over a minimum of five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period shall be used.

3. For retail exposures, institutions may reflect future drawings either in their conversion factors or in their LGD estimates.

For retail exposures, estimates of conversion factors shall be based on data over a minimum of five years. An institution need not give equal importance to historic data requirements referred to in paragraph 1(a) if more recent data is a better predictor of draw downs. Subject to the permission of competent authorities, institutions may use, when they implement the IRB Approach, relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

4. EBA shall develop draft regulatory technical standards to specify the following:

(a) the nature, severity and duration of an economic downturn referred to in paragraph 1;

(b) conditions according to which a competent authority may permit and institution to use relevant data covering a period of two years at the time an institution first implements the IRB approach.

EBA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 179

Requirements for assessing the effect of guarantees and credit derivatives for exposures to corporates, institutions and central governments and central banks where own estimates of LGD are used and retail exposures

1. The following requirements shall apply in relation to eligible guarantors and guarantees:

   (a) institutions shall have clearly specified criteria for the types of guarantors they recognise for the calculation of risk weighted exposure amounts;

   (b) for recognised guarantors the same rules as for obligors as set out in Articles 167, 168 and 169 shall apply;

   (c) the guarantee shall be evidenced in writing, non-cancellable on the part of the guarantor, in force until the obligation is satisfied in full (to the extent of the amount and tenor of the guarantee) and legally enforceable against the guarantor in a jurisdiction where the guarantor has assets to attach and enforce a judgement. Conditional guarantees prescribing conditions under which the guarantor may not be obliged to perform may be recognised subject to permission of the competent authorities. The assignment criteria shall adequately address any potential reduction in the risk mitigation effect.

2. An institution shall have clearly specified criteria for adjusting grades, pools or LGD estimates, and, in the case of retail and eligible purchased receivables, the process of allocating exposures to grades or pools, to reflect the impact of guarantees for the calculation of risk weighted exposure amounts. These criteria shall comply with the requirements set out in Articles 167 to 169.

   The criteria shall be plausible and intuitive. They shall address the guarantor's ability and willingness to perform under the guarantee, the likely timing of any payments from the guarantor, the degree to which the guarantor's ability to perform under the guarantee is correlated with the obligor's ability to repay, and the extent to which residual risk to the obligor remains.

3. The requirements for guarantees in this Article shall apply also for single-name credit derivatives. In relation to a mismatch between the underlying obligation and the reference obligation of the credit derivative or the obligation used for determining whether a credit event has occurred, the requirements set out under Article 211(2) shall apply. For retail exposures and eligible purchased receivables, this paragraph applies to the process of allocating exposures to grades or pools.

   The criteria shall address the payout structure of the credit derivative and conservatively assess the impact this has on the level and timing of recoveries. The institution shall consider the extent to which other forms of residual risk remain.

4. The requirements set out in paragraphs 1 to 3 shall not apply for guarantees provided by institutions, central governments and central banks, and corporate entities which meet the requirements laid down in Article 197(1)(g) if the institution has received permission to apply the Standardised Approach for exposures to such entities pursuant to Article 145. In this case the requirements of Chapter 4 shall apply.

5. For retail guarantees, the requirements set out in paragraphs 1 to 3 also apply to the assignment of exposures to grades or pools, and the estimation of PD.

6. EBA shall develop draft regulatory technical standards to specify the conditions according to which competent authorities may permit conditional guarantees to be recognised.

EBA shall submit the draft regulatory technical standards referred to in the first sub-paragraph to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 180
Requirements for purchased receivables

1. In quantifying the risk parameters to be associated with rating grades or pools for purchased receivables, institutions shall ensure the conditions laid down in paragraphs 2 to 6 are met.

2. The structure of the facility shall ensure that under all foreseeable circumstances the institution has effective ownership and control of all cash remittances from the receivables. When the obligor makes payments directly to a seller or servicer, the institution shall verify regularly that payments are forwarded completely and within the contractually agreed terms. Institutions shall have procedures to ensure that ownership over the receivables and cash receipts is protected against bankruptcy stays or legal challenges that could materially delay the lender's ability to liquidate or assign the receivables or retain control over cash receipts.

3. The institution shall monitor both the quality of the purchased receivables and the financial condition of the seller and servicer. The following shall apply:

(a) the institution shall assess the correlation among the quality of the purchased receivables and the financial condition of both the seller and servicer, and have in place internal policies and procedures that provide adequate safeguards to protect against any contingencies, including the assignment of an internal risk rating for each seller and servicer;

(b) the institution shall have clear and effective policies and procedures for determining seller and servicer eligibility. The institution or its agent shall conduct periodic reviews of sellers and servicers in order to verify the accuracy of reports from the seller or servicer, detect fraud or operational weaknesses, and verify the quality of the seller's credit policies and servicer's collection policies and procedures. The findings of these reviews shall be documented;

(c) the institution shall assess the characteristics of the purchased receivables pools, including over-advances; history of the seller's arrears, bad debts, and bad debt allowances; payment terms, and potential contra accounts;

(d) the institution shall have effective policies and procedures for monitoring on an aggregate basis single-obligor concentrations both within and across purchased receivables pools;

(e) the institution shall ensure that it receives from the servicer timely and sufficiently detailed reports of receivables ageings and dilutions to ensure compliance with the institution's eligibility criteria and advancing policies governing purchased receivables, and provide an effective means with which to monitor and confirm the seller's terms of sale and dilution.

4. The institution shall have systems and procedures for detecting deteriorations in the seller's financial condition and purchased receivables quality at an early stage, and for addressing emerging problems pro-actively. In particular, the institution shall have clear and effective policies, procedures, and information systems to monitor covenant violations, and clear and effective policies and procedures for initiating legal actions and dealing with problem purchased receivables.

5. The institution shall have clear and effective policies and procedures governing the control of purchased receivables, credit, and cash. In particular, written internal policies shall specify all material elements of the receivables purchase programme, including the advancing rates, eligible collateral, necessary documentation, concentration limits, and the way cash receipts are to be handled. These elements shall take appropriate account of all relevant and material factors, including the seller and servicer's financial condition, risk concentrations, and trends in the quality of the purchased receivables and the seller's customer base, and internal systems shall ensure that funds are advanced only against specified supporting collateral and documentation.

6. The institution shall have an effective internal process for assessing compliance with all internal policies and procedures. The process shall include regular audits of all critical phases of the institution's receivables purchase programme, verification of the separation of duties between firstly the assessment of the seller and servicer and the assessment of the obligor and secondly between the assessment of the seller and servicer and the field audit of the seller and servicer, and evaluations of back office operations, with particular focus on qualifications, experience, staffing levels, and supporting automation systems.

SUB-SECTION 3
VALIDATION OF INTERNAL ESTIMATES

Article 181
Validation of internal estimates

Institutions shall validate their internal estimates subject to the following requirements:

(a) institutions shall have robust systems in place to validate the accuracy and consistency of rating systems, processes, and the estimation of all relevant risk parameters. The internal validation process shall enable the institution to assess the performance of internal rating and risk estimation systems consistently and meaningfully;

(b) institutions shall regularly compare realised default rates with estimated PDs for each grade and, where realised default rates are outside the expected range for that grade, institutions shall specifically analyse the reasons for the deviation. Institutions using own estimates of LGDs and conversion factors shall also perform analogous analysis for these estimates. Such comparisons shall make use of historical data that cover as long a period as possible. The institution shall document the methods and data used in such comparisons. This analysis and documentation shall be updated at least annually;

(c) institutions shall also use other quantitative validation tools and comparisons with relevant external data sources. The analysis shall be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. Institutions' internal assessments of the performance of their rating systems shall be based on as long a period as possible;

(d) the methods and data used for quantitative validation shall be consistent through time. Changes in estimation and validation methods and data (both data sources and periods covered) shall be documented;

(e) institutions shall have sound internal standards for situations where deviations in realised PDs, LGDs, conversion factors and total losses, where EL is used, from expectations, become significant enough to call the validity of the estimates into question. These standards shall take account of business cycles and similar systematic variability in default experience. Where realised values continue to be higher than expected values, institutions shall revise estimates upward to reflect their default and loss experience;

SUB-SECTION 4
REQUIREMENTS FOR EQUITY EXPOSURES UNDER THE INTERNAL MODELS APPROACH

Article 182
Own funds requirement and risk quantification

For the purpose of calculating own funds requirements institutions shall meet the following standards:

(a) the estimate of potential loss shall be robust to adverse market movements relevant to the long-term risk profile of the institution's specific holdings. The data used to represent return distributions shall reflect the longest sample period for which data is available and meaningful in representing the risk profile of the institution's specific equity exposures. The data used shall be sufficient to provide conservative, statistically reliable and robust loss estimates that are not based purely on subjective or judgmental considerations. The shock employed shall provide a conservative estimate of potential losses over a relevant long-term market or business cycle. The institution shall combine empirical analysis of available data with adjustments based on a variety of factors in order to attain model outputs that achieve appropriate realism and conservatism. In constructing Value at Risk (VaR) models estimating potential quarterly losses, institutions may use quarterly data or convert shorter horizon period data to a quarterly equivalent using an analytically appropriate method supported by empirical evidence and through a well-developed and documented thought process and analysis. Such an

approach shall be applied conservatively and consistently over time. Where only limited relevant data is available the institution shall add appropriate margins of conservatism;

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

(c) the internal model shall be appropriate for the risk profile and complexity of an institution's equity portfolio. Where an institution has material holdings with values that are highly non-linear in nature the internal models shall be designed to capture appropriately the risks associated with such instruments;

(d) mapping of individual positions to proxies, market indices, and risk factors shall be plausible, intuitive, and conceptually sound;

(e) institutions shall demonstrate through empirical analyses the appropriateness of risk factors, including their ability to cover both general and specific risk;

(f) the estimates of the return volatility of equity exposures shall incorporate relevant and available data, information, and methods. Independently reviewed internal data or data from external sources including pooled data shall be used;

(g) a rigorous and comprehensive stress-testing programme shall be in place.

Article 183
Risk management process and controls

With regard to the development and use of internal models for own funds requirement purposes, institutions shall establish policies, procedures, and controls to ensure the integrity of the model and modelling process. These policies, procedures, and controls shall include the following:

(a) full integration of the internal model into the overall management information systems of the institution and in the management of the non-trading book equity portfolio. Internal models shall be fully integrated into the institution's risk management infrastructure if they are particularly used in measuring and assessing equity portfolio performance including the risk-adjusted performance, allocating economic capital to equity exposures and evaluating overall capital adequacy and the investment management process;

(b) established management systems, procedures, and control functions for ensuring the periodic and independent review of all elements of the internal modelling process, including approval of model revisions, vetting of model inputs, and review of model results, such as direct verification of risk computations. These reviews shall assess the accuracy, completeness, and appropriateness of model inputs and results and focus on both finding and limiting potential errors associated with known weaknesses and identifying unknown model weaknesses. Such

reviews may be conducted by an internal independent unit, or by an independent external third party;

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

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

(e) parties responsible for any aspect of the modelling process shall be adequately qualified. Management shall allocate sufficient skilled and competent resources to the modelling function.

Article 184
Validation and documentation

Institutions shall have robust systems in place to validate the accuracy and consistency of their internal models and modelling processes. All material elements of the internal models and the modelling process and validation shall be documented.

The validation and documentation of institutions' internal models and modelling processes shall be subject to the following requirements:

(a) institutions shall use the internal validation process to assess the performance of its internal models and processes in a consistent and meaningful way;

(b) the methods and data used for quantitative validation shall be consistent through time. Changes in estimation and validation methods and data both data sources and periods covered shall be documented;

(c) institutions shall regularly compare actual equity returns computed using realised and unrealised gains and losses with modelled estimates. Such comparisons shall make use of historical data that cover as long a period as possible. The institution shall document the methods and data used in such comparisons. This analysis and documentation shall be updated at least annually;

(d) institutions shall make use of other quantitative validation tools and comparisons with external data sources. The analysis shall be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. Institutions' internal assessments of the performance of their models shall be based on as long a period as possible;

(e) institutions shall have sound internal standards for addressing situations where comparison of actual equity returns with the models estimates calls the validity of the estimates or of the models as such into question. These standards shall take account of business cycles and similar systematic variability in equity returns. All adjustments made to internal models in response to model reviews shall be documented and consistent with the institution's model review standards;

(f) the internal model and the modelling process shall be documented, including the responsibilities of parties involved in the modelling, and the model approval and model review processes.

SUB-SECTION 5
INTERNAL GOVERNANCE AND OVERSIGHT

Article 185
Corporate Governance

1. All material aspects of the rating and estimation processes shall be approved by the institution's management body or a designated committee thereof and senior management. These parties shall possess a general understanding of the rating systems of the institution and detailed comprehension of its associated management reports.

2. Senior management shall be subject to the following requirements:

   (a) they shall provide notice to the management body or a designated committee thereof of material changes or exceptions from established policies that will materially impact the operations of the institution's rating systems;

   (b) they shall have a good understanding of the rating systems designs and operations;

   (c) they shall ensure, on an ongoing basis that the rating systems are operating properly;

   Senior management shall be regularly informed by the credit risk control units about the performance of the rating process, areas needing improvement, and the status of efforts to improve previously identified deficiencies.

3. Internal ratings-based analysis of the institution's credit risk profile shall be an essential part of the management reporting to these parties. Reporting shall include at least risk profile by grade, migration across grades, estimation of the relevant parameters per grade, and comparison of realised default rates, and to the extent that own estimates are used of realised LGDs and realised conversion factors against expectations and stress-test results. Reporting frequencies shall depend on the significance and type of information and the level of the recipient.

4. EBA shall develop draft regulatory technical standards to specify in greater detail the requirements on the management body, a designated committee thereof and senior management laid down in this Article.

   EBA shall submit the draft regulatory technical standards referred to in the first sub-paragraph to the Commission by 31 December 2014.

   Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first sub-paragraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 186
Credit risk control

1. The credit risk control unit shall be independent from the personnel and management functions responsible for originating or renewing exposures and report directly to senior management. The unit shall be responsible for the design or selection, implementation, oversight and performance of the rating systems. It shall regularly produce and analyse reports on the output of the rating systems.

2. The areas of responsibility for the credit risk control unit or units shall include:

   (a) testing and monitoring grades and pools;

   (b) production and analysis of summary reports from the institution's rating systems;

   (c) implementing procedures to verify that grade and pool definitions are consistently applied across departments and geographic areas;

   (d) reviewing and documenting any changes to the rating process, including the reasons for the changes;

   (e) reviewing the rating criteria to evaluate if they remain predictive of risk. Changes to the rating process, criteria or individual rating parameters shall be documented and retained;

   (f) active participation in the design or selection, implementation and validation of models used in the rating process;

   (g) oversight and supervision of models used in the rating process;

   (h) ongoing review and alterations to models used in the rating process.

3. Institutions using pooled data according to Articles 175(2) and 175(3) may outsource the following tasks:

   (a) production of information relevant to testing and monitoring grades and pools;

   (b) production of summary reports from the institution's rating systems;

   (c) production of information relevant to review of the rating criteria to evaluate if they remain predictive of risk;

   (d) documentation of changes to the rating process, criteria or individual rating parameters;

   (e) production of information relevant to ongoing review and alterations to models used in the rating process.

4. Institutions making use of paragraph 3 shall ensure that the competent authorities have access to all relevant information from the third party that is necessary for examining compliance with the requirements and that the competent authorities may perform on-site examinations to the same extent as within the institution.

Article 187
Internal Audit

Internal audit or another comparable independent auditing unit shall review at least annually the institution's rating systems and its operations, including the operations of the credit function and the estimation of PDs, LGDs, ELs and conversion factors. Areas of review shall include adherence to all applicable requirements.

Chapter 4
Credit risk mitigation

SECTION 1
DEFINITIONS AND GENERAL REQUIREMENTS

Article 188
Definitions

For the purposes of this Chapter, the following definitions shall apply:

(1) ‘lending institution’ means the institution which has the exposure in question;

(2) ‘secured lending transaction’ means any transaction giving rise to an exposure secured by collateral which does not include a provision conferring upon the institution the right to receive margin at least daily;

(3) ‘capital market-driven transaction’ means any transaction giving rise to an exposure secured by collateral which includes a provision conferring upon the institution the right to receive margin at least daily;

(4) 'underlying collective investment undertaking' means a collective investment undertaking in the shares or units of which another collective investment undertaking has invested.

Article 189
Principles for recognising the effect of credit risk mitigation techniques

1. No exposure in respect of which an institution obtains credit risk mitigation shall produce a higher risk-weighted exposure amount or expected loss amount than an otherwise identical exposure in respect of which an institution has no credit risk mitigation.

2. Where the risk-weighted exposure amount already takes account of credit protection under Chapter 2 or Chapter 3, as relevant, institutions shall not take into account that credit protection in the calculations under this Chapter.

3. Where the provisions in Sections 2 and 3 are met, institutions may modify the calculation of risk-weighted exposure amounts under the Standardised Approach and the calculation of risk-

weighted exposure amounts and expected loss amounts under the IRB Approach in accordance with the provisions of Sections 4, 5 and 6.

4. Institutions shall treat cash, securities or commodities purchased, borrowed or received under a repurchase transaction or securities or commodities lending or borrowing transaction as collateral.

5. Where an institution calculating risk-weighted exposure amounts under the Standardised Approach has more than one form of credit risk mitigation covering a single exposure it shall do both of the following:

   (a) subdivide the exposure into parts covered by each type of credit risk mitigation tool;

   (b) calculate the risk-weighted exposure amount for each part obtained in point (a) separately in accordance with the provisions of Chapter 2 and this Chapter.

6. When an institution calculating risk-weighted exposure amounts under the Standardised Approach covers a single exposure with credit protection provided by a single protection provider and that protection has differing maturities, it shall do both of the following:

   (a) subdivide the exposure into parts covered by each credit risk mitigation tool;

   (b) calculate the risk-weighted exposure amount for each part obtained in point (a) separately in accordance with the provisions of Chapter 2 and this Chapter.

Article 190
Principles governing the eligibility of credit risk mitigation techniques

1. The technique used by the lending institution to provide the credit protection together with the actions and steps taken and procedures and policies implemented by that lending institution shall be such as to result in credit protection arrangements which are legally effective and enforceable in all relevant jurisdictions.

2. The lending institution shall take all appropriate steps to ensure the effectiveness of the credit protection arrangement and to address the risks related to that arrangement.

3. In the case of funded credit protection, the assets relied upon for protection shall qualify as eligible assets for the purpose of credit risk mitigation only where they meet both the following conditions:

   (a) they are included in the list of eligible assets set out in Articles 193 to 196, as applicable;

   (b) they are sufficiently liquid and their value over time sufficiently stable to provide appropriate certainty as to the credit protection achieved having regard to the approach used to calculate risk-weighted exposure amounts and to the degree of recognition allowed.

4. In the case of funded credit protection, the lending institution shall have the right to liquidate or retain, in a timely manner, the assets from which the protection derives in the event of the

default, insolvency or bankruptcy — or other credit event set out in the transaction documentation — of the obligor and, where applicable, of the custodian holding the collateral. The degree of correlation between the value of the assets relied upon for protection and the credit quality of the obligor shall not be too high.

5. In the case of unfunded credit protection, a protection provider shall qualify as an eligible protection provider only where all of the following conditions are met:

(a) the protection provider is included in the list of eligible protection providers set out in Section 2;

(b) the protection provider is sufficiently reliable;

(c) the protection agreement meets all the criteria laid down in paragraph 6.

6. In the case of unfunded credit protection, a protection agreement shall qualify as an eligible protection agreement only where it meets both the following conditions:

(a) it is included in the list of eligible protection agreements set out in Articles 197 to 199, as applicable;

(b) it is legally effective and enforceable in the relevant jurisdictions, to provide appropriate certainty as to the credit protection achieved having regard to the approach used to calculate risk-weighted exposure amounts and to the degree of recognition allowed.

7. Credit protection shall comply with the requirements set out in Section 3.

8. An institution shall be able to demonstrate to competent authorities that it has adequate risk management processes to control those risks to which it may be exposed as a result of carrying out credit risk mitigation practices.

9. Notwithstanding the presence of credit risk mitigation taken into account for the purposes of calculating risk-weighted exposure amounts and, where relevant, expected loss amounts, institutions shall continue to undertake a full credit risk assessment of the underlying exposure and be in a position to demonstrate the fulfilment of this requirement to the competent authorities. In the case of repurchase transactions or securities or commodities lending or borrowing transactions the underlying exposure shall, for the purposes of this paragraph only, be deemed to be the net amount of the exposure.

10. EBA shall develop draft regulatory technical standards to specify the following:

(a) what constitutes sufficiently liquid assets and when can asset values be considered as sufficiently stable for the purpose of paragraph 3;

(b) which degree of correlation between the value of the assets relied upon for protection and the credit quality of the obligor is considered as too high for the purpose of paragraph 4;

(c) when is a protection provider considered to be sufficiently reliable for the purpose of point b of paragraph 5.

EBA shall develop those draft regulatory technical standards for submission to the Commission by 31 December 2013.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

SECTION 2
ELIGIBLE FORMS OF CREDIT RISK MITIGATION

SUB-SECTION 1
FUNDED CREDIT PROTECTION

Article 191
On-balance sheet netting

An institution may use on-balance sheet netting of mutual claims between itself and its counterparty as an eligible form of credit risk mitigation.

Without prejudice to Article 192, eligibility is limited to reciprocal cash balances between the institution and the counterparty. Institutions may modify risk-weighted exposure amounts and, as relevant, expected loss amounts only for loans and deposits that they have received themselves and that are subject to an on-balance sheet netting agreement.

Article 192
Master netting agreements covering repurchase transactions or securities or commodities lending or borrowing transactions or other capital market-driven transactions

Institutions adopting the Financial Collateral Comprehensive Method set out in Article 218 may take into account the effects of bilateral netting contracts covering repurchase transactions, securities or commodities lending or borrowing transactions, or other capital market-driven transactions with a counterparty. Without prejudice to Article 293, the collateral taken and securities or commodities borrowed within such agreements or transactions shall comply with the eligibility requirements for collateral set out in Articles 193 and 194.

Article 193
Eligibility of collateral under all approaches and methods

1. Institutions may use the following items as eligible collateral under all approaches and methods:

   (a) cash on deposit with, or cash assimilated instruments held by, the lending institution;

   (b) debt securities issued by central governments or central banks, which securities have a credit assessment by an ECAI or export credit agency recognised as eligible for the

purposes of Chapter 2 which has been determined by EBA to be associated with credit quality step 4 or above under the rules for the risk weighting of exposures to central governments and central banks under Chapter 2;

(c) debt securities issued by institutions, which securities have a credit assessment by an eligible ECAI which has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to institutions under Chapter 2;

(d) debt securities issued by other entities which securities have a credit assessment by an eligible ECAI which has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to corporates under Chapter 2;

(e) debt securities with a short-term credit assessment by an eligible ECAI which has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of short term exposures under Chapter 2;

(f) equities or convertible bonds that are included in a main index;

(g) gold;

(h) securitisation positions that are not re-securitisation positions, which have an external credit assessment by an eligible ECAI which has been determined by EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of securitisation exposures under the approach specified in Chapter 5, Section 3, Sub-section 3.

2. For the purposes of point (b) of paragraph 1, 'debt securities issued by central governments or central banks' shall include all the following:

(a) debt securities issued by regional governments or local authorities, exposures to which are treated as exposures to the central government in whose jurisdiction they are established under Article 110(2);

(b) debt securities issued by public sector entities which are treated as exposures to central governments in accordance with Article 111(4);

(c) debt securities issued by multilateral development banks to which a 0 % risk weight is assigned under Article 112(2);

(d) debt securities issued by international organisations which are assigned a 0 % risk weight under Article 113.

3. For the purposes of point (c) of paragraph 1, 'debt securities issued by institutions' shall include all the following:

(a) debt securities issued by regional governments or local authorities other than those exposures to which are treated as exposures to the central government in whose jurisdiction they are established under Article 110;

(b) debt securities issued by public sector entities, exposures to which are treated according to Article 111(1) and 111(2);

(c) debt securities issued by multilateral development banks other than those to which a 0 % risk weight is assigned under Article 112(2).

4. An institution may use debt securities that are issued by other institutions and that do not have a credit assessment by an eligible ECAI as eligible collateral where those debt securities fulfil all the following criteria:

(a) they are listed on a recognised exchange;

(b) they qualify as senior debt;

(c) all other rated issues by the issuing institution of the same seniority have a credit assessment by an eligible ECAI which has been determined by the EBA to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to institutions or short term exposures under Chapter 2;

(d) the lending institution has no information to suggest that the issue would justify a credit assessment below that indicated in (c);

(e) the market liquidity of the instrument is sufficient for these purposes.

5. Institutions may use units or shares in collective investment undertakings as eligible collateral where both the following conditions are satisfied:

(a) the units or shares have a daily public price quote;

(b) the collective investment undertakings are limited to investing in instruments that are eligible for recognition under paragraphs 1 and 2.

Where a CIU invests in shares or units of another CIU, conditions laid down in points (a) and (b) of the first subparagraph shall apply equally to any such underlying CIU.

The use by a collective investment undertaking of derivative instruments to hedge permitted investments shall not prevent units or shares in that undertaking from being eligible as collateral.

6. For the purposes of paragraph 5, where a collective investment undertaking or any of its underlying collective investment undertakings are not limited to investing in instruments that are eligible under paragraphs 1 and 4, institutions may use units or shares in that CIU as collateral to an amount equal to the value of the eligible assets held by that CIU under the assumption that that CIU or any of its underlying collective investment undertakings have invested in non-eligible assets to the maximum extent allowed under their respective mandates.

Where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, institutions shall do both of the following:

(a) calculate the total value of the non-eligible assets;

(b) where the amount obtained under point (a) is negative, subtract that amount from the total value of the eligible assets.

7. With regard to points (b) to (e) of paragraph 1, where a security has two credit assessments by eligible ECAIs, institutions shall apply the less favourable assessment. Where a security has more than two credit assessments by eligible ECAIs, institutions shall apply the two most favourable assessments. Where the two most favourable credit assessments are different, institutions shall apply the less favourable of the two.

8. ESMA shall develop draft regulatory technical standards to specify the conditions for identifying a main index referred to in point (f) of paragraph 1, in point (a) of Article 194(1), in Article 219(1) and (4), and in point (e) of Article 293(2).

ESMA shall submit those draft regulatory technical standards to the Commission by 31 December 2013.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1095/2010.

9. EBA shall develop draft regulatory technical standards to specify the methodology for the calculation of the amount of units or shares in a CIU that institutions may use as collateral referred to in paragraph 6 and in Article 194(2).

EBA shall submit those draft regulatory technical standards to the Commission by 31 December 2013.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

10. ESMA shall develop draft implementing technical standards to specify the following:

(a) the main indices identified in accordance with the conditions referred to in paragraph 8;

(b) the recognised exchanges referred to in point (a) of paragraph 4 and of Article 194(1), in Article 219(1) and (4), in point (e) of Article 293(2), in point (k) of Article 389(2), in point (d) of Article 404(3), in point (c) of Article 415(1), and in point 17 of Annex IV, Part 3.

ESMA shall submit those draft implementing technical standards to the Commission by 31 December 2014.

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with the procedure laid down in Article 15 of Regulation (EU) No 1095/2010.

Article 194

Additional eligibility of collateral under the Financial Collateral Comprehensive Method

1. In addition to the collateral established in Article 193, where an institution uses the Financial Collateral Comprehensive Method set out in Article 218, that institution may use the following items as eligible collateral:

   (a) equities or convertible bonds not included in a main index but traded on a recognised exchange;

   (b) units or shares in collective investment undertakings where both the following conditions are met:

      (i) the units or shares have a daily public price quote;

      (ii) the collective investment undertaking is limited to investing in instruments that are eligible for recognition under Article 193(1) and (2) and the items mentioned in point (a) of this subparagraph.

   In the case a CIU invests in units or shares of another CIU, conditions (a) and (b) of this paragraph equally apply to any such underlying CIU.

   The use by a collective investment undertaking of derivative instruments to hedge permitted investments shall not prevent shares in that undertaking from being eligible as collateral.

2. Where the collective investment undertaking or any underlying collective investment undertaking are not limited to investing in instruments that are eligible for recognition under Article 193(1) and (2) and the items mentioned in point (a) of paragraph 1, institutions may use units or shares in that CIU as collateral to an amount equal to the value of the eligible assets held by that CIU under the assumption that that CIU or any of its underlying collective investment undertakings have invested in non-eligible assets to the maximum extent allowed under their respective mandates.

   Where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, institutions shall do both of the following:

   (a) calculate the total value of the non-eligible assets;

   (b) where the amount obtained under point (a) is negative, subtract that amount from the total value of the eligible assets.

Article 195

Additional eligibility for collateral under the IRB Approach

1. In addition to the collateral established in Articles 193 and 194, institutions that calculate risk-weighted exposure amounts and expected loss amounts under the IRB Approach may also use the following forms of collateral:

   (a) immovable property collateral in accordance with paragraphs 2 to 6;

(b) receivables in accordance with paragraph 7;

(c) other physical collateral in accordance with paragraphs 8 and 10;

(d) leasing in accordance with paragraph 9.

2. Unless otherwise specified under Article 119(2), institutions may use as eligible collateral residential property which is or will be occupied or let by the owner, or the beneficial owner in the case of personal investment companies, and commercial immovable property, including offices and other commercial premises, where both the following conditions are met:

(a) the value of the property does not materially depend upon the credit quality of the obligor. Institutions may exclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower from their determination of the materiality of such dependence;

(b) the risk of the borrower does not materially depend upon the performance of the underlying property or project, but on the underlying capacity of the borrower to repay the debt from other sources, and as a consequence the repayment of the facility does not materially depend on any cash flow generated by the underlying property serving as collateral.

3. Institutions may use as eligible residential property collateral shares in Finnish residential housing companies operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation in respect of residential property which is or will be occupied or let by the owner provided that the conditions in paragraph 2 are met.

4. Institutions may use as eligible commercial immovable property collateral shares in Finnish housing companies operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation as commercial immovable property collateral, provided that the conditions in paragraph 2 are met.

5. Institutions may derogate from point (b) of paragraph 2 for exposures secured by residential property situated within the territory of a Member State, where the competent authority of that Member State has published evidence showing that a well-developed and long-established residential property market is present in that territory with loss rates that do not exceed any of the following limits:

(a) losses stemming from loans collateralised by residential property up to 80 % of the market value or 80 % of the mortgage-lending-value, unless otherwise provided under Article 119(2), do not exceed 0.3 % of the outstanding loans collateralised by residential property in any given year;

(b) overall losses stemming from loans collateralised by residential property do not exceed 0.5 % of the outstanding loans collateralised by residential property in any given year.

6. Institutions may derogate from point (b) of paragraph 2 for commercial immovable property situated within the territory of a Member State, where the competent authority of that Member State has published evidence showing that a well-developed and long-established commercial

property market is present in that territory with loss rates that meet both the following conditions:

(a) losses stemming from loans collateralised by commercial immovable property up to 50 % of the market value or 60 % of the mortgage-lending-value do not exceed 0.3 % of the outstanding loans collateralised by commercial immovable property in any given year;

(b) overall losses stemming from loans collateralised by commercial immovable property do not exceed 0.5 % of the outstanding loans collateralised by commercial immovable property in any given year.

Where either of the conditions in points (a) and (b) of the first subparagraph is not met in a given year, institutions shall not use the treatment specified in that subparagraph until both the conditions are satisfied in a subsequent year.

7. Institutions may use as eligible collateral amounts receivable linked to a commercial transaction or transactions with an original maturity of less than or equal to one year. Eligible receivables do not include those associated with securitisations, sub-participations or credit derivatives or amounts owed by affiliated parties.

8. Competent authorities shall permit an institution to use as eligible collateral physical collateral of a type other than those indicated in paragraphs 2 to 6 where all the following conditions are met:

(a) there are liquid markets, evidenced by frequent transactions, for the disposal of the collateral in an expeditious and economically efficient manner. Institutions shall carry out the assessment of this condition periodically and where information indicates material changes in the market;

(b) there are well-established, publicly available market prices for the collateral. Institutions may consider market prices as well-established where they come from reliable sources of information such as public indices and reflect the price of the transactions under normal conditions. Institutions may consider market prices as publicly available, where these prices are disclosed, easily accessible, and obtainable regularly and without any undue administrative or financial burden;

(c) the institution analyses the market prices, time and costs required to realise the collateral and the realised proceeds from the collateral;

(d) the institution demonstrates that the realised proceeds from the collateral are not below 70% of the collateral value in more than 10% of all liquidations for a given type of collateral. Where there is material volatility in the market prices, institutions demonstrate to the satisfaction of the competent authorities that their valuation of the collateral is sufficiently conservative.

Institutions shall document the fulfilment of the conditions specified in points (a) to (d) of the first subparagraph and those specified in Article 205.

After the entry into force of the implementing technical standards referred to in paragraph 10, competent authorities shall permit institutions to use only those types of other physical collaterals that are included in those standards.

9. Subject to the provisions of Article 225(2), where the requirements set out in Article 206 are met, exposures arising from transactions whereby an institution leases property to a third party may be treated in the same manner as loans collateralised by the type of property leased.

10. EBA shall develop draft implementing technical standards to specify the types of physical collaterals for which the conditions referred to in points (a) and (b) of paragraph 8 are met, based on the criteria set out in those points.

EBA shall submit those draft implementing technical standards to the Commission by 31 December 2014.

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with the procedure laid down in Article 15 of Regulation (EU) No 1093/2010.

Article 196
Other funded credit protection

Institutions may use the following other funded credit protection as eligible collateral:

(a) cash on deposit with, or cash assimilated instruments held by, a third party institution in a non-custodial arrangement and pledged to the lending institution;

(b) life insurance policies pledged to the lending institution;

(c) instruments issued by third party institutions which will be repurchased by that institution on request.

SUB-SECTION 2
UNFUNDED CREDIT PROTECTION

Article 197
Eligibility of protection providers under all approaches

1. Institutions may use the following parties as eligible providers of unfunded credit protection:

(a) central governments and central banks;

(b) regional governments or local authorities;

(c) multilateral development banks;

(d) international organisations exposures to which a 0 % risk weight under Article 112 is assigned;

(e) public sector entities, claims on which are treated in accordance with Article 111;

(f) institutions;

(g) other corporate entities, including parent, subsidiary and affiliate corporate entities of the institution, where either of the following conditions is met:

(i) those other corporate entities have a credit assessment by a recognised ECAI which has been determined by EBA to be associated with credit quality step 2 or above under the rules for the risk weighting of exposures to corporates under Chapter 2;

(ii) in the case of institutions calculating risk-weighted exposure amounts and expected loss amounts under the IRB Approach, those other corporate entities do not have a credit assessment by a recognised ECAI and are internally rated as having a PD equivalent to that associated with the credit assessments of ECAIs determined by EBA to be associated with credit quality step 2 or above the rules for risk weighting of exposures to corporates under Chapter 2.

2. Where institutions calculate risk-weighted exposure amounts and expected loss amounts under the IRB Approach, to be eligible as a provider of unfunded credit protection a guarantor shall be internally rated by the institution in accordance with the provisions of Section 6 of Chapter 3.

Institutions may use as eligible providers of unfunded credit protection other financial institutions authorised and supervised by the competent authorities responsible for the authorisation and supervision of institutions and subject to prudential requirements equivalent to those applied to institutions.

Competent authorities shall publish and maintain the list of those other eligible providers of unfunded credit protection, or the guiding criteria for identifying such other eligible providers of unfunded credit protection, together with a description of the applicable prudential requirements, and share their list with other competent authorities in accordance with Article 112 of Directive [inserted by OP].

Article 198
Eligibility of protection providers under the IRB Approach which qualify for the treatment set out in Article IRB 6(4)

An institution may use institutions, insurance and reinsurance undertakings and export credit agencies as eligible providers of unfunded credit protection which qualify for the treatment set out in Article 148(4) where they meet all the following conditions:

(a) they have sufficient expertise in providing unfunded credit protection;

(b) they are regulated in a manner equivalent to the rules laid down in this Regulation, or had, at the time the credit protection was provided, a credit assessment by a recognised ECAI which had been determined by EBA to be associated with credit quality step 3, or above, in accordance with the rules for the risk weighting of exposures to corporates set out in Chapter 2;

(c) they had, at the time the credit protection was provided, or for any period of time thereafter, an internal rating with a PD equivalent to or lower than that associated with credit quality step 2 or above in accordance with the rules for the risk weighting of exposures to corporates set out in Chapter 2;

(d) they have an internal rating with a PD equivalent to or lower than that associated with credit quality step 3 or above in accordance with the rules for the risk weighting of exposures to corporates set out in Chapter 2.

For the purpose of this Article, credit protection provided by export credit agencies shall not benefit from any explicit central government counter-guarantee.

SUB-SECTION 3
TYPES OF CREDIT DERIVATIVES

Article 199
Eligibility of credit derivatives

1. Institutions may use the following types of credit derivatives, and instruments that may be composed of such credit derivatives or that are economically effectively similar, as eligible credit protection:

   (a) credit default swaps;

   (b) total return swaps;

   (c) credit linked notes to the extent of their cash funding.

   Where an institution buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record the offsetting deterioration in the value of the asset that is protected either through reductions in fair value or by an addition to reserves, that credit protection does not qualify as eligible credit protection.

2. Where an institution conducts an internal hedge using a credit derivative, in order for the credit protection to qualify as eligible credit protection for the purposes of this Chapter, the credit risk transferred to the trading book shall be transferred out to a third party or parties.

   Where an internal hedge has been conducted in accordance with the first subparagraph and the requirements in Sub-section 2 have been met, institutions shall apply the rules set out in Sections 4 to 6 for the calculation of risk-weighted exposure amounts and expected loss amounts where they acquire unfunded credit protection.

SECTION 3
REQUIREMENTS

SUB-SECTION 1
FUNDED CREDIT PROTECTION

Article 200

Requirements for on-balance sheet netting agreements (other than master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions or other capital market-driven transactions)

On-balance sheet netting agreements, other than master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions or other capital market-driven transactions, shall qualify as an eligible form of credit risk mitigation where all the following conditions are met:

(a) those agreements are legally effective and enforceable in all relevant jurisdictions, including in the event of the insolvency or bankruptcy of a counterparty;

(b) institutions are able to determine at any time the assets and liabilities that are subject to those agreements;

(c) institutions monitor and control the risks associated with the termination of the credit protection on an ongoing basis;

(d) institutions monitor and control the relevant exposures on a net basis and do so on an ongoing basis.

Article 201

Requirements for master netting agreements covering repurchase transactions or securities or commodities lending or borrowing transactions or other capital market driven transactions

Master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions or other capital market driven transactions shall qualify as an eligible form of credit risk mitigation where the collateral provided under those agreements meets all the requirements referred to in Article 202(1) and where all the following conditions are met:

(a) they are legally effective and enforceable in all relevant jurisdictions, including in the event of the bankruptcy or insolvency of the counterparty;

(b) they give the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon the event of default, including in the event of the bankruptcy or insolvency of the counterparty;

(c) they provide for the netting of gains and losses on transactions closed out under a agreement so that a single net amount is owed by one party to the other.

Article 202
Requirements for financial collateral

1. Under all approaches and methods, financial collateral and gold shall qualify as eligible collateral where all the requirements laid down in paragraphs 2 to 4 are met.

2. The credit quality of the obligor and the value of the collateral shall not have a material positive correlation.

   Securities issued by the obligor, or any related group entity, shall not qualify as eligible collateral. This notwithstanding, the obligor's own issues of covered bonds falling within the terms of Article 124 qualify as eligible collateral when they are posted as collateral subject to a repurchase transactions, provided that they comply with the condition set out in the first subparagraph.

3. Institutions shall fulfil any contractual and statutory requirements in respect of, and take all steps necessary to ensure, the enforceability of the collateral arrangements under the law applicable to their interest in the collateral.

   Institutions shall have conducted sufficient legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions. They shall re-conduct such review as necessary to ensure continuing enforceability.

4. Institutions shall fulfil all the following operational requirements:

   (a) they shall properly document the collateral arrangements and have in place clear and robust procedures for the timely liquidation of collateral;

   (b) they shall use robust procedures and processes to control risks arising from the use of collateral, including risks of failed or reduced credit protection, valuation risks, risks associated with the termination of the credit protection, concentration risk arising from the use of collateral and the interaction with the institution's overall risk profile;

   (c) they shall have in place documented policies and practices concerning the types and amounts of collateral accepted;

   (d) they shall calculate the market value of the collateral, and revalue it accordingly, with a minimum frequency of once every six months and whenever they have reason to believe that a significant decrease in the market value of the collateral has occurred;

   (e) where the collateral is held by a third party, they shall take reasonable steps to ensure that the third party segregates the collateral from its own assets;

   (f) they shall ensure that they devote sufficient resources to the orderly operation of margin agreements with OTC derivatives and securities-financing counterparties, as measured by the timeliness and accuracy of their outgoing calls and response time to incoming calls;

   (g) they shall have in place collateral management policies to control, monitor and report the following:

(i) the risks to which margin agreements expose them;

(ii) the concentration risk to particular types of collateral assets;

(iii) the reuse of collateral including the potential liquidity shortfalls resulting from the reuse of collateral received from counterparties;

(iv) the surrender of rights on collateral posted to counterparties.

5. In addition to the requirements set out in paragraphs 1 to 4, for financial collateral to qualify as eligible collateral under the Financial Collateral Simple Method the residual maturity of the protection shall be at least as long as the residual maturity of the exposure.

Article 203
Requirements for immovable property collateral

1. Immovable property shall qualify as eligible collateral only where all the requirements laid down in paragraphs 2 to 5 are met.

2. The following requirements on legal certainly shall be met:

(a) a mortgage or charge is enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement and shall be properly filed on a timely basis;

(b) all legal requirements for establishing the pledge have been fulfilled;

(c) the protection agreement and the legal process underpinning it enable the institution to realise the value of the protection within a reasonable timeframe.

3. The following requirements on monitoring of property values and on property valuation shall be met:

(a) institutions monitor the value of the property on a frequent basis and at a minimum once every year for commercial immovable property and once every three years for residential real estate. Institutions carry out more frequent monitoring where the market is subject to significant changes in conditions;

(b) the property valuation is reviewed when information available to institutions indicates that the value of the property may have declined materially relative to general market prices and that review is carried out by a valuer who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process. For loans exceeding EUR 3 million or 5 % of the own funds of an institution, the property valuation shall be reviewed by such valuer at least every three years.

Institutions may use statistical methods to monitor the value of the property and to identify property that needs revaluation.

4. Institutions shall clearly document the types of residential and commercial immovable property they accept and their lending policies in this regard.

5. Institutions shall have in place procedures to monitor that the property taken as credit protection is adequately insured against the risk of damage.

Article 204
Requirements for receivables

1. Receivables shall qualify as eligible collateral where all the requirements laid down in paragraphs 2 and 3 are met.

2. The following requirements on legal certainty shall be met:

   (a) the legal mechanism by which the collateral is provided to a lending institution shall be robust and effective and ensure that that institution has clear rights over the proceeds;

   (b) institutions shall take all steps necessary to fulfil local requirements in respect of the enforceability of security interest. Lending institutions shall have a first priority claim over the collateral although such claims may still be subject to the claims of preferential creditors provided for in legislative provisions;

   (c) institutions shall have conducted sufficient legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions;

   (d) institutions shall properly document their collateral arrangements and shall have in place clear and robust procedures for the timely collection of collateral;

   (e) institutions shall have in place procedures that ensure that any legal conditions required for declaring the default of a borrower and timely collection of collateral are observed;

   (f) in the event of a borrower's financial distress or default, institutions shall have legal authority to sell or assign the receivables to other parties without consent of the receivables obligors.

3. The following requirements on risk management shall be met:

   (a) an institution shall have in place a sound process for determining the credit risk associated with the receivables. Such a process shall include analyses of a borrower's business and industry and the types of customers with whom that borrower does business. Where institutions rely on their borrowers to ascertain the credit risk of the customers, the institution shall review the borrower's credit practices to ascertain their soundness and credibility;

   (b) the margin between the amount of the exposure and the value of the receivables shall reflect all appropriate factors, including the cost of collection, concentration within the receivables pool pledged by an individual borrower, and potential concentration risk within the institution's total exposures beyond that controlled by the institution's general methodology. Institutions shall maintain a continuous monitoring process appropriate to

the receivables. They shall also review, on a regular basis, compliance with loan covenants, environmental restrictions, and other legal requirements;

(c) receivables pledged by a borrower shall be diversified and not be unduly correlated with that borrower. Where there is material positive correlation, institutions shall take into account the attendant risks in the setting of margins for the collateral pool as a whole;

(d) institutions shall not use receivables from affiliates of a borrower, including subsidiaries and employees, as eligible credit protection;

(e) institution shall have in place a documented process for collecting receivable payments in distressed situations. Institutions shall have in place the requisite facilities for collection even when they normally rely on their borrowers for collections.

Article 205
Requirements for other physical collateral

Physical collateral other than immovable property collateral shall qualify as eligible collateral under the IRB Approach where all the following conditions are met:

(a) the collateral arrangement under which the physical collateral is provided to an institution shall be legally effective and enforceable in all relevant jurisdictions and shall enable that institution to realise the value of the collateral within a reasonable timeframe;

(b) with the sole exception of permissible prior claims referred to in Article 204(2)(b), only first liens on, or charges over, collateral shall qualify as eligible collateral and an institution shall have priority over all other lenders to the realised proceeds of the collateral;

(c) institutions shall monitor the value of the collateral on a frequent basis and at a minimum once every year. Institutions shall carry out more frequent monitoring where the market is subject to significant changes in conditions;

(d) the loan agreement shall include detailed descriptions of the collateral as well as detailed specifications of the manner and frequency of revaluation;

(e) institutions shall clearly document in internal credit policies and procedures available for examination the types of physical collateral they accept and the policies and practices they have in place in respect of the appropriate amount of each type of collateral relative to the exposure amount ;

(f) institutions' credit policies with regard to the transaction structure shall address appropriate collateral requirements relative to the exposure amount, the ability to liquidate the collateral readily, the ability to establish objectively a price or market value, the frequency with which the value can readily be obtained, including a professional appraisal or valuation, and the volatility or a proxy of the volatility of the value of the collateral;

(g) both initial valuation and revaluation shall take fully into account any deterioration or obsolescence of the collateral. When conducting valuation and revaluation institutions shall

pay particular attention to the effects of the passage of time on fashion- or date-sensitive collateral;

(h) institutions shall have the right to physically inspect the collateral. They shall also have in place policies and procedures addressing their exercise of the right to physical inspection;

(i) the collateral taken as protection shall be adequately insured against the risk of damage and institutions shall have in place procedures to monitor this.

Article 206
Requirements for treating lease exposures as collateralised

Institutions shall treat exposures arising from leasing transactions as collateralised by the type of property leased, where all the following conditions are met:

(a) the conditions set out in Articles 203 or 205, as appropriate, for the type of property leased to qualify as eligible collateral are met;

(b) the lessor has in place robust risk management with respect to the use to which the leased asset is put, its location, its age and the planned duration of its use, including appropriate monitoring of the value of the security;

(c) the lessor has legal ownership of the asset and is able to exercise its rights as owner in a timely fashion;

(d) where this has not already been ascertained in calculating the LGD level, the difference between the value of the unamortised amount and the market value of the security is not so large as to overstate the credit risk mitigation attributed to the leased assets.

Article 207
Requirements for other funded credit protection

1. To be eligible for the treatment set out in Article 227(1), cash on deposit with, or cash assimilated instruments held by, a third party institution all the following conditions shall be met:

   (a) the borrower's claim against the third party institution is openly pledged or assigned to the lending institution and such pledge or assignment is legally effective and enforceable in all relevant jurisdictions;

   (b) the third party institution is notified of the pledge or assignment;

   (c) as a result of the notification, the third party institution is able to make payments solely to the lending institution or to other parties only with the lending institution's prior consent;

   (d) the pledge or assignment is unconditional and irrevocable.

2. Life insurance policies pledged to the lending institution shall qualify as eligible collateral where all the following conditions are met:

(a) the life insurance policy is openly pledged or assigned to the lending institution;

(b) the company providing the life insurance is notified of the pledge or assignment and may not pay amounts payable under the contract without the prior consent of the lending institution;

(c) the lending institution has the right to cancel the policy and receive the surrender value in the event of the default of the borrower;

(d) the lending institution is informed of any non-payments under the policy by the policy-holder;

(e) the credit protection is provided for the maturity of the loan. Where this is not possible because the insurance relationship ends before the loan relationship expires, the institution shall ensure that the amount deriving from the insurance contract serves the institution as security until the end of the duration of the credit agreement;

(f) the pledge or assignment is legally effective and enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement;

(g) the surrender value is declared by the company providing the life insurance and is non-reducible;

(h) the surrender value is to be paid by the company providing the life insurance in a timely manner upon request;

(i) the surrender value shall not be requested without the prior consent of the institution;

(j) the company providing the life insurance is subject to Directive 2009/138/EC of the European Parliament and of the Council or is subject to supervision by a competent authority of a third country which applies supervisory and regulatory arrangements at least equivalent to those applied in the Union.

SUB-SECTION 2
UNFUNDED CREDIT PROTECTION AND CREDIT LINKED NOTES

Article 208
Requirements common to guarantees and credit derivatives

1. Subject to Article 209(1), credit protection deriving from a guarantee or credit derivative shall qualify as eligible unfunded credit protection where all the following conditions are met:

(a) the credit protection is direct;

(b) the extent of the credit protection is clearly defined;

(c) the credit protection contract does not contain any clause, the fulfilment of which is outside the direct control of the lender, that:

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

(ii) would increase the effective cost of protection as a result of deteriorating credit quality of the protected exposure;

(iii) could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make any payments due, or when the leasing contract has expired for the purposes of recognising guaranteed residual value under Articles 129(7) and 162(4);

(iv) could allow the maturity of the credit protection to be reduced by the protection provider;

(d) is legally effective and enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement.

2. An institution shall demonstrate to competent authorities that it has in place systems to manage potential concentration of risk arising from its use of guarantees and credit derivatives. An institution shall be able to demonstrate to the satisfaction of the competent authorities how its strategy in respect of its use of credit derivatives and guarantees interacts with its management of its overall risk profile.

3. Institutions shall fulfil any contractual and statutory requirements in respect of, and take all steps necessary to ensure, the enforceability of its unfunded credit protection under the law applicable to their interest in the credit protection.

Institutions shall have conducted sufficient legal review confirming the enforceability of the unfunded credit protection in all relevant jurisdictions. They shall repeat such review as necessary to ensure continuing enforceability.

Article 209
Sovereign and other public sector counter-guarantees

1. Institutions may treat the exposure listed in paragraph 2 as protected by a guarantee provided by the entities listed in that paragraph, provided all the following conditions are satisfied:

(a) the counter-guarantee covers all credit risk elements of the claim;

(b) both the original guarantee and the counter-guarantee meet the requirements for guarantees set out in Articles 208 and 210(1), except that the counter-guarantee need not be direct;

(c) the cover is robust and nothing in the historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct guarantee by the entity in question.

2. The treatment laid down in paragraph 1 shall apply to exposures protected by a guarantee which is counter-guaranteed by any of the following entities:

(a) a central government or central bank;

(b) a regional government or local authority;

(c) a public sector entity, claims on which are treated as claims on the central government in accordance with Article 111(4);

(d) a multilateral development bank or an international organisation, to which a 0 % risk weight is assigned under or by virtue of Chapter 2;

(e) a public sector entity, claims on which are treated in accordance with Article 111(1) and 111(2).

3. Institutions shall apply the treatment set out in paragraph 1 also to an exposure which is not counter-guaranteed by any entity listed in paragraph 2 where that exposure's counter-guarantee is in turn directly guaranteed by one of those entities and the conditions listed in paragraph 1 are satisfied.

Article 210
Additional requirements for guarantees

1. Guarantees shall qualify as eligible unfunded credit protection where all the conditions in Article 208 and all the following conditions are met:

(a) on the qualifying default of or non-payment by the counterparty, the lending institution has the right to pursue, in a timely manner, the guarantor for any monies due under the claim in respect of which the protection is provided and the payment by the guarantor shall not be subject to the lending institution first having to pursue the obligor;

In the case of unfunded credit protection covering residential mortgage loans, the requirements in Article 208(1)(c)(iii) and in the first subparagraph have only to be satisfied within 24 months;

(b) the guarantee is an explicitly documented obligation assumed by the guarantor;

(c) either of the following conditions is met:

(i) the guarantee covers all types of payments the obligor is expected to make in respect of the claim;

(ii) where certain types of payment are excluded from the guarantee, the lending institution has adjusted the value of the guarantee to reflect the limited coverage.

2. In the case of guarantees provided in the context of mutual guarantee schemes or provided by or counter-guaranteed by entities referred to in Article 209(1), the requirements in point (a) of paragraph 1 shall be considered to be satisfied where either of the following conditions is met:

(a) the lending institution has the right to obtain in a timely manner a provisional payment by the guarantor that meets both the following conditions:

(i) it represents a robust estimate of the amount of the loss, including losses resulting from the non-payment of interest and other types of payment which the borrower is obliged to make, that the lending institution is likely to incur;

(ii) it is proportional to the coverage of the guarantee;

(b) the lending institution can demonstrate to the satisfaction of the competent authorities that the effects of the guarantee, which shall also cover losses resulting from the non-payment of interest and other types of payments which the borrower is obliged to make, justify such treatment.

Article 211
Additional requirements for credit derivatives

1. Credit derivative shall qualify as eligible unfunded credit protection where all the conditions in Article 208 and all the following conditions are met:

(a) the credit events specified in the credit derivative contract include:

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

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

(iii) the restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event;

(b) where credit derivatives allow for cash settlement:

(i) institutions have in place a robust valuation process in order to estimate loss reliably;

(ii) there is a clearly specified period for obtaining post-credit-event valuations of the underlying obligation;

(c) where the protection purchaser's right and ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation provide that any required consent to such transfer shall not be unreasonably withheld;

(d) the identity of the parties responsible for determining whether a credit event has occurred is clearly defined;

(e) the determination of the credit event is not the sole responsibility of the protection provider;

(f) the protection buyer has the right or ability to inform the protection provider of the occurrence of a credit event.

Where the credit events do not include restructuring of the underlying obligation as described in point (a)(iii), the credit protection may nonetheless be eligible subject to a reduction in the value as specified in Article 228(2);

2. A mismatch between the underlying obligation and the reference obligation under the credit derivative which is the obligation used for the purposes of determining the cash settlement value or or between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible only where both the following conditions are met:

(a) the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, ranks concurrently with or is junior to the underlying obligation;

(b) the underlying obligation and the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, share the same obligor and legally enforceable cross-default or cross-acceleration clauses are in place.

Article 212
Requirements to qualify for the treatment set out in Article 148(4)

1. To be eligible for the treatment set out in Article 148(4), credit protection deriving from a guarantee or credit derivative shall meet the following conditions:

(a) the underlying obligation is to one of the following exposures:

(i) a corporate exposure as defined in Article 142, excluding insurance and reinsurance undertakings;

(ii) an exposure to a regional government, local authority or public sector entity which is not treated as an exposure to a central government or a central bank according to Article 142;

(iii) an exposure to a small or medium sized enterprise, classified as a retail exposure according to Article 142(5);

(b) the underlying obligors are not members of the same group as the protection provider;

(c) the exposure is hedged by one of the following instruments:

(i) single-name unfunded credit derivatives or single-name guarantees;

(ii) first-to-default basket products;

(iii) nth-to-default basket products;

(d) the credit protection meets the requirements set out in Articles 208, 210 and 211;

(e) the risk weight that is associated with the exposure prior to the application of the treatment in Article 148(4), does not already factor in any aspect of the credit protection;

(f) an institution has the right and expectation to receive payment from the protection provider without having to take legal action in order to pursue the counterparty for payment. To the extent possible, the institution shall take steps to satisfy itself that the protection provider is willing to pay promptly should a credit event occur;

(g) the purchased credit protection absorbs all credit losses incurred on the hedged portion of an exposure that arise due to the occurrence of credit events outlined in the contract;

(h) where the payout structure of the credit protection provides for physical settlement, there is legal certainty with respect to the deliverability of a loan, bond, or contingent liability;

(i) where an institution intends to deliver an obligation other than the underlying exposure, it shall ensure that the deliverable obligation is sufficiently liquid so that the institution would have the ability to purchase it for delivery in accordance with the contract;

(j) the terms and conditions of credit protection arrangements are legally confirmed in writing by both the protection provider and the institution;

(k) institutions have in place a process to detect excessive correlation between the creditworthiness of a protection provider and the obligor of the underlying exposure due to their performance being dependent on common factors beyond the systematic risk factor;

(l) in the case of protection against dilution risk, the seller of purchased receivables is not a member of the same group as the protection provider.

2. For the purpose of point (c)(ii) of paragraph 1, institutions shall apply the treatment set out in Article 148(4) to the asset within the basket with the lowest risk-weighted exposure amount.

3. For the purpose of point (c)(iii) of paragraph 1, the protection obtained is only eligible for consideration under this framework where eligible (n-1)th default protection has also been obtained or where (n-1) of the assets within the basket has or have already defaulted. Where this is the case, institutions shall apply the treatment set out in Article 148(4) to the asset within the basket with the lowest risk-weighted exposure amount.

SECTION 4
CALCULATING THE EFFECTS OF CREDIT RISK MITIGATION

SUB-SECTION 1
FUNDED CREDIT PROTECTION

Article 213
Credit linked notes

Investments in credit linked notes issued by the lending institution may be treated as cash collateral for the purpose of calculating the effect of funded credit protection in accordance with this Sub-section, provided that the credit default swap embedded in the credit linked note qualifies as eligible unfunded credit protection.

Article 214
On-balance sheet netting

Loans and deposits with the lending institution subject to on-balance sheet netting are to be treated as cash collateral for the purpose of calculating the effect of funded credit protection for those loans and deposits of the lending institution subject to on-balance sheet netting which are denominated in the same currency.

Article 215
Using the Supervisory Volatility Adjustments Approach or the Own Estimates Volatility Adjustments Approach for master netting agreements

1. When institutions calculate the 'fully adjusted exposure value' (E^*) for the exposures subject to an eligible master netting agreement covering repurchase transactions or securities or commodities lending or borrowing transactions or other capital market-driven transactions, they shall calculate the volatility adjustments that they need to apply either by using the Supervisory Volatility Adjustments Approach or the Own Estimates Volatility Adjustments Approach ('Own Estimates Approach') as set out in Articles 218 to 221 for the Financial Collateral Comprehensive Method.

   The use of the Own Estimates Approach shall be subject to the same conditions and requirements as apply under the Financial Collateral Comprehensive Method.

2. For the purpose of calculating E^*, the following conditions shall be met:

   (a) institutions shall calculate the net position in each group of securities or in each type of commodity by subtracting the amount in point (i) from the amount in point (ii):

      (i) the total value of a group of securities or of commodities of the same type lent, sold or provided under the master netting agreement;

(ii) the total value of a group of securities or of commodities of the same type borrowed, purchased or received under the agreement;

(b) institutions shall calculate the net position in each currency, other than the settlement currency of the master netting agreement, by subtracting the amount in point (i) from the amount in point (ii):

(i) the sum of the total value of securities denominated in that currency lent, sold or provided under the master netting agreement and the amount of cash in that currency lent or transferred under the agreement;

(ii) the sum of the total value of securities denominated in that currency borrowed, purchased or received under the agreement and the amount of cash in that currency borrowed or received under the agreement;

(c) institutions shall apply the volatility adjustment appropriate to a given group of securities or to a cash position to the absolute value of the positive or negative net position in the securities in that group;

(d) institutions shall apply the foreign exchange risk (fx) volatility adjustment to the net positive or negative position in each currency other than the settlement currency of the master netting agreement.

3. Institutions shall calculate E^* according to the following formula:

$$E^* = \max\left\{0, \left(\sum_i E_i - \sum_i C_i\right) + \sum_j \left|E_j^{sec}\right| \cdot H_j^{sec} + \sum_k \left|E_k^{fx}\right| \cdot H_k^{fx}\right\}$$

where:

E_i = the exposure value for each separate exposure i under the agreement that would apply in the absence of the credit protection, where institutions calculate risk-weighted exposure amounts under the Standardised Approach or where they calculate the risk-weighted exposure amounts and expected loss amounts under the IRB Approach;

C_i = the value of securities in each group or commodities of the same type borrowed, purchased or received or the cash borrowed or received in respect of each exposure I;

E_j^{sec} = the net position (positive or negative) in a given group of securities j;

E_k^{fx} = the net position (positive or negative) in a given currency k other than the settlement currency of the agreement as calculated under point (b) of paragraph 2;

H_j^{sec} = the volatility adjustment appropriate to a particular group of securities j;

H_k^{fx} = the foreign exchange volatility adjustment for currency k.

4. For the purpose of calculating risk-weighted exposure amounts and expected loss amounts for repurchase transactions or securities or commodities lending or borrowing transactions or other capital market-driven transactions covered by master netting agreements, institutions shall use E^* as calculated under paragraph 3 as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement for the purposes of Article 108 under the Standardised Approach or Chapter 3 under the IRB Approach.

5. For the purposes of paragraphs 2 and 3, 'group of securities' means securities which are issued by the same entity, have the same issue date, the same maturity, are subject to the same terms and conditions, and are subject to the same liquidation periods as indicated in Articles 219 and 220, as applicable.

Article 216
Using the Internal Models Approach for Master netting agreements

1. Subject to permission of competent authorities, institutions may, as an alternative to using the Supervisory Volatility Adjustments Approach or the Own Estimates Approach in calculating the fully adjusted exposure value (E^*) resulting from the application of an eligible master netting agreement covering repurchase transactions, securities or commodities lending or borrowing transactions, or other capital market driven transactions other than derivative transactions, use an internal models approach which takes into account correlation effects between security positions subject to the master netting agreement as well as the liquidity of the instruments concerned.

2. Subject to the permission of the competent authorities, institutions may also use their internal models for margin lending transactions, where the transactions are covered under a bilateral master netting agreement that meets the requirements set out in Chapter 6, Section 7.

3. An institution may choose to use an internal models approach independently of the choice it has made between the Standardised Approach and the IRB Approach for the calculation of risk-weighted exposure amounts. However, where an institution seeks to use an internal models approach, it shall do so for all counterparties and securities, excluding immaterial portfolios where it may use the Supervisory Volatility Adjustments Approach or the Own Estimates Approach as laid down in Article 215.

   Institutions that have received permission for an internal risk-management model under Title IV, Chapter 5 may use the internal models approach. Where an institution has not received such permission, it may still apply for permission to the competent authorities to use an internal models approach for the purposes of this Article.

4. Competent authorities shall permit an institution to use an internal models approach only where they are satisfied that the institution's system for managing the risks arising from the transactions covered by the master netting agreement is conceptually sound and implemented with integrity and where the following qualitative standards are met:

   (a) the internal risk-measurement model used for calculating the potential price volatility for the transactions is closely integrated into the daily risk-management process of the

institution and serves as the basis for reporting risk exposures to the senior management of the institution;

(b) the institution has a risk control unit that meets all the following requirements:

(i) it is independent from business trading units and reports directly to senior management;

(ii) it is responsible for designing and implementing the institution's risk-management system;

(iii) it produces and analyses daily reports on the output of the risk-measurement model and on the appropriate measures to be taken in terms of position limits;

(c) the daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce reductions of positions taken and of overall risk exposure;

(d) the institution has sufficient staff skilled in the use of sophisticated models in the risk control unit;

(e) the institution has established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of the risk-measurement system;

(f) the institution's models have a proven track record of reasonable accuracy in measuring risks demonstrated through the back-testing of its output using at least one year of data;

(g) the institution frequently conducts a rigorous programme of stress testing and the results of these tests are reviewed by senior management and reflected in the policies and limits it sets;

(h) the institution conducts, as part of its regular internal auditing process, an independent review of its risk-measurement system. This review shall include both the activities of the business trading units and of the independent risk-control unit;

(i) at least once a year, the institution conducts a review of its risk-management system;

(j) the internal model meets the requirements set out in Article 286(8) and (9) and in Article 288.

5. The internal risk-measurement model shall capture a sufficient number of risk factors in order to capture all material price risks.

An institutions may use empirical correlations within risk categories and across risk categories where its system for measuring correlations is sound and implemented with integrity.

6. Institutions using the internal models approach shall calculate E^* according to the following formula:

$$E^* = \max\left\{0, \left(\sum_i E_i - \sum_i C_i\right) + \textit{potential change in value}\right\}$$

where:

E_i = the exposure value for each separate exposure i under the agreement that would apply in the absence of the credit protection, where institutions calculate the risk-weighted exposure amounts under the Standardised Approach or where they calculate risk-weighted exposure amounts and expected loss amounts under the IRB Approach;

C_i = the value of the securities borrowed, purchased or received or the cash borrowed or received in respect of each such exposure i.

When calculating risk-weighted exposure amounts using internal models, institutions shall use the previous business day's model output.

7. The calculation of the potential change in value referred to in paragraph 6 shall be subject to all the following standards:

(a) it shall be carried out at least daily;

(b) it shall be based on a 99th percentile, one-tailed confidence interval;

(c) it shall be based on a 5-day equivalent liquidation period, except in the case of transactions other than securities repurchase transactions or securities lending or borrowing transactions where a 10-day equivalent liquidation period shall be used;

(d) it shall be based on an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility;

(e) the data set used in the calculation shall be updated every three months.

Where an institution has a repurchase transaction, a securities or commodities lending or borrowing transaction and margin lending or similar transaction or netting set which meets the criteria set out in Article 279(2) and (3), the minimum holding period shall be brought in line with the margin period of risk that would apply under those points, in combination with Article 279(4).

8. For the purpose of calculating risk-weighted exposure amounts and expected loss amounts for repurchase transactions or securities or commodities lending or borrowing transactions or other capital market-driven transactions covered by master netting agreements, institutions shall use E^* as calculated under paragraph 6 as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement for the purposes of Article 108 under the Standardised Approach or Chapter 3 under the IRB Approach.

9. EBA shall develop draft regulatory technical standards to specify the following:

(a) what represents an immaterial portfolio for the purpose of paragraph 3;

(b) the criteria for determining whether an internal model is sound and implemented with integrity for the purposes of paragraphs 4 and 5.

EBA shall submit those draft regulatory technical standards to the Commission by 31 December 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with the procedure laid down in Articles 10 to 14 of Regulation (EU) No 1093/2010.

Article 217
Financial Collateral Simple Method

1. Institutions may use the Financial Collateral Simple Method only where they calculate risk-weighted exposure amounts under the Standardised Approach. Institution shall not use both the Financial Collateral Simple Method and the Financial Collateral Comprehensive Method, except for the purposes of Articles 143(1) and 145(1). Institutions shall not use this exception selectively with the purpose of achieving reduced own funds requirements or with the purpose of conducting regulatory arbitrage.

2. Under the Financial Collateral Simple Method institutions shall assign to eligible financial collateral a value equal to its market value as determined in accordance with point (d) of Article 202(4).

3. Institutions shall assign to those portions of exposure values that are collateralised by the market value of eligible collateral the risk weight that they would assign under Chapter 2 where the lending institution had a direct exposure to the collateral instrument. For this purpose, the exposure value of an off-balance sheet item listed in Annex I shall be equal to 100 % of the item's value rather than the exposure value indicated in Article 106(1).

   The risk weight of the collateralised portion shall be at least 20 % except as specified in paragraphs 4 to 6. Institutions shall apply to the remainder of the exposure value the risk weight that they would assign to an unsecured exposure to the counterparty under Chapter 2.

4. Institutions shall assign a risk weight of 0 % to the collateralised portion of the exposure arising from repurchase transaction and securities lending or borrowing transactions which fulfil the criteria in Article 222. Where the counterparty to the transaction is not a core market participant, institutions shall assign a risk weight of 10 %.

5. Institutions shall assign a risk weight of 0 %, to the extent of the collateralisation, to the exposure values determined under Chapter 6 for the derivative instruments listed in Annex II and subject to daily marking-to-market, collateralised by cash or cash-assimilated instruments where there is no currency mismatch.

   Institutions shall assign a risk weight of 10 %, to the extent of the collateralisation, to the exposure values of such transactions collateralised by debt securities issued by central governments or central banks which are assigned a 0 % risk weight under Chapter 2.

6. For transactions other than those referred to in paragraphs 4 and 5, institutions may assign a 0 % risk weight where the exposure and the collateral are denominated in the same currency, and either of the following conditions is met:

(a) the collateral is cash on deposit or a cash assimilated instrument;

(b) the collateral is in the form of debt securities issued by central governments or central banks eligible for a 0 % risk weight under Article 109, and its market value has been discounted by 20 %.

7. For the purpose of paragraphs 5 and 6 debt securities issued by central governments or central banks shall include:

(a) debt securities issued by regional governments or local authorities exposures to which are treated as exposures to the central government in whose jurisdiction they are established under Article 110;

(b) debt securities issued by multilateral development banks to which a 0 % risk weight is assigned under or by virtue of Article 112(2);

(c) debt securities issued by international organisations which are assigned a 0 % risk weight under Article 113.

Article 218
Financial Collateral Comprehensive Method

1. In order to take account of price volatility, institutions shall apply volatility adjustments to the market value of collateral, as set out in Articles 219 to 222, when valuing financial collateral for the purposes of the Financial Collateral Comprehensive Method.

Where collateral is denominated in a currency that differs from the currency in which the underlying exposure is denominated, institutions shall add an adjustment reflecting currency volatility to the volatility adjustment appropriate to the collateral as set out in Articles 219 to 222.

In the case of OTC derivatives transactions covered by netting agreements recognised by the competent authorities under Chapter 6, institutions shall apply a volatility adjustment reflecting currency volatility when there is a mismatch between the collateral currency and the settlement currency. Even where multiple currencies are involved in the transactions covered by the netting agreement, institutions shall apply a single volatility adjustment.

2. Institutions shall calculate the volatility-adjusted value of the collateral (C_{VA}) they need to take into account as follows:

$$C_{VA} = C \cdot \left(1 - H_C - H_{fx}\right)$$

where:

C = the value of the collateral;

H_C = the volatility adjustment appropriate to the collateral, as calculated under Articles 219 and 222;

H_{fx} = the volatility adjustment appropriate to currency mismatch, as calculated under Articles 219 and 222.

Institutions shall use the formula in this paragraph when calculating the volatility-adjusted value of the collateral for all transactions except for those transactions subject to recognised master netting agreements to which the provisions set out in Articles 215 and 216 apply.

3. Institutions shall calculate the volatility-adjusted value of the exposure (E_{VA}) they need to take into account as follows:

$$E_{VA} = E \cdot (1 + H_E)$$

where:

E = the exposure value as would be determined under Chapter 2 or Chapter 3 as appropriate where the exposure was not collateralised;

H_E = the volatility adjustment appropriate to the exposure, as calculated under Articles 219 and 222.

In the case of OTC derivative transactions institutions shall calculate E_{VA} as follows:

$$E_{VA} = E .$$

4. For the purpose of calculating E in paragraph 3, the following shall apply:

(a) for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the exposure value of an off-balance sheet item listed in Annex I shall be 100 % of that item's value rather than the exposure value indicated in Article 106(1);

(b) for institutions calculating risk-weighted exposure amounts under the IRB Approach, they shall calculate the exposure value of the items listed in Article 162(8) to (10) by using a conversion factor of 100 % rather than the conversion factors or percentages indicated in those paragraphs.

5. Institutions shall calculate the fully adjusted value of the exposure, taking into account both volatility and the risk-mitigating effects of collateral as follows:

$$E^* = \max\{0, E_{VA} - C_{VAM}\}$$

where:

C_{VAM} = C_{VA} further adjusted for any maturity mismatch in accordance with the provisions of Section 5;

E^* = is the fully adjusted exposure value.

6. Institutions may calculate volatility adjustments either by using the Supervisory Volatility Adjustments Approach referred to in Article 219 or the Own Estimates Approach referred to in Article 220.

An institution may choose to use the Supervisory Volatility Adjustments Approach or the Own Estimates Approach independently of the choice it has made between the Standardised Approach and the IRB Approach for the calculation of risk-weighted exposure amounts.

However, where an institution uses the Own Estimates Approach, it shall do so for the full range of instrument types, excluding immaterial portfolios where it may use the Supervisory Volatility Adjustments Approach.

7. Where the collateral consists of a number of eligible items, institutions shall calculate the volatility adjustment as follows:

$$H = \sum_i a_i H_i$$

where:

a_i = the proportion of the value of an eligible item i in the total value of collateral;

Hi = the volatility adjustment applicable to eligible item i.

Article 219

Supervisory volatility adjustment under the Financial Collateral Comprehensive Method

1. The volatility adjustments to be applied by institutions under the Supervisory Volatility Adjustments Approach, assuming daily revaluation, shall be those set out in Tables 1 to 4 of this paragraph.

VOLATILITY ADJUSTMENTS

Table 1										
Credit quality step with which the credit assessment of the debt security is associated	Residual Maturity	Volatility adjustments for debt securities issued by entities described in Part 1, point 7(b)			Volatility adjustments for debt securities issued by entities described in Part 1, point 7(c) and (d)			Volatility adjustments for securitisation positions and meeting the criteria in Part 1 point 7 (h)		
		20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
1	≤ 1 year	0.707	0.5	0.354	1.414	1	0.707	2.829	2	1.414
	>1 ≤ 5 years	2.828	2	1.414	5.657	4	2.828	11.314	8	5.657
	> 5 years	5.657	4	2.828	11.314	8	5.657	22.628	16	11.313

2-3	≤ 1 year	1.414	1	0.707	2.828	2	1.414	5.657	4	2.828
	>1 ≤ 5 years	4.243	3	2.121	8.485	6	4.243	16.971	12	8.485
	> 5 years	8.485	6	4.243	16.971	12	8.485	33.942	24	16.970
4	≤ 1 year	21.213	15	10.607	N/A	N/A	N/A	N/A	N/A	N/A
	>1 ≤ 5 years	21.213	15	10.607	N/A	N/A	N/A	N/A	N/A	N/A
	> 5 years	21.213	15	10.607	N/A	N/A	N/A	N/A	N/A	N/A

Table 2						
Credit quality step with which the credit assessment of a short term debt security is associated	Volatility adjustments for debt securities issued by entities described in Part 1, point 7(b) with short-term credit assessments			Volatility adjustments for debt securities issued by entities described in Part 1, point 7(c) and (d) with short-term credit assessments		
	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
1	0.707	0.5	0.354	1.414	1	0.707
2-3	1.414	1	0.707	2.828	2	1.414

Table 3			
Other collateral or exposure types			
	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
Main Index Equities, Main Index Convertible Bonds	21.213	15	10.607
Other Equities or Convertible Bonds listed on a recognised exchange	35.355	25	17.678
Cash	0	0	0

Gold	21.213	15	10.607

Table 4		
Volatility adjustment for currency mismatch		
20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
11.314	8	5.657

2. The calculation of volatility adjustments in accordance with paragraph 1 shall be subject to the following conditions:

   (a) for secured lending transactions the liquidation period shall be 20 business days;

   (b) for repurchase transactions, except insofar as such transactions involve the transfer of commodities or guaranteed rights relating to title to commodities, and securities lending or borrowing transactions the liquidation period shall be 5 business days;

   (c) for other capital market driven transactions, the liquidation period shall be 10 business days.

   Where an institution has a transaction or netting set which meets the criteria set out in of Article 279(2) and (3), the minimum holding period shall be brought in line with the margin period of risk that would apply under those paragraphs.

3. In Tables 1 to 4 of paragraph 1 and in paragraphs 4 to 6, the credit quality step with which a credit assessment of the debt security is associated is the credit quality step with which the credit assessment is determined by EBA to be associated under Chapter 2.

   For the purpose of determining the credit quality step with which a credit assessment of the debt security is associated referred to in the first subparagraph, Article 193(7) also applies.

4. For non-eligible securities or for commodities lent or sold under repurchase transactions or securities or commodities lending or borrowing transactions, the volatility adjustment is the same as for non-main index equities listed on a recognised exchange.

5. For eligible units in collective investment undertakings the volatility adjustment is the weighted average volatility adjustments that would apply, having regard to the liquidation period of the transaction as specified in paragraph 2, to the assets in which the fund has invested.

   Where the assets in which the fund has invested are not known to the institution, the volatility adjustment is the highest volatility adjustment that would apply to any of the assets in which the fund has the right to invest.

6. For unrated debt securities issued by institutions and satisfying the eligibility criteria in Article 193(4) the volatility adjustments is the same as for securities issued by institutions or corporates with an external credit assessment associated with credit quality steps 2 or 3.

Article 220

Own estimates of volatility adjustments under the Financial Collateral Comprehensive Method

1. The competent authorities shall permit institutions to use their own volatility estimates for calculating the volatility adjustments to be applied to collateral and exposures where those institutions comply with the requirements set out in paragraphs 2 and 3. Institutions which have obtained permission to use their own volatility estimates shall not revert to the use of other methods except for demonstrated good cause and subject to the permission of the competent authorities.

   For debt securities that have a credit assessment from a recognised ECAI equivalent to investment grade or better, institutions may calculate a volatility estimate for each category of security.

   For debt securities that have a credit assessment from a recognised ECAI equivalent to below investment grade, and for other eligible collateral, institutions shall calculate the volatility adjustments for each individual item.

   Institutions using the Own Estimates Approach shall estimate volatility of the collateral or foreign exchange mismatch without taking into account any correlations between the unsecured exposure, collateral or exchange rates.

   In determining relevant categories, institutions shall take into account the type of issuer of the security, the external credit assessment of the securities, their residual maturity, and their modified duration. Volatility estimates shall be representative of the securities included in the category by the institution.

2. The calculation of the volatility adjustments shall be subject to all the following criteria:

   (a) institutions shall base the calculation on a 99th percentile, one-tailed confidence interval;

   (b) institutions shall base the calculation on the following liquidation periods:

      (i) 20 business days for secured lending transactions;

      (ii) 5 business days for repurchase transaction, except insofar as such transactions involve the transfer of commodities or guaranteed rights relating to title to commodities and securities lending or borrowing transactions;

      (iii) 10 business days for other capital market driven transactions;

   (c) institutions may use volatility adjustment numbers calculated according to shorter or longer liquidation periods, scaled up or down to the liquidation period set out in point (b) for the type of transaction in question, using the square root of time formula:

$$H_M = H_N \cdot \sqrt{\frac{T_M}{T_N}}$$

where:

T_M = the relevant liquidation period;

H_M = the volatility adjustment based on the liquidation period T_M;

H_N = the volatility adjustment based on the liquidation period T_N.

(d) institutions shall take into account the illiquidity of lower-quality assets. They shall adjust the liquidation period upwards in cases where there is doubt concerning the liquidity of the collateral. They shall also identify where historical data may understate potential volatility. Such cases shall be dealt with by means of a stress scenario;

(e) the length of the historical observation period institutions use for calculating volatility adjustments shall be at least one year. For institutions that use a weighting scheme or other methods for the historical observation period, the length of the effective observation period shall be at least one year. The competent authorities may also require an institution to calculate its volatility adjustments using a shorter observation period where, in the competent authorities' judgement, this is justified by a significant upsurge in price volatility;

(f) institutions shall update their data sets and calculate volatility adjustments at least once every three months. They shall also reassess their data sets whenever market prices are subject to material changes.

3. The estimation of volatility adjustments shall meet all the following qualitative criteria:

(a) an institutions shall use the volatility estimates in the day-to-day risk management process including in relation to its internal exposure limits;

(b) where the liquidation period used by an institution in its day-to-day risk management process is longer than that set out in this Part for the type of transaction in question, that institution shall scale up its volatility adjustments in accordance with the square root of time formula set out in point (c) of paragraph 2;

(c) an institution shall have in place established procedures for monitoring and ensuring compliance with a documented set of policies and controls for the operation of its system for the estimation of volatility adjustments and for the integration of such estimations into its risk management process;

(d) an independent review of the institution's system for the estimation of volatility adjustments shall be carried out regularly within the institution's own internal auditing process. A review of the overall system for the estimation of volatility adjustments and for the integration of those adjustments into the institution's risk management process shall take place at least once a year. The subject of that review shall include at least the following:

(i) the integration of estimated volatility adjustments into daily risk management;

(ii) the validation of any significant change in the process for the estimation of volatility adjustments;

(iii) the verification of the consistency, timeliness and reliability of data sources used to run the system for the estimation of volatility adjustments, including the independence of such data sources;

(iv) the accuracy and appropriateness of the volatility assumptions.

Article 221

Scaling up of volatility adjustment under the Financial Collateral Comprehensive method

The volatility adjustments set out in Article 219 are the volatility adjustments an institution shall apply where there is daily revaluation. Similarly, where an institution uses its own estimates of the volatility adjustments in accordance with Article 220, it shall calculate them in the first instance on the basis of daily revaluation. Where the frequency of revaluation is less than daily, institutions shall apply larger volatility adjustments. Institutions shall calculate them by scaling up the daily revaluation volatility adjustments, using the following square-root-of-time formula:

$$H = H_M \cdot \sqrt{\frac{N_R + (T_M - 1)}{T_M}}$$

where:

H = the volatility adjustment to be applied;

H_M = the volatility adjustment where there is daily revaluation;

N_R = the actual number of business days between revaluations;

T_M = the liquidation period for the type of transaction in question.

Article 222

Conditions for applying a 0% volatility adjustment under the Financial Collateral Comprehensive method

1. In relation to repurchase transactions and securities lending or borrowing transactions, where an institution uses the Supervisory Volatility Adjustments Approach under Article 219 or the Own Estimates Approach under Article 220 and where the conditions set out in points (a) to (h) of paragraph 2 are satisfied, institutions may, instead of applying the volatility adjustments calculated under Articles 219 to 221, apply a 0 % volatility adjustment. Institutions using the internal models approach set out in Article 216 shall not use the treatment laid down in this Article.

2. Institutions may apply a 0% volatility adjustment where all the following conditions are met:

(a) both the exposure and the collateral are cash or debt securities issued by central governments or central banks within the meaning of Article 193(1)(b) and eligible for a 0 % risk weight under Chapter 2;

(b) both the exposure and the collateral are denominated in the same currency;

(c) either the maturity of the transaction is no more than one day or both the exposure and the collateral are subject to daily marking-to-market or daily re-margining;

(d) the time between the last marking-to-market before a failure to re-margin by the counterparty and the liquidation of the collateral is no more than four business days;

(e) the transaction is settled across a settlement system proven for that type of transaction;

(f) the documentation covering the agreement or transaction is standard market documentation for repurchase transactions or securities lending or borrowing transactions in the securities concerned;

(g) the transaction is governed by documentation specifying that where the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable;

(h) the counterparty is considered a core market participant by the competent authorities.

3. The core market participants referred to in point (h) of paragraph 2 shall include the following entities:

(a) the entities mentioned in Article 193(1)(b) exposures to which are assigned a 0 % risk weight under Chapter 2;

(b) institutions;

(c) other financial undertakings, including insurance undertakings, exposures to which are assigned a 20 % risk weight under the Standardised Approach or which, in the case of institutions calculating risk-weighted exposure amounts and expected loss amounts under the IRB Approach, do not have a credit assessment by a recognised ECAI and are internally rated as having a PD equivalent to that associated with the credit assessments of ECAIs determined by EBA to be associated with credit quality step 2 or above under the rules for the risk weighting of exposures to corporates under Chapter 2;

(d) regulated collective investment undertakings that are subject to capital or leverage requirements;

(e) regulated pension funds;

(f) recognised clearing organisations.

Article 223

Calculating risk-weighted exposure amounts and expected loss amounts under the Financial Collateral Comprehensive method

1. Under the Standardised Approach, institutions shall use E^* as calculated under Article 218(5) as the exposure value for the purposes of Article 108. In the case of off-balance sheet items listed in Annex I, institutions shall use E^* as the value to which the percentages indicated in Article 106(1) shall be applied to arrive at the exposure value.

2. Under the IRB Approach, institutions shall use the effective LGD (LGD^*) as the LGD for the purposes of Chapter 3. Institutions shall calculate LGD^* as follows:

$$LGD^* = LGD \cdot \frac{E^*}{E}$$

where:

LGD = the LGD that would apply to the exposure under Chapter 3 where the exposure was not collateralised;

E = the exposure value as described under Article 29(2);

E^* = the fully adjusted exposure value as calculated under Article 29(2).

Article 224

Valuation principles for other eligible collateral under the IRB Approach

1. For immovable property collateral, the collateral shall be valued by an independent valuer at or less than the market value. An institution shall require the independent valuer to document the market value in a transparent and clear manner.

   In those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions the property may instead be valued by an independent valuer at or less than the mortgage lending value. The independent valuer shall not take into account speculative elements in the assessment of the mortgage lending value and shall document that value in a transparent and clear manner.

   The value of the collateral shall be the market value or mortgage lending value reduced as appropriate to reflect the results of the monitoring required under Article 203(3) and to take account of any prior claims on the property.

2. For receivables, the value of receivables shall be the amount receivable.

3. Institutions shall value physical collateral other than immovable property at its market value which they shall calculate as the estimated amount for which the property would exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction.

Article 225

Calculating risk-weighted exposure amounts and expected loss amounts for other eligible collateral under the IRB Approach

1. Institutions shall use LGD^* calculated in accordance with this paragraph and paragraph 2 as the LGD for the purposes of Chapter 3.

   Where the ratio of the value of the collateral to the exposure value is below the required minimum collateralisation level of the exposure (C^*) as laid down in Table 5, LGD^* shall be the LGD laid down in Chapter 3 for uncollateralised exposures to the counterparty. For this purpose, institutions shall calculate the exposure value of the items listed in Articles 162(8) to (10) by using a conversion factor or percentage of 100 % rather than the conversion factors or percentages indicated in those points.

   Where the ratio of the value of the collateral to the exposure value exceeds a second, higher threshold level of C^{**} as laid down in Table 5, LGD^* shall be that prescribed in Table 5.

   Where the required level of collateralisation C^{**} is not achieved in respect of the exposure as a whole, institutions shall consider the exposure to be two exposures — one corresponding to the part in respect of which the required level of collateralisation C^{**} is achieved and one corresponding to the remainder.

2. The applicable LGD^* and required collateralisation levels for the secured parts of exposures are set out in Table 5 of this paragraph.

Table 5

Minimum LGD for secured parts of exposures

	LGD* for senior claims or contingent claims	LGD* for subordinated claims or contingent claims	Required minimum collateralisation level of the exposure (C*)	Required minimum collateralisation level of the exposure (C^{**})
Receivables	35 %	65 %	0 %	125 %
Residential real estate/commercial real estate	35 %	65 %	30 %	140 %
Other collateral	40 %	70 %	30 %	140 %

3. As an alternative to the treatment in paragraphs 1 and 2, and subject to Article 119(2), institutions may assign a 50 % risk weight to the part of the exposure that is, within the limits set out in Articles 120(2)(d) and 121(2)(d) respectively, fully collateralised by residential property or commercial immovable property situated within the territory of a Member State where all the conditions in Article 195(6) are met.

Article 226
Calculating risk-weighted exposure amounts and expected loss amounts in the case of mixed pools of collateral

1. An institution shall calculate the value of LGD* that it shall use as the LGD for the purposes of Chapter 3 in accordance with paragraphs 2 and 3 where both the following conditions are met:

   (a) the institution uses the IRB Approach to calculate risk-weighted exposure amounts and expected loss amounts;

   (b) an exposure is collateralised by both financial collateral and other eligible collateral.

2. Institutions shall be required to subdivide the volatility-adjusted value of the exposure, obtained by applying the volatility adjustment as set out in Article 218(5) to the value of the exposure, into parts so as to obtain a part covered by eligible financial collateral, a part covered by receivables, a part covered by commercial immovable property collateral or residential property collateral, a part covered by other eligible collateral, and the unsecured part, as relevant.

3. Institutions shall calculate LGD* for each part of the exposure obtained in paragraph 2 separately in accordance with the relevant provisions of this Chapter.

Article 227
Other funded credit protection

1. Where the conditions set out in Article 207(1) are met, deposits with third party institutions may be treated as a guarantee by the third party institution.

2. Where the conditions set out in Article 207(2) are met, institutions shall subject the portion of the exposure collateralised by the current surrender value of life insurance policies pledged to the lending institution to the following treatment:

   (a) where the exposure is subject to the Standardised Approach, it shall be risk-weighted by using the risk weights specified in paragraph 3;

   (b) where the exposure is subject to the IRB Approach but not subject to the institution's own estimates of LGD, it shall be assigned an LGD of 40 %.

   In case of a currency mismatch, institutions shall reduce the current surrender value in accordance with Article 228(3), the value of the credit protection being the current surrender value of the life insurance policy.

3. For purposes of point (a) of paragraph 2, institutions shall assign the following risk weights on the basis of the risk weight assigned to a senior unsecured exposure to the undertaking providing the life insurance:

   (a) a risk weight of 20 %, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 20 %;

(b) a risk weight of 35 %, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 50 %;

(c) a risk weight of 70 %, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 100 %;

(d) a risk weight of 150 %, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 150 %.

4. Institution may treat instruments repurchased on request that are eligible under Article 196(c) as a guarantee by the issuing institution. The value of the eligible credit protection shall be the following:

(a) where the instrument will be repurchased at its face value, the value of the protection shall be that amount;

(b) where the instrument will be repurchased at market price, the value of the protection shall be the value of the instrument valued in the same way as the debt securities specified in Article 193(4).

SUB-SECTION 2
UNFUNDED CREDIT PROTECTION

Article 228
Valuation

1. For the purpose of calculating the effects of unfunded credit protection in accordance with this Sub-section, the value of unfunded credit protection (G) shall be the amount that the protection provider has undertaken to pay in the event of the default or non-payment of the borrower or on the occurrence of other specified credit events.

2. In the case of credit derivatives which do not include as a credit event restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that result in a credit loss event the following shall apply:

(a) where the amount that the protection provider has undertaken to pay is not higher than the exposure value, institutions shall reduce the value of the credit protection calculated under paragraph 1 by 40 %;

(b) where the amount that the protection provider has undertaken to pay is higher than the exposure value, the value of the credit protection shall be no higher than 60 % of the exposure value.

3. Where unfunded credit protection is denominated in a currency different from that in which the exposure is denominated, institutions shall reduce the value of the credit protection by the application of a volatility adjustment as follows:

$$G^* = G \cdot \left(1 - H_{fx}\right)$$

where:

G^* = the amount of credit protection adjusted for foreign exchange risk,

G = the nominal amount of the credit protection;

H_{fx} = the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation determined in accordance with paragraph 4.

Where there is no currency mismatch H_{fx} is equal to zero.

4. Institutions shall base the volatility adjustments for any currency mismatch on a 10 business day liquidation period, assuming daily revaluation, and may calculate them based on the Supervisory Volatility Adjustments approach or the Own Estimates Approach as set out in Articles 219 and 220 respectively. Institutions shall scale up the volatility adjustments in accordance with Article 221.

Article 229

Calculating risk-weighted exposure amounts and expected loss amounts in case of partial protection and tranching

Where an institution transfers a part of the risk of a loan in one or more tranches, the rules set out in Chapter 5 shall apply. Institutions may consider materiality thresholds on payments below which no payment shall be made in the event of loss to be equivalent to retained first loss positions and to give rise to a tranched transfer of risk.

Article 230

Calculating risk-weighted exposure amounts under the Standardised Approach

1. For the purposes of Article 108(3) institutions shall calculate the risk-weighted exposure amounts in accordance with the following formula:

$$\max\{0, E - G_A\} \cdot r + G_A \cdot g$$

where:

E = the exposure value according to Article 106; for this purpose, the exposure value of an off-balance sheet item listed in Annex I shall be 100 % of its value rather than the exposure value indicated in Article 106(1);

G_A = the amount of credit risk protection as calculated under Article 228(3) (G^*) further adjusted for any maturity mismatch as laid down in Section 5;

r = the risk weight of exposures to the obligor as specified under Chapter 2;

g = the risk weight of exposures to the protection provider as specified under Chapter 2.

2. Where the protected amount (G_A) is less than the exposure (E), institutions may apply the formula specified in paragraph 1 only where the protected and unprotected parts of the exposure are of equal seniority.

3. Institutions may extend the treatment provided for in Article 109(4) and (5) to exposures or parts of exposures guaranteed by the central government or central bank, where the guarantee is denominated in the domestic currency of the borrower and the exposure is funded in that currency.

Article 231
Calculating risk-weighted exposure amounts and expected loss amounts under the IRB Approach

1. For the covered portion of the exposure value (E), based on the adjusted value of the credit protection G_A, the PD for the purposes of Section 3 of Chapter 3 may be the PD of the protection provider, or a PD between that of the borrower and that of the guarantor where a full substitution is deemed not to be warranted. In the case of subordinated exposures and non-subordinated unfunded protection, the LGD to be applied by institutions for the purposes of Section 3 of Chapter 3 may be that associated with senior claims.

2. For any uncovered portion of the exposure value (E) the PD shall be that of the borrower and the LGD shall be that of the underlying exposure.

3. G_A is the value of G^* as calculated under Article 228(3) further adjusted for any maturity mismatch as laid down in Section 5. E is the exposure value according to Section 4 of Chapter 3. For this purpose, institutions shall calculate the exposure value of the items listed in Article 162(8) to (10) by using a conversion factor or percentage of 100 % rather than the conversion factors or percentages indicated in those points.

SECTION 5
MATURITY MISMATCHES

Article 232
Definition of maturity mismatch

Maturity mismatch

1. For the purpose of calculating risk-weighted exposure amounts, a maturity mismatch occurs when the residual maturity of the credit protection is less than that of the protected exposure. Where protection has a residual maturity of less than three months and the maturity of the protection is less than the maturity of the underlying exposure that protection does not qualify as eligible credit protection.

2. Where there is a maturity mismatch the credit protection shall not qualify as eligible where either of the following conditions is met:

   (a) the original maturity of the protection is less than 1 year;

(b) the exposure is a short term exposure specified by the competent authorities as being subject to a one-day floor rather than a one-year floor in respect of the maturity value (M) under Article 158(3).

Article 233
Maturity of credit protection

1. Subject to a maximum of 5 years, the effective maturity of the underlying shall be the longest possible remaining time before the obligor is scheduled to fulfil its obligations. Subject to paragraph 2, the maturity of the credit protection shall be the time to the earliest date at which the protection may terminate or be terminated.

2. Where there is an option to terminate the protection which is at the discretion of the protection seller, institutions shall take the maturity of the protection to be the time to the earliest date at which that option may be exercised. Where there is an option to terminate the protection which is at the discretion of the protection buyer and the terms of the arrangement at origination of the protection contain a positive incentive for the institution to call the transaction before contractual maturity, an institution shall take the maturity of the protection to be the time to the earliest date at which that option may be exercised; otherwise the institution may consider that such an option does not affect the maturity of the protection.

3. Where a credit derivative is not prevented from terminating prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay institutions shall reduce the maturity of the protection by the length of the grace period.

Article 234
Valuation of protection

1. For transactions subject to funded credit protection under the Financial Collateral Simple Method, where there is a mismatch between the maturity of the exposure and the maturity of the protection, the collateral does not qualify as eligible funded credit protection.

2. For transactions subject to funded credit protection under the Financial Collateral Comprehensive Method, institutions shall reflect the maturity of the credit protection and of the exposure in the adjusted value of the collateral according to the following formula:

$$C_{VAM} = C_{VA} \cdot \frac{t - t^*}{T - t^*}$$

where:

C_{VA} = the volatility adjusted value of the collateral as specified in Article 218(2) or the amount of the exposure, whichever is the lowest;

t = the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 233, or the value of T, whichever is lower;

T = the number of years remaining to the maturity date of the exposure calculated in accordance with Article 233, or 5 years, whichever is lower;

t^* = 0.25.

Institutions shall use C_{VAM} as C_{VA} further adjusted for maturity mismatch in the formula for the calculation of the fully adjusted value of the exposure (E^*) set out in Article 218(5).

3. For transactions subject to unfunded credit protection, institutions shall reflect the maturity of the credit protection and of the exposure in the adjusted value of the credit protection according to the following formula:

$$G_A = G^* \cdot \frac{t - t^*}{T - t^*}$$

where:

G^* = the amount of the protection adjusted for any currency mismatch;

G_A = G^* adjusted for any maturity mismatch;

t = is the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 233, or the value of T, whichever is lower;

T = is the number of years remaining to the maturity date of the exposure calculated in accordance with Article 233, or 5 years, whichever is lower;

t^* = 0.25.

Institutions shall use G_A as the value of the protection for the purposes of Articles 228 to 231.

SECTION 6
BASKET CRM TECHNIQUES

Article 235
First-to-default credit derivatives

Where an institution obtains credit protection for a number of exposures under terms that the first default among the exposures shall trigger payment and that this credit event shall terminate the contract, the institution may modify the calculation of the risk-weighted exposure amount and, as relevant, the expected loss amount of the exposure which would, in the absence of the credit protection, produce the lowest of the two following amounts in accordance with this Chapter, but only where the exposure value is less than or equal to the value of the credit protection:

(a) risk-weighted exposure amount under the Standardised Approach;

(b) risk-weighted exposure amount under the IRB Approach plus 12.5 times the expected loss amount.

Article 236
Nth-to-default credit derivatives

Where the nth default among the exposures triggers payment under the credit protection, the institution purchasing the protection may only recognise the protection for the calculation of risk-weighted exposure amounts and, as relevant, expected loss amounts where protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred. In such cases, the institution may modify the calculation of the risk-weighted exposure amount and, as relevant, the expected loss amount of the exposure which would, in the absence of the credit protection, produce the n-th lowest of the two amounts referred to in points (a) and (b) in Article 235.

All exposures in the basket shall meet the requirements laid down in Article CRM 199(2) and CRM 211(1)(d).

Chapter 5
Securitisation

SECTION 1
DEFINITIONS

Article 237
Definitions

For the purposes of this Chapter, the following definitions shall apply:

(1) 'excess spread' means finance charge collections and other fee income received in respect of the securitised exposures net of costs and expenses;

(2) 'clean-up call option' means a contractual option for the originator to repurchase or extinguish the securitisation positions before all of the underlying exposures have been repaid, when the amount of outstanding exposures falls below a specified level;

(3) 'liquidity facility' means the securitisation position arising from a contractual agreement to provide funding to ensure timeliness of cash flows to investors;

(4) 'K_{IRB}' means 8 % of the risk-weighted exposure amounts that would be calculated under Chapter 3 in respect of the securitised exposures, had they not been securitised, plus the amount of expected losses associated with those exposures calculated under those Articles;

(5) 'ratings based method' means the method of calculating risk-weighted exposure amounts for securitisation positions in accordance with Article 256;

(6) 'supervisory formula method' means the method of calculating risk-weighted exposure amounts for securitisation positions in accordance with Article 257;

(7) ‘unrated position’ means a securitisation position which does not have an eligible credit assessment by an eligible ECAI as defined in Section 4;

(8) ‘rated position’ means a securitisation position which has an eligible credit assessment by an eligible ECAI as defined in Section 4;

(9) ‘asset-backed commercial paper (ABCP) programme’ means a programme of securitisations the securities issued by which predominantly take the form of commercial paper with an original maturity of one year or less;

(10) ‘traditional securitisation’ means a securitisation involving the economic transfer of the exposures being securitised. This shall be accomplished by the transfer of ownership of the securitised exposures from the originator institution or through sub-participation. The securities issued do not represent payment obligations of the originator institution;

(11) ‘synthetic securitisation’ means a securitisation where the transfer of risk is achieved by the use of credit derivatives or guarantees, and the exposures being securitised remain exposures of the originator institution;

(12) ‘revolving exposure’ means an exposure whereby customers' outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to an agreed limit;

(13) 'early amortisation provision' means a contractual clause in a securitisations of revolving exposures which requires, on the occurrence of defined events, investors' positions to be redeemed before the originally stated maturity of the securities issued;

(14) 'first loss tranche' means the most subordinated tranche in a securitisation that bears the first loss incurred on the securitised exposures and thereby provides protection to the second loss and, where relevant, higher ranking tranches.

SECTION 2
RECOGNITION OF SIGNIFICANT RISK TRANSFER

Article 238
Traditional securitisation

1. The originator institution of a traditional securitisation may exclude securitised exposures from the calculation of risk-weighted exposure amounts and expected loss amounts if either of the following conditions is fulfilled:

   (a) significant credit risk associated with the securitised exposures is considered to have been transferred to third parties;

   (b) the originator institution applies a 1250 % risk weight to all securitisation positions it holds in this securitisation or deducts these securitisation positions from Common Equity Tier 1 items in accordance with Article 33(1)(k).

2. Significant credit risk shall be considered to have been transferred in the following cases:

(a) the risk-weighted exposure amounts of the mezzanine securitisation positions held by the originator institution in this securitisation do not exceed 50 % of the risk weighted exposure amounts of all mezzanine securitisation positions existing in this securitisation;

(b) where there are no mezzanine securitisation positions in a given securitisation and the originator can demonstrate that the exposure value of the securitisation positions that would be subject to deduction from own funds or a 1250 % risk weight exceeds a reasoned estimate of the expected loss on the securitised exposures by a substantial margin, the originator institution does not hold more than 20 % of the exposure values of the securitisation positions that would be subject to deduction from own funds or a 1250 % risk weight.

Where the possible reduction in risk weighted exposure amounts, which the originator institution would achieve by this securitisation is not justified by a commensurate transfer of credit risk to third parties, competent authority may decide on a case-by-case basis that significant credit risk shall not be considered to have been transferred to third parties.

3. For the purposes of paragraph 2, mezzanine securitisation positions mean securitisation positions to which a risk weight lower than 1250 % applies and that are more junior than the most senior position in this securitisation and more junior than any securitisation position in this securitisation to which either of the following is assigned in accordance with Section 4:

(a) in the case of a securitisation position subject to Section 3, Sub-section 3 a credit quality step 1;

(b) in the case of a securitisation position subject to points Section 3, Sub-section 4 a credit quality step 1 or 2.

4. As an alternative to paragraphs 2 and 3, competent authorities shall grant permission to originator institutions to consider significant credit risk as having been transferred where the originator institution is able to demonstrate, in every case of a securitisation, that the reduction of own funds requirements which the originator achieves by the securitisation is justified by a commensurate transfer of credit risk to third parties.

Permission shall be granted only where the institution meets all of the following conditions:

(a) the institution has appropriately risk-sensitive policies and methodologies in place to assess the transfer of risk;

(b) the institution has also recognised the transfer of credit risk to third parties in each case for purposes of the institution's internal risk management and its internal capital allocation.

5. In addition to the requirements set out in paragraphs 1 to 4, as applicable, all the following conditions shall be met:

(a) the securitisation documentation reflects the economic substance of the transaction;

(b) the securitised exposures are put beyond the reach of the originator institution and its creditors, including in bankruptcy and receivership. This shall be supported by the opinion of qualified legal counsel;

(c) the securities issued do not represent payment obligations of the originator institution;

(d) the originator institution does not maintain effective or indirect control over the transferred exposures. An originator shall be considered to have maintained effective control over the transferred exposures if it has the right to repurchase from the transferee the previously transferred exposures in order to realise their benefits or if it is obligated to re-assume transferred risk. The originator institution's retention of servicing rights or obligations in respect of the exposures shall not of itself constitute indirect control of the exposures;

(e) the securitisation documentation meets all the following conditions:

(i) it does not contain clauses that other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator institution including but not limited to altering the underlying credit exposures or increasing the yield payable to investors in response to a deterioration in the credit quality of the securitised exposures;

(ii) it does not contain clauses that increase the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool;

(iii) it makes it clear, where applicable, that any purchase or repurchase of securitisation positions by the originator or sponsor beyond its contractual obligations may only be made at arms' lengths conditions;

(f) where there is a clean-up call option, that option shall also meet the following conditions:

(i) it is exercisable at the discretion of the originator institution;

(ii) it may only be exercised when 10 % or less of the original value of the exposures securitised remains unamortised;

(iii) it is not structured to avoid allocating losses to credit enhancement positions or other positions held by investors and is not otherwise structured to provide credit enhancement.

6. The competent authorities shall keep EBA informed about the specific cases, referred to in paragraph 2, where the possible reduction in risk-weighted exposure amounts is not justified by a commensurate transfer of credit risk to third parties, and the use institutions make of paragraph 4. EBA shall monitor the range of practices in this area and shall, in accordance with Article 16 of Regulation (EU) No. 1093/2010, issue guidelines.

Article 239
Synthetic securitisation

1. An originator institution of a synthetic securitisation may calculate risk-weighted exposure amounts, and, as relevant, expected loss amounts, for the securitised exposures in accordance with Article 244, if either of the following is met:

   (a) significant credit risk is considered to have been transferred to third parties either through funded or unfunded credit protection;

   (b) the originator institution applies a 1250 % risk weight to all securitisation positions it holds in this securitisation or deducts these securitisation positions from Common Equity Tier 1 items in accordance with Article 33(1)(k).

2. Significant credit risk shall be considered to have been transferred if either of the following conditions is met:

   (a) the risk-weighted exposure amounts of the mezzanine securitisation positions which are held by the originator institution in this securitisation do not exceed 50 % of the risk weighted exposure amounts of all mezzanine securitisation positions existing in this securitisation;

   (b) where there are no mezzanine securitisation positions in a given securitisation and the originator can demonstrate that the exposure value of the securitisation positions that would be subject to deduction from own funds or a 1250 % risk weight exceeds a reasoned estimate of the expected loss on the securitised exposures by a substantial margin, the originator institution does not hold more than 20 % of the exposure values of the securitisation positions that would be subject to deduction from own funds or a 1250 % risk weight;

   (c) where the possible reduction in risk weighted exposure amounts, which the originator institution would achieve by this securitisation, is not justified by a commensurate transfer of credit risk to third parties, competent authority may decide on a case- by-case basis that significant credit risk shall not be considered to have been transferred to third parties.

3. For the purposes of paragraph 2, mezzanine securitisation positions means securitisation positions to which a risk weight lower than 1250 % applies and that are more junior than the most senior position in this securitisation and more junior than any securitisation positions in this securitisation to which either of the following is assigned in accordance with Section 4:

   (a) in the case of a securitisation position subject to Section 3, Sub-section 3 a credit quality step 1;

   (b) in the case of a securitisation position subject to Section 3, Sub-section 4 a credit quality step 1 or 2.

4. As an alternative to paragraphs 2 and 3, competent authorities shall grant permission to originator institutions to consider significant credit risk as having been transferred where the originator institution is able to demonstrate, in every case of a securitisation, that the reduction

of own funds requirements which the originator achieves by the securitisation is justified by a commensurate transfer of credit risk to third parties.

Permission shall be granted only where the institution meets all of the following conditions:

(a) the institution has appropriately risk-sensitive policies and methodologies in place to assess the transfer of risk;

(b) the institution has also recognised the transfer of credit risk to third parties in each case for purposes of the institution's internal risk management and its internal capital allocation.

5. In addition to the requirements set out in paragraphs 1 to 4, as applicable, the transfer shall comply with the following conditions:

(a) the securitisation documentation reflects the economic substance of the transaction;

(b) the credit protection by which the credit risk is transferred complies with Article 242(2);

(c) the instruments used to transfer credit risk do not contain terms or conditions that:

(i) impose significant materiality thresholds below which credit protection is deemed not to be triggered if a credit event occurs;

(ii) allow for the termination of the protection due to deterioration of the credit quality of the underlying exposures;

(iii) other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator institution;

(iv) increase the institution's cost of credit protection or the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool;

(d) an opinion is obtained from qualified legal counsel confirming the enforceability of the credit protection in all relevant jurisdictions;

(e) the securitisation documentation shall make clear, where applicable, that any purchase or repurchase of securitisation positions by the originator or sponsor beyond its contractual obligations may only be made at arms' lengths conditions;

(f) where there is a clean-up call option, that option meets all the following conditions:

(i) it is exercisable at the discretion of the originator institution;

(ii) it may only be exercised when 10 % or less of the original value of the exposures securitised remains unamortised;

(iii) it is not structured to avoid allocating losses to credit enhancement positions or other positions held by investors and is not otherwise structured to provide credit enhancement.

6. The competent authorities shall keep EBA informed about the specific cases, referred to in paragraph 2, where the possible reduction in risk-weighted exposure amounts is not justified by a commensurate transfer of credit risk to third parties, and the use institutions make of paragraph 4. The European Banking Authority shall monitor the range of practices in this area and shall, in accordance with Article 16 of Regulation (EU) No. 1093/2010, issue guidelines.

SECTION 3
CALCULATION OF THE RISK WEIGHTED EXPOSURE AMOUNTS

SUB-SECTION 1
PRINCIPLES

Article 240
Calculation of risk-weighted exposure amounts

1. Where an originator institution has transferred significant credit risk associated with securitised exposures in accordance with Section 2, that institution may:

(a) in the case of a traditional securitisation, exclude from its calculation of risk-weighted exposure amounts, and, as relevant, expected loss amounts, the exposures which it has securitised;

(b) in the case of a synthetic securitisation, calculate risk-weighted exposure amounts, and, as relevant, expected loss amounts, in respect of the securitised exposures in accordance with Articles 244 and 245.

2. Where the originator institution has decided to apply paragraph 1, it shall calculate the risk-weighted exposure amounts prescribed in this Chapter for the positions that it may hold in the securitisation.

Where the originator institution has not transferred significant credit risk or has decided not to apply paragraph 1, it need not calculate risk-weighted exposure amounts for any positions it may have in the securitisation in question but shall continue including the securitised exposures in its calculation of risk-weighted exposure amounts as if they had not been securitised.

3. Where there is an exposure to different tranches in a securitisation, the exposure to each tranche shall be considered a separate securitisation position. The providers of credit protection to securitisation positions shall be considered to hold positions in the securitisation. Securitisation positions shall include exposures to a securitisation arising from interest rate or currency derivative contracts.

4. Unless a securitisation position is deducted from Common Equity Tier 1 items pursuant to Article 33(1)(k), the risk-weighted exposure amount shall be included in the institution's total of risk-weighted exposure amounts for the purposes of Article 87(3).

5. The risk-weighted exposure amount of a securitisation position shall be calculated by applying to the exposure value of the position, calculated as set out in Article 241, the relevant total risk weight.

6. The total risk weight shall be determined as the sum of the risk weight set out in this Chapter and any additional risk weight in accordance with Article 396.

Article 241
Exposure value

1. The exposure value shall be calculated as follows:

   (a) where an institution calculates risk-weighted exposure amounts under Sub-section 3, the exposure value of an on-balance sheet securitisation position shall be its accounting value remaining after specific credit risk adjustments have been applied;

   (b) where an institution calculates risk-weighted exposure amounts under Sub-section 4, the exposure value of an on-balance sheet securitisation position shall be the accounting value measured without taking into account any credit risk adjustments made;

   (c) where an institution calculates risk-weighted exposure amounts under Sub-section 3, the exposure value of an off-balance sheet securitisation position shall be its nominal value, less any specific credit risk adjustment of that securitisation position, multiplied by a conversion factor as prescribed in this Chapter. The conversion factor shall be 100 % unless otherwise specified;

   (d) where an institution calculates risk-weighted exposure amounts under Sub-section 4, the exposure value of an off-balance sheet securitisation position shall be its nominal value multiplied by a conversion factor as prescribed in this Chapter. The conversion factor shall be 100 % unless otherwise specified;

   (e) The exposure value for the counterparty credit risk of a derivative instrument listed in Annex II, shall be determined in accordance with Chapter 6.

2. Where an institution has two or more overlapping positions in a securitisation, it shall, to the extent that they overlap include in its calculation of risk-weighted exposure amounts only the position or portion of a position producing the higher risk-weighted exposure amounts. The institution may also recognise such overlap between specific risk own funds requirements for positions in the trading book and own funds requirements for securitisation positions in the non-trading book, provided that the institution is able to calculate and compare the own funds requirements for the relevant positions. For the purpose of this paragraph, overlapping occurs when the positions, wholly or partially, represent an exposure to the same risk such that, to the extent of the overlap, there is a single exposure.

3. Where Article 263(c) applies to positions in the ABCP, the institution may, use the risk-weight assigned to a liquidity facility in order to calculate the risk-weighted exposure amount for the ABCP provided that 100 % of the ABCP issued by the programme is covered by this or other liquidity facilities and all of those liquidity facilities rank pari passu with the ABCP so that they form overlapping positions.

The institution shall notify to the competent authorities the use it makes of this treatment.

Article 242
Recognition of credit risk mitigation for securitisation positions

1. An institution may recognise funded or unfunded credit protection obtained in respect of a securitisation position in accordance with Chapter 4 and subject to the requirements laid down in this Chapter and in Chapter 4.

Eligible funded credit protection is limited to financial collateral which is eligible for the calculation of risk-weighted exposure amounts under Chapter 2 as laid down under Chapter 4 and recognition is subject to compliance with the relevant requirements as laid down under Chapter 4.

2. Eligible unfunded credit protection and unfunded credit protection providers are limited to those which are eligible under Chapter 4 and recognition is subject to compliance with the relevant requirements laid down under that Chapter 4.

3. By derogation from paragraph 2, the eligible providers of unfunded credit protection listed in Article 197 shall have a credit assessment by a recognised ECAI which has been determined to be associated with credit quality step 3 or above under Article 131 and shall have been associated with credit quality step 2 or above at the time the credit protection was first recognised. Institutions that have a permission to apply the IRB approach to a direct exposure to the protection provider may assess eligibility according to the first sentence based on the equivalence of the PD for the protection provider to the PD associated with the credit quality steps referred to in that point.

4. By derogation from paragraph 2, SSPEs are eligible protection providers where they own assets that qualify as eligible financial collateral and to which there are no rights or contingent rights preceding or ranking pari passu to the contingent rights of the institution receiving unfunded credit protection and all requirements for the recognition of financial collateral in Chapter 4 are fulfilled. In those cases, GA (the amount of the protection adjusted for any currency mismatch and maturity mismatch in accordance with the provisions of Chapter 4) shall be limited to the volatility adjusted market value of those assets and g (the risk weight of exposures to the protection provider as specified under the Standardised Approach) shall be determined as the weighted-average risk weight that would apply to those assets as financial collateral under the Standardised Approach.

Article 243
Implicit support

1. A sponsor institution, or an originator institution which in respect of a securitisation has made use of Article 240(1) and (2) in the calculation of risk-weighted exposure amounts or has sold instruments from its trading book to the effect that it is no longer required to hold own funds for the risks of those instruments shall not, with a view to reducing potential or actual losses to investors, provide support to the securitisation beyond its contractual obligations. A transaction shall not be considered to provide support if it is executed at arm's length conditions and taken into account in the assessment of significant risk transfer. Any such transaction shall be, regardless of whether it provides support, notified to the competent authorities and subject to the institution's credit review and approval process. The institution shall, when assessing whether the transaction is not structured to provide support, adequately consider at least all the following:

   (a) the price of the repurchase;

   (b) the institutions' capital and liquidity position before and after repurchase;

   (c) the performance of the securitised exposures;

   (d) the performance of the securitisation positions;

2. EBA shall issue, in accordance with Article 16 or Regulation (EU) No 1093/2010, guidelines on what constitutes arm's length conditions and when a transaction is not structured to provide support.

3. If an originator institution or a sponsor institution fails to comply with paragraph 1 in respect of a securitisation this institution shall at a minimum hold own funds against all of the securitised exposures as if they had not been securitised.

SUB-SECTION 2
ORIGINATOR INSTITUTIONS' CALCULATION OF RISK-WEIGHTED EXPOSURE AMOUNTS SECURITISED IN A SYNTHETIC SECURITISATION

Article 244
General treatment

In calculating risk-weighted exposure amounts for the securitised exposures, where the conditions in Article 239 are met, the originator institution of a synthetic securitisation shall, subject to Article 245, use the relevant calculation methodologies set out in this Section and not those set out in Chapter 2. For institutions calculating risk-weighted exposure amounts and expected loss amounts under Chapter 3, the expected loss amount in respect of such exposures shall be zero.

The requirements set out in the first subparagraph apply to the entire pool of exposures included in the securitisation. Subject to Article 245, the originator institution shall calculate risk-weighted exposure amounts in respect of all tranches in the securitisation in accordance with the provisions of this Section

including those for which the institution recognises credit risk mitigation in accordance with Article 242, in which case the risk-weight to be applied to that position may be modified in accordance with Chapter 4, subject to the requirements laid down in this Chapter.

Article 245
Treatment of maturity mismatches in synthetic securitisations

For the purposes of calculating risk-weighted exposure amounts in accordance with Article 244, any maturity mismatch between the credit protection by which the tranching is achieved and the securitised exposures shall be taken into consideration as follows:

(a) the maturity of the securitised exposures shall be taken to be the longest maturity of any of those exposures subject to a maximum of five years. The maturity of the credit protection shall be determined in accordance with Chapter 4;

(b) an originator institution shall ignore any maturity mismatch in calculating risk-weighted exposure amounts for tranches appearing pursuant to this Section with a risk weighting of 1250 %. For all other tranches, the maturity mismatch treatment set out in Chapter 4 shall be applied in accordance with the following formula:

$$RW^{*} = RW_{SP} \cdot \frac{t - t^{*}}{T - t^{*}} + RW_{Ass} \cdot \frac{T - t}{T - t^{*}}$$

where:

RW^{*} = risk-weighted exposure amounts for the purposes of Article 87(a);

RW_{Ass} = risk-weighted exposure amounts for exposures if they had not been securitised, calculated on a pro-rata basis;

RW_{SP} = risk-weighted exposure amounts calculated under Article 244 if there was no maturity mismatch;

T = maturity of the underlying exposures expressed in years;

t = maturity of credit protection. expressed in years;

t^{*} = 0.25.

SUB-SECTION 3
CALCULATION OF RISK-WEIGHTED EXPOSURE AMOUNTS UNDER THE STANDARDISED APPROACH

Article 246
Risk-weights

Subject to Article 247, the institution shall calculate the risk-weighted exposure amount of a rated securitisation or re-securitisation position by applying the relevant risk weight to the exposure value.

The relevant risk weight shall be the risk weight as laid down in Table 1, with which the credit assessment of the position is associated in accordance with Section 4.

Table 1

Credit Quality Step	1	2	3	4 (only for credit assessments other than short-term credit assessments)	all other credit quality steps
Securitisation positions	20%	50%	100%	350%	1250%
Re-securitisation positions	40%	100%	225%	650%	1250%

Subject to Articles 247 to 250, the risk-weighted exposure amount of an unrated securitisation position shall be calculated by applying a risk weight of 1250 %.

Article 247
Originator and sponsor institutions

For an originator institution or sponsor institution, the risk-weighted exposure amounts calculated in respect of its securitisation positions in any one securitisation may be limited to the risk-weighted exposure amounts which would currently be calculated for the securitised exposures had they not been securitised subject to the presumed application of a 150 % risk weight to the following:

(a) all items currently in default;

(b) all items associated with particularly high risk in accordance with Article 123 amongst the securitised exposures.

Article 248
Treatment of unrated positions

1. For the purpose of calculating the risk-weighted exposure amount of an unrated securitisation position an institution may apply the weighted-average risk weight that would be applied to the securitised exposures under Chapter 2 by an institution holding the exposures, multiplied by the concentration ratio referred to in paragraph 2. For this purpose, the institution shall know the composition of the pool of securitised exposures securitised at all times.

2. The concentration ratio shall be equal to the sum of the nominal amounts of all the tranches divided by the sum of the nominal amounts of the tranches junior to or pari passu with the tranche in which the position is held including that tranche itself. The resulting risk weight shall not be higher than 1250 % or lower than any risk weight applicable to a rated more senior tranche. Where the institution is unable to determine the risk weights that would be applied to the securitised exposures under Chapter 2, it shall apply a risk weight of 1250 % to the position.

Article 249
Treatment of securitisation positions in a second loss tranche or better in an ABCP programme

Subject to the availability of a more favourable treatment for unrated liquidity facilities under Article 250 an institution may apply to securitisation positions meeting the following conditions a risk weight that is the greater of 100 % or the highest of the risk weights that would be applied to any of the securitised exposures under Chapter 2 by an institution holding the exposures:

(a) the securitisation position shall be in a tranche which is economically in a second loss position or better in the securitisation and the first loss tranche shall provide meaningful credit enhancement to the second loss tranche;

(b) the quality of the securitisation position shall be equivalent to investment grade or better;

(c) the securitisation position shall be held by an institution which does not hold a position in the first loss tranche.

Article 250
Treatment of unrated liquidity facilities

1. Institutions may apply a conversion factor of 50 % to the nominal amount of an unrated liquidity facility in order to determine its exposure value when the following conditions are met:

   (a) the liquidity facility documentation shall clearly identify and limit the circumstances under which the facility may be drawn;

   (b) it shall not be possible for the facility to be drawn so as to provide credit support by covering losses already incurred at the time of draw and in particular not so as to provide liquidity in respect of exposures in default at the time of draw or so as to acquire assets at more than fair value;

(c) the facility shall not be used to provide permanent or regular funding for the securitisation;

(d) repayment of draws on the facility shall not be subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments, nor be subject to waiver or deferral;

(e) it shall not be possible for the facility to be drawn after all applicable credit enhancements from which the liquidity facility would benefit are exhausted;

(f) the facility shall include a provision that results in an automatic reduction in the amount that can be drawn by the amount of exposures that are in default, where 'default' has the meaning given to it under Chapter 3, or where the pool of securitised exposures consists of rated instruments, that terminates the facility if the average quality of the pool falls below investment grade.

The risk weight to be applied shall be the highest risk weight that would be applied to any of the securitised exposures under Chapter 2 by an institution holding the exposures.

2. To determine the exposure value of cash advance facilities, a conversion factor of 0 % may be applied to the nominal amount of a liquidity facility that is unconditionally cancellable provided that the conditions set out in paragraph 1 are satisfied and that repayment of draws on the facility are senior to any other claims on the cash flows arising from the securitised exposures.

Article 251

Additional own funds requirements for securitisations of revolving exposures with early amortisation provisions

1. Where there is a securitisation of revolving exposures subject to an early amortisation provision, the originator institution shall calculate an additional risk-weighted exposure amount in respect of the risk that the levels of credit risk to which it is exposed may increase following the operation of the early amortisation provision, according to this Article.

2. The institution shall calculate a risk-weighted exposure amount in respect of the sum of the exposure values of the originator's interest and the investors' interest.

For securitisation structures where the securitised exposures comprise revolving and non-revolving exposures, an originator institution shall apply the treatment set out in paragraphs 3 to 6 to that portion of the underlying pool containing revolving exposures.

The exposure value of the originator's interest shall be the exposure value of that notional part of a pool of drawn amounts sold into a securitisation, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having securitisation positions in the securitisation. The originator's interest shall not be subordinate to the investors' interest. The exposure value of the investors' interest shall be the exposure value of the remaining notional part of the pool of drawn amounts.

The risk-weighted exposure amount in respect of the exposure value of the originator's interest shall be calculated as that for a pro rata exposure to the securitised exposures as if they had not been securitised.

3. Originators of the following types of securitisation are exempt from the calculation of an additional risk-weighted exposure amount in paragraph 1:

(a) securitisations of revolving exposures whereby investors remain fully exposed to all future draws by borrowers so that the risk on the underlying facilities does not return to the originator institution even after an early amortisation event has occurred;

(b) securitisations where any early amortisation provision is solely triggered by events not related to the performance of the securitised assets or the originator institution, such as material changes in tax laws or regulations.

4. For an originator institution subject to the calculation of an additional risk-weighted exposure amount according to paragraph 1 the total of the risk-weighted exposure amounts in respect of its positions in the investors' interest and the risk-weighted exposure amounts calculated under paragraph 1 shall be no greater than the greater of:

(a) the risk-weighted exposure amounts calculated in respect of its positions in the investors' interest;

(b) the risk-weighted exposure amounts that would be calculated in respect of the securitised exposures by an institution holding the exposures as if they had not been securitised in an amount equal to the investors' interest.

Deduction of net gains, if any, arising from the capitalisation of future income required under Article 29(1), shall be treated outside the maximum amount indicated in the preceding sub-paragraph.

5. The risk-weighted exposure amount to be calculated in accordance with paragraph 1 shall be determined by multiplying the exposure value of the investors' interest by the product of the appropriate conversion factor as indicated in paragraphs 6 to 9 and the weighted average risk weight that would apply to the securitised exposures if the exposures had not been securitised.

An early amortisation provision shall be considered to be controlled where all of the following conditions are met:

(a) the originator institution has an appropriate own funds/liquidity plan in place to ensure that it has sufficient own funds and liquidity available in the event of an early amortisation;

(b) throughout the duration of the transaction there is pro-rata sharing between the originator's interest and the investor's interest of payments of interest and principal, expenses, losses and recoveries based on the balance of receivables outstanding at one or more reference points during each month;

(c) the amortisation period is considered sufficient for 90 % of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default;

(d) the speed of repayment is no more rapid than would be achieved by straight-line amortisation over the period set out in point (c).

6. In the case of securitisations subject to an early amortisation provision of retail exposures which are uncommitted and unconditionally cancellable without prior notice, where the early amortisation is triggered by the excess spread level falling to a specified level, institutions shall compare the three-month average excess spread level with the excess spread levels at which excess spread is required to be trapped.

Where the securitisation does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points greater than the excess spread level at which an early amortisation is triggered.

The conversion factor to be applied shall be determined by the level of the actual three month average excess spread in accordance with Table 2.

Table 2		
	Securitisations subject to a controlled early amortisation provision	Securitisations subject to a non-controlled early amortisation provision
3 months average excess spread	Conversion factor	Conversion factor
Above level A	0 %	0 %
Level A	1 %	5 %
Level B	2 %	15 %
Level C	10 %	50 %
Level D	20 %	100 %
Level E	40 %	100 %

Where:

(a) ‘Level A’ refers to levels of excess spread less than 133.33 % of the trapping level of excess spread but not less than 100 % of that trapping level;

(b) ‘Level B’ refers to levels of excess spread less than 100 % of the trapping level of excess spread but not less than 75 % of that trapping level;

(c) ‘Level C’ refers to levels of excess spread less than 75 % of the trapping level of excess spread but not less than 50 % of that trapping level;

(d) ‘Level D’ refers to levels of excess spread less than 50 % of the trapping level of excess spread but not less than 25 % of that trapping level;

(e) ‘Level E’ refers to levels of excess spread less than 25 % of the trapping level of excess spread.

7. In the case of securitisations subject to an early amortization provision of retail exposures which are uncommitted and unconditionally cancellable without prior notice and where the early amortization is triggered by a quantitative value in respect of something other than the three months average excess spread, subject to permission by the competent authorities, institutions may apply a treatment which approximates closely to that prescribed in paragraph 6 for determining the conversion factor indicated. The competent authority shall grant permission, if the following conditions are met:

(a) this treatment is more appropriate because the firm can establish a quantitative measure equivalent, in relation to the quantitative value triggering early amortisation, to the trapping level of excess spread;

(b) this treatment leads to a measure of the risk that the credit risk to which the institution is exposed may increase following the operation of the early amortisation provision that is as prudent as that calculated in accordance with paragraph 6.

8. All other securitisations subject to a controlled early amortisation provision of revolving exposures shall be subject to a conversion factor of 90 %.

9. All other securitisations subject to a non-controlled early amortisation provision of revolving exposures shall be subject to a conversion factor of 100 %.

Article 252

Credit risk mitigation for securitisation positions subject to the Standardised Approach

Where credit protection is obtained on a securitisation position, the calculation of risk-weighted exposure amounts may be modified in accordance with Chapter 4.

Article 253

Reduction in risk-weighted exposure amounts

Where a securitisation position is assigned a 1250 % risk weight, institutions may in accordance with Article 33(1)(k), as an alternative to including the position in their calculation of risk-weighted exposure amounts, deduct from own funds the exposure value of the position. For these purposes, the calculation of the exposure value may reflect eligible funded credit protection in a manner consistent with Article 252.

Where an originator institution makes use of this alternative, it may subtract 12.5 times the amount deducted in accordance with Article 33(1)(k) from the amount specified in Article 247 as the risk-

weighted exposure amount which would currently be calculated for the securitised exposures had they not been securitised.

SUB-SECTION 4
CALCULATION OF RISK-WEIGHTED EXPOSURE AMOUNTS UNDER THE IRB APPROACH

Article 254
Hierarchy of methods

1. Institutions shall use the methods in accordance with the following hierarchy:

   (a) for a rated position or a position in respect of which an inferred rating may be used, the Ratings Based Method set out in Article 256 shall be used to calculate the risk-weighted exposure amount;

   (b) for an unrated position the institution may use the Supervisory Formula Method set out in Article 257 where it can produce estimates of PD, and where applicable EAD and LGD as inputs into the Supervisory Formula Method in accordance with the requirements for the estimation of those parameters under the Internal Ratings Based approach in accordance with Section 3. An institution other than the originator institution may only use the Supervisory Formula Method subject to the permission of the competent authorities, which shall be granted where the institution fulfils the condition provided in the previous sentence;

   (c) as an alternative to point (b) and only for unrated positions in ABCP programmes, the institution may use the Internal Assessment Approach as set out in paragraph 3 if the competent authorities have permitted it to do so;

   (d) in all other cases, a risk weight of 1250 % shall be assigned to securitisation positions which are unrated.

2. For the purposes of using inferred ratings, an institution shall attribute to an unrated position an inferred credit assessment equivalent to the credit assessment of a rated reference position which is the most senior position which is in all respects subordinate to the unrated securitisation position in question and meets all of the following conditions:

   (a) the reference positions must be subordinate in all respects to the unrated securitisation position;

   (b) the maturity of the reference positions shall be equal to or longer than that of the unrated position in question;

   (c) on an ongoing basis, any inferred rating shall be updated to reflect any changes in the credit assessment of the reference positions.

3. The competent authorities shall grant credit institutions permission to use the 'Internal Assessment Approach' as set out in paragraph 4 where all of the following conditions are met:

(a) positions in the commercial paper issued from the ABCP programme shall be rated positions;

(b) the internal assessment of the credit quality of the position shall reflect the publicly available assessment methodology of one or more eligible ECAIs, for the rating of securities backed by the exposures of the type securitised;

(c) the ECAIs, the methodology of which shall be reflected as required by point (b), shall include those ECAIs which have provided an external rating for the commercial paper issued from the ABCP programme. Quantitative elements, such as stress factors, used in assessing the position to a particular credit quality shall be at least as conservative as those used in the relevant assessment methodology of the ECAIs in question;

(d) in developing its internal assessment methodology the institution shall take into consideration relevant published ratings methodologies of the eligible ECAIs that rate the commercial paper of the ABCP programme. This consideration shall be documented by the institution and updated regularly, as outlined in point (g);

(e) the institution's internal assessment methodology shall include rating grades. There shall be a correspondence between such rating grades and the credit assessments of eligible ECAIs. This correspondence shall be explicitly documented;

(f) the internal assessment methodology shall be used in the institution's internal risk management processes, including its decision making, management information and internal capital allocation processes;

(g) internal or external auditors, an ECAI, or the institution's internal credit review or risk management function shall perform regular reviews of the internal assessment process and the quality of the internal assessments of the credit quality of the institution's exposures to an ABCP programme. If the institution's internal audit, credit review, or risk management functions perform the review, then these functions shall be independent of the ABCP programme business line, as well as the customer relationship;

(h) the institution shall track the performance of its internal ratings over time to evaluate the performance of its internal assessment methodology and shall make adjustments, as necessary, to that methodology when the performance of the exposures routinely diverges from that indicated by the internal ratings;

(i) the ABCP programme shall incorporate underwriting standards in the form of credit and investment guidelines. In deciding on an asset purchase, the ABCP programme administrator shall consider the type of asset being purchased, the type and monetary value of the exposures arising from the provision of liquidity facilities and credit enhancements, the loss distribution, and the legal and economic isolation of the transferred assets from the entity selling the assets. A credit analysis of the asset seller's risk profile shall be performed and shall include analysis of past and expected future financial performance, current market position, expected future competitiveness, leverage, cash flow, interest coverage and debt rating. In addition, a review of the seller's underwriting standards, servicing capabilities, and collection processes shall be performed;

(j) the ABCP programme's underwriting standards shall establish minimum asset eligibility criteria that, in particular:

(i) exclude the purchase of assets that are significantly past due or defaulted;

(ii) limit excess concentration to individual obligor or geographic area;

(iii) limits the tenor of the assets to be purchased;

(k) the ABCP programme shall have collections policies and processes that take into account the operational capability and credit quality of the servicer. The ABCP programme shall mitigate risk relating to the performance of the seller and the servicer through various methods, such as triggers based on current credit quality that would preclude commingling of funds;

(l) the aggregated estimate of loss on an asset pool that the ABCP programme is considering purchasing shall take into account all sources of potential risk, such as credit and dilution risk. If the seller-provided credit enhancement is sized based only on credit-related losses, then a separate reserve shall be established for dilution risk, if dilution risk is material for the particular exposure pool. In addition, in sizing the required enhancement level, the program shall review several years of historical information, including losses, delinquencies, dilutions, and the turnover rate of the receivables;

(m) the ABCP programme shall incorporate structural features, such as wind-down triggers, into the purchase of exposures in order to mitigate potential credit deterioration of the underlying portfolio.

4. Under the Internal Assessment Approach, the unrated position shall be assigned by the institution to one of the rating grades laid down in point (e) paragraph 3. The position shall be attributed a derived rating the same as the credit assessments corresponding to that rating grade as laid down in point (e) of paragraph 3. Where this derived rating is, at the inception of the securitisation, at the level of investment grade or better, it shall be considered the same as an eligible credit assessment by an eligible ECAI for the purposes of calculating risk-weighted exposure amounts.

5. Institutions which have obtained permission to use the Internal Assessment Approach shall not revert to the use of other methods unless all of the following conditions are met:

(a) the institution has demonstrated to the satisfaction of the competent authority that the institution has good cause to do so;

(b) the institution has received the prior permission of the competent authority.

Article 255
Maximum risk-weighted exposure amounts

For an originator institution, a sponsor institution, or for other institutions which can calculate K_{IRB}, the risk-weighted exposure amounts calculated in respect of its positions in a securitisation may be limited to that which would produce a own funds requirement under Article 87(3) equal to the sum of 8 % of

the risk-weighted exposure amounts which would be produced if the securitised assets had not been securitised and were on the balance sheet of the institution plus the expected loss amounts of those exposures.

Article 256
Ratings Based Method

1. Under the Ratings Based Method, the institution shall calculate the risk-weighted exposure amount of a rated securitisation or re-securitisation position by applying the relevant risk weight to the exposure value and multiplying the result by 1.06.

   The relevant risk weight shall be the risk weight as laid down in Table 4, with which the credit assessment of the position is associated in accordance with Section 4.

Table 4

Credit Quality Step		Securitisation Positions			Re-securitisation Positions	
Credit assessments other than short term	Short term credit assessments	A	B	C	D	E
1	1	7%	12%	20%	20%	30%
2		8%	15%	25%	25%	40%
3		10%	18%	35%	35%	50%
4	2	12%	20%		40%	65%
5		20%	35%		60%	100%
6		35%	50%		100%	150%
7	3	60%	75%		150%	225%
8		100%			200%	350%
9		250%			300%	500%
10		425%			500%	650%
11		650%			750%	850%
all other and unrated		1250%				

The weightings in column C of Table 4 shall be applied where the securitisation position is not a re-securitisation position and where the effective number of exposures securitised is less than six.

For the remainder of the securitisation positions that are not re-securitisation positions, the weightings in column B shall be applied unless the position is in the most senior tranche of a securitisation, in which case the weightings in column A shall be applied.

For re-securitisation positions the weightings in column E shall be applied unless the re-securitisation position is in the most senior tranche of the re-securitisation and none of the underlying exposures were themselves re-securitisation exposures, in which case column D shall be applied.

When determining whether a tranche is the most senior, it is not required to take into consideration amounts due under interest rate or currency derivative contracts, fees due, or other similar payments.

In calculating the effective number of exposures securitised multiple exposures to one obligor shall be treated as one exposure. The effective number of exposures is calculated as:

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

where EADi represents the sum of the exposure values of all exposures to the ith obligor. If the portfolio share associated with the largest exposure, C1, is available, the institution may compute N as $1/C_1$.

2. Credit risk mitigation on securitisation positions may be recognised in accordance with Articles 23(1) and (4), subject to the conditions in Article 242.

Article 257
Supervisory Formula Method

1. Under the Supervisory Formula Method, the risk weight for a securitisation position shall be calculated as follows subject to a floor of 20 % for re-securitisation positions and 7 % for all other securitisation positions:

$$12.5 \cdot \frac{S[L+T] - S[L]}{T}$$

where:

$$S[x] = \begin{cases} x, & when\ \ x \le K_{IRBR} \\ K_{IRBR} + K[x] - K[K_{IRBR}] + \left(1 - \exp\left(\frac{\omega \cdot (K_{IRBR} - x)}{K_{IRBR}}\right)\right) \cdot \frac{d \cdot K_{IRBR}}{\omega}, & when\ \ x > K_{IRBR} \end{cases}$$

where:

$$h = \left(1 - \frac{K_{IRBR}}{ELGD}\right)^{N};$$

$$c = \frac{K_{IRBR}}{1-h};$$

$$\nu = \frac{\left(ELGD - K_{IRBR}\right)\cdot K_{IRBR} + 0.25\cdot\left(1 - ELGD\right)\cdot K_{IRBR}}{N};$$

$$f = \left(\frac{\nu + K_{IRBR}^2}{1-h} - c^2\right) + \frac{\left(1 - K_{IRBR}\right)\cdot K_{IRBR} - \nu}{\left(1-h\right)\cdot\tau};$$

$$g = \frac{\left(1-c\right)\cdot c}{f} - 1;$$

$$a = g \cdot c;$$

$$b = g \cdot \left(1 - c\right);$$

$$d = 1 - \left(1-h\right)\cdot\left(1 - Beta\left[K_{IRBR}; a, b\right]\right);$$

$$K\left[x\right] = \left(1-h\right)\cdot\left(\left(1 - Beta\left[x; a, b\right]\right)\cdot x + Beta\left[x; a+1, b\right]\cdot c\right);$$

τ = 1000;

ω = 20;

Beta [x; a, b] = the cumulative beta distribution with parameters a and b evaluated at x;

T = the thickness of the tranche in which the position is held, measured as the ratio of (a) the nominal amount of the tranche to (b) the sum of the nominal amounts of the exposures that have been securitised. For derivative instruments listed in Annex II, the sum of the current replacement and the potential future credit exposure calculated in accordance with Chapter 6 shall be used in place of the nominal amount;

K_{IRBR} = the ratio of (a) K_{IRB} to (b) the sum of the exposure values of the exposures that have been securitised, and is expressed in decimal form;

L = the credit enhancement level, measured as the ratio of the nominal amount of all tranches subordinate to the tranche in which the position is held to the sum of the nominal amounts of the exposures that have been securitised. Capitalised future income shall not be included in the measured L. Amounts due by counterparties to derivative instruments listed in Annex II that represent tranches more junior than the

tranche in question may be measured at their current replacement cost, without the potential future credit exposures, in calculating the enhancement level;

N = the effective number of exposures calculated in accordance with Article 256. In the case of re-securitisations, the institution shall look at the number of securitisation exposures in the pool and not the number of underlying exposures in the original pools from which the underlying securitisation exposures stem;

ELGD = the exposure-weighted average loss-given-default, calculated as follows:

$$ELGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i}$$

where:

LGD_i = the average LGD associated with all exposures to the i^{th} obligor, where LGD is determined in accordance with Chapter 3. In the case of resecuritisation, an LGD of 100 % shall be applied to the securitised positions. When default and dilution risk for purchased receivables are treated in an aggregate manner within a securitisation, the LGD_i input shall be constructed as a weighted average of the LGD for credit risk and the 75 % LGD for dilution risk. The weights shall be the stand-alone own funds charges for credit risk and dilution risk respectively.

2. Where the nominal amount of the largest securitised exposure, C_1, is no more than 3 % of the sum of the nominal amount of the securitised exposures, then, for the purposes of the Supervisory Formula Method, the institution may set LGD= 50 % and N equal to either of the following:

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

$$N = \frac{1}{C_1}$$

where:

C_m = the ratio of the sum of the nominal amounts of the largest ‘m’ exposures to the sum of the nominal amounts of the exposures securitised. The level of ‘m’ may be set by the institution.

For securitisations in which materially all securitised exposures are retail exposures, institutions may, subject to permission by the competent authority, use the Supervisory Formula Method using the simplifications h=0 and v=0, provided that the effective number of exposures is not low and that the exposures are not highly concentrated.

3. The competent authorities shall keep the EBA informed about the use institutions make of the previous sub-paragraph. EBA shall monitor the range of practices in this area and shall, in accordance with Article 16 of Regulation (EU) No. 1093/2010, issue guidelines.

4. Credit risk mitigation on securitisation positions may be recognised in accordance with paragraphs 2 to 4 of Article 259, subject to the conditions in Article 242.

Article 258
Liquidity Facilities

1. For the purposes of determining the exposure value of an unrated securitisation position in the form of cash advance facilities, a conversion factor of 0 % may be applied to the nominal amount of a liquidity facility that meets the conditions set out in Article 250(2).

2. When it is not practical for the institution to calculate the risk-weighted exposure amounts for the securitised exposures as if they had not been securitised, an institution may, on an exceptional basis, temporarily apply the method set out in paragraph 3 for the calculation of risk-weighted exposure amounts for an unrated securitisation position in the form of a liquidity facility that meets the conditions in Article 250(1) Institutions shall notify the use they make of the first sentence to the competent authorities, together with its reasons and the intended time period of use.

3. The highest risk weight that would be applied under Chapter 2 to any of the securitised exposures, had they not been securitised, may be applied to the securitisation position represented by a liquidity facility that meets the conditions in Article 250(1). To determine the exposure value of the position a conversion factor of 100 % shall be applied.

Article 259
Credit risk mitigation for securitisation positions subject to the IRB approach

1. Where risk-weighted exposure amounts are calculated using the Ratings Based Method, the exposure value or the risk-weight for a securitisation position in respect of which credit protection has been obtained may be modified in accordance with the provisions of Chapter 4 as they apply for the calculation of risk-weighted exposure amounts under Chapter 2.

2. In case of full credit protection, where risk-weighted exposure amounts are calculated using the Supervisory Formula Method, the following requirements shall apply:

   (a) the institution shall determine the 'effective risk weight' of the position. It shall do this by dividing the risk-weighted exposure amount of the position by the exposure value of the position and multiplying the result by 100;

   (b) in the case of funded credit protection, the risk-weighted exposure amount of the securitisation position shall be calculated by multiplying the funded protection-adjusted exposure amount of the position (E^*), as calculated under Chapter 4 for the calculation of risk-weighted exposure amounts under Chapter 2 taking the amount of the securitisation position to be E, by the effective risk weight;

(c) in the case of unfunded credit protection, the risk-weighted exposure amount of the securitisation position shall be calculated by multiplying the amount of the protection adjusted for any currency mismatch and maturity mismatch (G_A) in accordance with the provisions of Chapter 4 by the risk weight of the protection provider; and adding this to the amount arrived at by multiplying the amount of the securitisation position minus G_A by the effective risk weight.

3. In case of partial protection, where risk-weighted exposure amounts are calculated using the Supervisory Formula Method, the following requirements shall apply:

(a) if the credit risk mitigation covers the first loss or losses on a proportional basis on the securitisation position, the institution may apply paragraph 2;

(b) in other cases, the institution shall treat the securitisation position as two or more positions with the uncovered portion being considered the position with the lower credit quality. For the purposes of calculating the risk-weighted exposure amount for this position, the provisions in Article 257 shall apply subject to the modifications that T shall be adjusted to e^* in the case of funded credit protection; and to T-g in the case of unfunded credit protection, where e^* denotes the ratio of E^* to the total notional amount of the underlying pool, where E^* is the adjusted exposure amount of the securitisation position calculated in accordance with the provisions of Chapter 4 as they apply for the calculation of risk-weighted exposure amounts under Chapter 2 taking the amount of the securitisation position to be E; and g is the ratio of the nominal amount of credit protection, adjusted for any currency or maturity mismatch in accordance with the provisions of Chapter 4, to the sum of the exposure amounts of the securitised exposures. In the case of unfunded credit protection the risk weight of the protection provider shall be applied to that portion of the position not falling within the adjusted value of T.

4. Where, in case of unfunded credit protection, competent authorities have granted the institution permission to calculate risk-weighted exposure amounts for comparable direct exposures to the protection provider in accordance with Chapter 3, the risk weight g of exposures to the protection provider according to Article 230 shall be determined as specified in Chapter 3.

Article 260

Additional own funds requirements for securitisations of revolving exposures with early amortisation provisions

1. In addition to the risk-weighted exposure amounts calculated in respect of its securitisation positions, an originator institution shall calculate a risk-weighted exposure amount according to the methodology set out in Article 251 when it sells revolving exposures into a securitisation that contains an early amortisation provision.

2. By derogation from Article 251, the exposure value of the originators interest shall be the sum of the following items:

(a) the exposure value of that notional part of a pool of drawn amounts sold into a securitisation, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having securitisation positions in the securitisation;

(b) the exposure value of that part of the pool of undrawn amounts of the credit lines, the drawn amounts of which have been sold into the securitisation, the proportion of which to the total amount of such undrawn amounts is the same as the proportion of the exposure value described in point (a) to the exposure value of the pool of drawn amounts sold into the securitisation.

The originator's interest shall not be subordinate to the investors' interest.

The exposure value of the Investors' interest shall be the exposure value of the notional part of the pool of drawn amounts not falling within point (a) plus the exposure value of that part of the pool of undrawn amounts of credit lines, the drawn amounts of which have been sold into the securitisation, not falling within point (b).

3. The risk-weighted exposure amount in respect of the exposure value of the originator's interest according to point (a) of paragraph 2 shall be calculated as that for a pro-rata exposure to the securitised drawn amounts exposures as if they had not been securitised and a pro rata exposure to the undrawn amounts of the credit lines, the drawn amounts of which have been sold into the securitisation.

Article 261
Reduction in risk-weighted exposure amounts

1. The risk-weighted exposure amount of a securitisation position to which a 1250 % risk weight is assigned may be reduced by 12.5 times the amount of any specific credit adjustments made by the institution in respect of the securitised exposures. To the extent that specific credit adjustments are taken account of for this purpose they shall not be taken account of for the purposes of the calculation laid down in Article 155.

2. The risk-weighted exposure amount of a securitisation position may be reduced by 12.5 times the amount of any specific credit adjustments made by the institution in respect of the position.

3. As provided in Article 33(1)(k) in respect of a securitisation position in respect of which a 1250 % risk weight applies, institutions may, as an alternative to including the position in their calculation of risk-weighted exposure amounts, deduct from own funds the exposure value of the position subject to the following:

(a) the exposure value of the position may be derived from the risk-weighted exposure amounts taking into account any reductions made in accordance with paragraphs 1 and 2;

(b) the calculation of the exposure value may reflect eligible funded protection in a manner consistent with the methodology prescribed in Articles 242 and 259;

(c) where the Supervisory Formula Method is used to calculate risk-weighted exposure amounts and $L < K_{IRBR}$ and $[L+T] > K_{IRBR}$ the position may be treated as two positions with L equal to K_{IRBR} for the more senior of the positions.

4. Where an institution makes use of the option in paragraph 3 it may subtract 12.5 times the amount deducted in accordance with that paragraph from the amount specified in Article 255 as the amount to which the risk-weighted exposure amount in respect of its positions in a securitisation may be limited.

SECTION 4
EXTERNAL CREDIT ASSESSMENTS

Article 262
Recognition of ECAIs

1. Institutions may use ECAI credit assessments to determine the risk weight of a securitisation position only where the credit assessment has been issued by an ECAI or has been endorsed by an eligible ECAI in accordance with Regulation (EC) No 1060/2009.

2. Eligible ECAIs are all credit rating agencies that have been registered or certified in accordance with Regulation (EC) No 1060/2009 and central banks issuing credit ratings which are exempt from Regulation (EC) No 1060/2009.

3. EBA shall publish a list of eligible ECAIs.

Article 263
Requirements to be met by the credit assessments of ECAIs

For the purposes of calculating risk-weighted exposure amounts according to Section 3, institutions shall only use a credit assessment of an eligible ECAI if the following conditions are met:

(a) there shall be no mismatch between the types of payments reflected in the credit assessment and the types of payment to which the institution is entitled under the contract giving rise to the securitisation position in question;

(b) the credit assessments, procedures, methodologies assumptions and the key elements underpinning the assessments shall have been published by the ECAI. Also, loss and cash-flow analysis as well as sensitivity of ratings to changes in the underlying ratings assumptions, including the performance of pool assets, shall be published by the ECAI. Information that is made available only to a limited number of entities shall not be considered to have been published. The credit assessments shall be included in the ECAI's transition matrix;

(c) the credit assessment shall not be based or partly based on unfunded support provided by the institution itself. In such case, the institution shall consider the relevant position for the purposes of calculating risk-weighted exposure amounts for this position according to Section 3as if it were not rated.

The ECAI shall be committed to publish explanations how the performance of pool assets affects this credit assessment.

Article 264
Use of credit assessments

1. An institution may nominate one or more eligible ECAIs the credit assessments of which shall be used in the calculation of its risk-weighted exposure amounts under this Chapter (a 'nominated ECAI').

2. An institution shall use credit assessments consistently and not selectively in respect of its securitisation positions, in accordance with the following principles:

   (a) an institution may not use an ECAI's credit assessments for its positions in some tranches and another ECAI's credit assessments for its positions in other tranches within the same securitisation that may or may not be rated by the first ECAI;

   (b) where a position has two credit assessments by nominated ECAIs, the institution shall use the less favourable credit assessment;

   (c) where a position has more than two credit assessments by nominated ECAIs, the two most favourable credit assessments shall be used. If the two most favourable assessments are different, the less favourable of the two shall be used.

3. Where credit protection eligible under Chapter 4 is provided directly to the SSPE, and that protection is reflected in the credit assessment of a position by a nominated ECAI, the risk weight associated with that credit assessment may be used. Where the protection is not eligible under Chapter 4, the credit assessment shall not be recognised. Where the credit protection is not provided to the SSPE but directly to a securitisation position, the credit assessment shall not be recognised.

Article 265
Mapping

EBA shall develop draft implementing technical standards to determine, for all eligible ECAIs, which of the credit quality steps set out in this Chapter are associated with the relevant credit assessments of an eligible ECAI. Those determinations shall be objective and consistent, and carried out in accordance with the following principles:

(a) EBA shall differentiate between the relative degrees of risk expressed by each assessment;

(b) EBA shall consider quantitative factors, such as default and/or loss rates and the historical performance of credit assessments of each ECAI across different asset classes;

(c) EBA shall consider qualitative factors such as the range of transactions assessed by the ECAI, its methodology and the meaning of its credit assessments, in particular whether based on expected loss or first Euro loss;

(d) EBA shall seek to ensure that securitisation positions to which the same risk weight is applied on the basis of the credit assessments of eligible ECAIs are subject to equivalent degrees of credit risk. EBA shall consider modifying its determination as to the credit quality step with which a particular credit assessment shall be associated, as appropriate.

EBA shall submit those draft implementing technical standards to the Commission by 1 January 2014.

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with the procedure laid down in Article 15 of Regulation (EU) No 1093/2010.

Chapter 6
Counterparty credit risk

SECTION 1
DEFINITIONS

Article 266
Determination of the exposure value

1. An institution shall determine the exposure value of derivative instruments listed in Annex II in accordance with this Chapter.

2. An institution may determine the exposure value of repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions in accordance with this Chapter instead of making use of Chapter 4.

Article 267
Definitions

For the purposes of this Chapter and Title VI, the following definitions shall apply:

General terms

(1) 'counterparty credit risk' (hereinafter referred to as 'CCR') means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows;

Transaction types

(2) 'long settlement transactions' means transactions where a counterparty undertakes to deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities, or vice versa, at a settlement or delivery date specified by contract that is later than the market standard for this particular type of transaction or five business days after the date on which the institution enters into the transaction, whichever is earlier;

(3) ‘margin lending transactions’ means transactions in which an institution extends credit in connection with the purchase, sale, carrying or trading of securities. Margin lending transactions do not include other loans that are secured by collateral in the form of securities;

Netting set, hedging sets, and related terms

(4) ‘netting set’ means a group of transactions between an institution and a single counterparty that is subject to a legally enforceable bilateral netting arrangement that is recognised under Section 7 and Chapter 4;

Each transaction that is not subject to a legally enforceable bilateral netting arrangement which is recognised under Section 7 shall be treated as its own netting set for the purposes of this Chapter;

Under the Internal Model Method set out in Section 6, all netting sets with a single counterparty may be treated as a single netting set if negative simulated market values of the individual netting sets are set to 0 in the estimation of expected exposure (hereinafter referred to as ‘EE’);

(5) ‘risk position’ means a risk number that is assigned to a transaction under the Standardised Method set out in Section5 following a predetermined algorithm;

(6) ‘hedging set’ means a group of risk positions arising from the transactions within a single netting set, where only the balance of those risk positions is used for determining the exposure value under the Standardised Method set out in Section 5;

(7) ‘margin agreement’ means an agreement or provisions of an agreement under which one counterparty must supply collateral to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level;

(8) ‘margin threshold’ means the largest amount of an exposure that remains outstanding before one party has the right to call for collateral;

(9) ‘margin period of risk’ means the time period from the most recent exchange of collateral covering a netting set of transactions with a defaulting counterparty until the transactions are closed out and the resulting market risk is re-hedged;

(10) ‘effective maturity under the Internal Model Method for a netting set with maturity greater than one year’ means the ratio of the sum of expected exposure over the life of the transactions in the netting set discounted at the risk-free rate of return, divided by the sum of expected exposure over one year in a netting set discounted at the risk-free rate;

This effective maturity may be adjusted to reflect rollover risk by replacing expected exposure with effective expected exposure for forecasting horizons under one year;

(11) ‘cross-product netting’ means the inclusion of transactions of different product categories within the same netting set pursuant to the Cross-Product Netting rules set out in this Chapter;

(12) ‘Current Market Value’ (hereinafter referred to as ‘CMV’) for the purposes of Section 5 refers to the net market value of the portfolio of transactions within a netting set, where both positive and negative market values are used in computing the CMV;

Distributions

(13) ‘distribution of market values’ means the forecast of the probability distribution of net market values of transactions within a netting set for a future date (the forecasting horizon), given the realised market value of those transactions at the date of the forecast;

(14) ‘distribution of exposures’ means the forecast of the probability distribution of market values that is generated by setting forecast instances of negative net market values equal to zero;

(15) ‘risk-neutral distribution’ means a distribution of market values or exposures over a future time period where the distribution is calculated using market implied values such as implied volatilities;

(16) ‘actual distribution’ means a distribution of market values or exposures at a future time period where the distribution is calculated using historic or realised values such as volatilities calculated using past price or rate changes;

Exposure measures and adjustments

(17) ‘current exposure’ means the larger of zero and the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in insolvency or liquidation;

(18) ‘peak exposure’ means a high percentile of the distribution of exposures at particular future date before the maturity date of the longest transaction in the netting set;

(19) ‘expected exposure’ (hereinafter referred to as ‘EE’) means the average of the distribution of exposures at a particular future date before the longest maturity transaction in the netting set matures;

(20) ‘effective expected exposure at a specific date’ (hereinafter referred to as ‘Effective EE’) means the greater of the expected exposure at that specific date or the effective expected exposure at the prior date;

(21) ‘expected positive exposure’ (hereinafter referred to as ‘EPE’) means the weighted average over time of expected exposures, where the weights are the proportion of the entire time period that an individual expected exposure represents;

When calculating the own funds requirement, institutions shall take the average over the first year or, if all the contracts within the netting set mature within less than one year, over the time period of the longest maturity contract in the netting set.

(22) ‘effective expected positive exposure’ (hereinafter referred to as ‘Effective EPE’) means the weighted average of effective expected exposure over the first year of a netting set or, if all the contracts within the netting set mature within less than one year, over the time period of the

longest maturity contract in the netting set, where the weights are the proportion of the entire time period that an individual expected exposure represents;

CCR related risks

(23) 'rollover risk' means the amount by which EPE is understated when future transactions with a counterparty are expected to be conducted on an ongoing basis;

The additional exposure generated by those future transactions is not included in calculation of EPE;

(24) 'counterparty' for the purposes of Section 7 means any legal or natural person that enters into a netting agreement, and has the contractual capacity to do so;

(25) 'contractual cross product netting agreement' means a bilateral contractual agreement between an institution and a counterparty which creates a single legal obligation (based on netting of covered transactions) covering all bilateral master agreements and transactions belonging to different product categories that are included within the agreement;

For the purposes of this definition, 'different product categories' means:

(a) repurchase transactions, securities and commodities lending and borrowing transactions;

(b) margin lending transactions;

(c) the contracts listed in Annex II;

(26) 'payment leg' means the payment agreed in an OTC derivative transaction with a linear risk profile which stipulates the exchange of a financial instrument for a payment.

In the case of transactions that stipulate the exchange of payment against payment, those two payment legs shall consist of the contractually agreed gross payments, including the notional amount of the transaction.

SECTION 2
METHODS FOR CALCULATING THE EXPOSURE VALUE

Article 268
Methods for calculating the exposure value

1. Institutions shall determine the exposure value for the contracts listed in Annex II on the basis of one of the methods set out in Sections 3 to 6 in accordance with this Article.

An institution which is not eligible for the treatment set out in Article 89 shall not use the Original Exposure Method. To determine the exposure value for the contracts listed in point 3 of Annex II an institution shall not use the Original Exposure Method.

A group of institutions may use the methods set out in Sections 3 to 6 in combination on a permanent basis. A single institution shall not use the Mark-to-market Method and the Original Exposure Method in combination unless one of the methods is used for the cases set out in Article 276(6).

2. Where permitted by the competent authorities in accordance with paragraphs 1 and 2 of Article 277, an institution may determine the exposure value for the following items using the Internal Model Method set out in Section 6:

(a) the contracts listed in Annex II;

(b) repurchase transactions;

(c) securities or commodities lending or borrowing transactions;

(d) margin lending transactions;

(e) long settlement transactions.

3. When an institution purchases protection through a credit derivative against a non-trading book exposure or against a counterparty risk exposure, it may calculate its own funds requirement for the hedged exposure in accordance with either of the following:

(a) Article 228 to 231;

(b) in accordance with Article 148(3), or Article 179, where permission has been granted in accordance with Article 138.

The exposure value for CCR for those credit derivatives shall be zero, unless an institution applies the approach (ii) in point (h) of Article 293(2).

4. Notwithstanding paragraph 3, an institution may choose consistently to include for the purposes of calculating own funds requirements for counterparty credit risk all credit derivatives not included in the trading book and purchased as protection against a non-trading book exposure or against a counterparty risk exposure where the credit protection is recognised under this Regulation.

5. Where credit default swaps sold by an institution are treated by an institution as credit protection provided by that institution and are subject to own funds requirement for credit risk of the underlying for the full notional amount, their exposure value for the purposes of CCR in the non-trading book shall be zero.

6. Under all methods set out in Sections 3 to 6, the exposure value for a given counterparty shall be equal to the sum of the exposure values calculated for each netting set with that counterparty.

Where an institution calculates the risk-weighted exposure amounts arising from OTC derivatives in accordance with Chapter 2, the exposure value for a given netting set of OTC derivative instruments listed in Annex II calculated in accordance with this Chapter shall be the greater of zero and the difference between the sum of exposure values across all netting

sets with the counterparty and the sum of CVA for that counterparty being recognised by the institution as an incurred write-down.

7. Institutions shall determine the exposure value for exposures arising from long settlement transactions by any of the methods set out in Sections 3 to 6, regardless of which method the institution has chosen for treating OTC derivatives and repurchase transactions, securities or commodities lending or borrowing transactions, and margin lending transactions. In calculating the own funds requirements for long settlement transactions, an institution that uses the approach set out in Chapter 3 may assign the risk weights under the approach set out in Chapter 2 on a permanent basis and irrespective of the materiality of such positions.

8. For the methods set out in Sections 3 and 4, the institution shall adopt a consistent methodology for determining the notional amount, and shall ensure that the notional amount to be taken into account provides an appropriate measure of the risk inherent in the contract. Where the contract provides for a multiplication of cash flows, the notional amount shall be adjusted by an institution to take into account the effects of the multiplication on the risk structure of that contract.

SECTION 3
MARK – TO – MARKET METHOD

Article 269
Mark-to-market Method

1. In order to determine the current replacement cost of all contracts with positive values, institutions shall attach the current market values to the contracts.

2. In order to determine the potential future credit exposure, institutions shall multiply the notional amounts or underlying values, as applicable, by the percentages in Table 1 and in accordance with the following principles:

   (a) contracts which do not fall within one of the five categories indicated in Table 1 shall be treated as contracts concerning commodities other than precious metals;

   (b) for contracts with multiple exchanges of principal, the percentages shall be multiplied by the number of remaining payments still to be made in accordance with the contract;

   (c) for contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset so that the market value of the contract is zero on those specified dates, the residual maturity shall be equal to the time until the next reset date. In the case of interest-rate contracts that meet those criteria and have a remaining maturity of over one year, the percentage shall be no lower than 0.5 %.

Table 1					
Residual maturity	Interest-rate contracts	Contracts concerning	Contracts concerning	Contracts concerning	Contracts concerning

		foreign-exchange rates and gold	equities	precious metals except gold	commodities other than precious metals
One year or less	0 %	1 %	6 %	7 %	10 %
Over one year, not exceeding five years	0.5 %	5 %	8 %	7 %	12 %
Over five years	1.5 %	7.5 %	10 %	8 %	15 %

3. For contracts relating to commodities other than gold, which are referred to in point 3 of Annex II, an institution may, as an alternative to applying the percentages in Table 1, apply the percentages in Table 2 provided that that institution follows the extended maturity ladder approach set out in Article 350 for those contracts.

Table 2				
Residual maturity	Precious metals (except gold)	Base metals	Agricultural products (softs)	Other, including energy products
One year or less	2 %	2,5 %	3 %	4 %
Over one year, not exceeding five years	5 %	4 %	5 %	6 %
Over five years	7,5 %	8 %	9 %	10 %

4. The sum of current replacement cost and potential future credit exposure is the exposure value.

SECTION 4
ORIGINAL EXPOSURE METHOD

Article 270
Original Exposure Method

1. The exposure value is the notional amount of each instrument multiplied by the percentages set out in Table 3.

Table 3		
Original maturity	Interest-rate contracts	Contracts concerning foreign-exchange rates and gold
One year or less	0,5 %	2 %
Over one year, not exceeding two years	1 %	5 %
Additional allowance for each additional year	1 %	3 %

2. For calculating the exposure value of interest-rate contracts, an institution may choose to use either the original or residual maturity.

SECTION 5
STANDARDISED METHOD

Article 271
Standardised Method

1. Institutions may use the Standardised Method (hereinafter referred to as 'SM') only for calculating the exposure value for OTC derivatives and long settlement transactions.

2. When applying the SM, institutions shall calculate the exposure value separately for each netting set, net of collateral, as follows:

$$Exposure\ value = \beta \cdot \max\left\{CMV - CMC, \sum_j \left|\sum_i RPT_{ij} - \sum_l RPC_{lj}\right| \cdot CCRM_j\right\}$$

where:

CMV = current market value of the portfolio of transactions within the netting set with a counterparty gross of collateral, where:

$$CMV = \sum_i CMV_i$$

where:

CMV_i = the current market value of transaction i;

CMC = the current market value of the collateral assigned to the netting set, where:

$$CMC = \sum_l CMC_l$$

where

CMC_l = the current market value of collateral l;

i = index designating transaction;

l = index designating collateral;

j = index designating hedging set category;

The hedging sets for this purpose correspond to risk factors for which risk positions of opposite sign can be offset to yield a net risk position on which the exposure measure is then based.

RPT_{ij} = risk position from transaction i with respect to hedging set j;

RPC_{lj} = risk position from collateral l with respect to hedging set j;

$CCRM_j$ = CCR Multiplier set out in Table 5 with respect to hedging set j;

β = 1.4.

3. For the purposes of the calculation under paragraph 2:

(a) eligible collateral received from a counterparty shall have a positive sign and collateral posted to a counterparty shall have a negative sign;

(b) only collateral that is eligible under Article 193(2) and Article 232 shall be used for the SM;

(c) an institution may disregard the interest rate risk from payment legs with a remaining maturity of less than one year;

(d) an institution may treat transactions that consist of two payment legs that are denominated in the same currency as a single aggregate transaction. The treatment for payment legs applies to the aggregate transaction.

Article 272
Transactions with a linear risk profile

1. Institutions shall map transactions with a linear risk profile to risk positions in accordance with the following provisions:

   (a) transactions with a linear risk profile with equities (including equity indices), gold, other precious metals or other commodities as the underlying shall be mapped to a risk position in the respective equity (or equity index) or commodity and an interest rate risk position for the payment leg;

   (b) transactions with a linear risk profile with a debt instrument as the underlying instrument shall be mapped to an interest rate risk position for the debt instrument and another interest rate risk position for the payment leg;

   (c) transactions with a linear risk profile that stipulate the exchange of payment against payment, including foreign exchange forwards, shall be mapped to an interest rate risk position for each of the payment legs.

   Where, under a transaction mentioned in point (a), (b) or (c), a payment leg or the underlying debt instrument is denominated in foreign currency, that payment leg or underlying instrument shall also be mapped to a risk position in that currency.

2. For the purposes of paragraph 1, the size of a risk position from a transaction with linear risk profile shall be the effective notional value (market price multiplied by quantity) of the underlying financial instruments or commodities converted to the institution's domestic currency by multiplication with the relevant exchange rate, except for debt instruments.

3. For debt instruments and for payment legs, the size of the risk position shall be the effective notional value of the outstanding gross payments (including the notional amount) converted to the currency of the home Member State of the institution, multiplied by the modified duration of the debt instrument or payment leg, as the case may be.

4. The size of a risk position from a credit default swap shall be the notional value of the reference debt instrument multiplied by the remaining maturity of the credit default swap.

Article 273
Transactions with a non-linear risk profile

1. Institutions shall determine the size of the risk positions for transactions with a non-linear risk profile in accordance with the following paragraphs.

2. The size of a risk position from an OTC derivative with a non-linear risk profile, including options and swaptions, of which the underlying is not a debt instrument shall be equal to the delta equivalent effective notional value of the financial instrument that underlies the transaction in accordance with Article 274(1).

3. The size of a risk position from an OTC derivative with a non-linear risk profile, including options and swaptions, of which the underlying is a debt instrument or a payment leg, shall be

equal to the delta equivalent effective notional value of the financial instrument or payment leg multiplied by the modified duration of the debt instrument or payment leg, as the case may be.

4. For the determination of risk positions, institutions shall treat collateral as follows:

(a) collateral received from a counterparty shall be treated as a claim on the counterparty under a derivative contract (long position) that is due on the day the determination is made;

(b) collateral it has posted with the counterparty shall be treated as an obligation to the counterparty (short position) that is due on the day the determination is made.

Article 274
Calculation of risk positions

1. An institution shall determine the size and sign of a risk position as follows:

(a) for all instruments other than debt instruments:

(i) as the effective notional value in the case of a transaction with a linear risk profile;

(ii) as the delta equivalent notional value, $p_{ref} \cdot \frac{\partial V}{\partial p}$,in the case of a transaction with a non-linear risk profile,

where:

P_{ref} = price of the underlying instrument, expressed in the reference currency;

V = value of the financial instrument (in the case of an option, the value is the option price);

p = price of the underlying instrument, expressed in the same currency as V;

(b) for debt instruments and the payment legs of all transactions:

(i) as the effective notional value multiplied by the modified duration in the case of a transaction with a linear risk profile;

(ii) as the delta equivalent in notional value multiplied by the modified duration, $\frac{\partial V}{\partial r}$, in the case of a transaction with a non-linear risk profile,

where:

V = value of the financial instrument (in the case of an option this is the option price);

r = interest rate level.

If V is denominated in a currency other than the reference currency, the derivative shall be converted into the reference currency by multiplication with the relevant exchange rate.

2. For the purposes of applying the formulas in paragraph 1, institutions shall group the risk positions into hedging sets. The absolute value amount of the sum of the resulting risk positions shall be calculated for each hedging set. The net risk position shall be the result of that calculation and shall be calculated for the purposes of paragraph 1 as follows:

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

Article 275
Interest rate risk positions

1. In order to calculate interest rate positions, institutions shall apply the following provisions.

2. For interest rate risk positions from the following:

(a) money deposits received from the counterparty as collateral;

(b) a payment legs;

(c) underlying debt instruments,

to which in each case a capital charge of 1,60 % or less applies in accordance with Table 1 of Article 325, institutions shall assign those positions to one of the six hedging sets for each currency set out in Table 4.

Table 4		
	Government referenced interest rates	Non-government referenced interest rates
Maturity	< 1 year >1 ≤ 5 years > 5 years	< 1 year >1 ≤ 5 years > 5 years

3. For interest rate risk positions from underlying debt instruments or payment legs for which the interest rate is linked to a reference interest rate that represents a general market interest level, the remaining maturity shall be the length of the time interval up to the next re-adjustment of the interest rate. In all other cases, it shall be the remaining life of the underlying debt instrument or, in the case of a payment leg, the remaining life of the transaction.

Article 276
Hedging sets

1. Institutions shall establish hedging sets in accordance with paragraphs (2) to (5).

2. There shall be one hedging set for each issuer of a reference debt instrument that underlies a credit default swap.

   N-th to default basket credit default swaps shall be treated as follows:

   (a) the size of a risk position in a reference debt instrument in a basket underlying an n-th to default credit default swap shall be the effective notional value of the reference debt instrument, multiplied by the modified duration of the n-th to default derivative with respect to a change in the credit spread of the reference debt instrument;

   (b) there shall be one hedging set for each reference debt instrument in a basket underlying a given 'nth to default' credit default swap. Risk positions from different n-th to default credit default swaps shall not be included in the same hedging set;

   (c) the CCR multiplier applicable to each hedging set created for one of the reference debt instruments of an n-th to default derivative shall be as follows:

      (i) 0.3% for reference debt instruments that have a credit assessment from a recognised ECAI equivalent to credit quality step 1 to 3;

      (ii) 0.6 % for other debt instruments.

3. For interest rate risk positions from:

   (a) money deposits that are posted with a counterparty as collateral when that counterparty does not have debt obligations of low specific risk outstanding;

   (b) underlying debt instruments,

   to which according to Table 1 of Article 325 a capital charge of more than 1.60 % applies, there shall be one hedging set for each issuer.

   When a payment leg emulates such a debt instrument, there shall also be one hedging set for each issuer of the reference debt instrument.

   An institution may assign risk positions that arise from debt instruments of a particular 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.

4. Underlying financial instruments other than debt instruments shall be assigned to the same hedging sets only if they are identical or similar instruments. In all other cases they shall be assigned to separate hedging sets.

   For the purposes of this paragraph institutions shall determine whether underlying instruments are similar in accordance with the following principles:

(a) for equities, the underlying is similar if it is issued by the same issuer. An equity index shall be treated as a separate issuer;

(b) for precious metals, the underlying is similar if it is the same metal. A precious metal index shall be treated as a separate precious metal;

(c) for electric power, the underlying is similar if the delivery rights and obligations refer to the same peak or off-peak load time interval within any 24-hour interval;

(d) for commodities, the underlying is similar if it is the same commodity. A commodity index shall be treated as a separate commodity.

5. The CCR multipliers (hereinafter referred to as 'CCRM') for the different hedging set categories are set out in the following table:

Table 5		
	Hedging set categories	CCRM
1.	Interest Rates	0.2 %
2.	Interest Rates for risk positions from a reference debt instrument that underlies a credit default swap and to which a capital charge of 1.60 %, or less, applies under Table 1 of Chapter 2 of Title IV.	0.3 %
3.	Interest Rates for risk positions from a debt instrument or reference debt instrument to which a capital charge of more than 1.60 % applies under Table 1 of Chapter 2 of Title IV.	0.6 %
4.	Exchange Rates	2.5 %
5.	Electric Power	4 %
6.	Gold	5 %
7.	Equity	7 %
8.	Precious Metals (other than gold)	8.5 %
9.	Other Commodities (excluding precious metals and electricity power)	10 %
10.	Underlying instruments of OTC derivatives that are not in any of the above categories	10 %

Underlying instruments of OTC derivatives, as referred to in point 10 of Table 5, shall be assigned to separate individual hedging sets for each category of underlying instrument.

6. For transactions with a non-linear risk profile or for payment legs and transactions with debt instruments as underlying for which the institution cannot determine the delta or the modified

duration, as the case may be, with an instrument model that the competent authority has approved for the purposes of determining the own funds requirements for market risk, the competent authority shall either determine the size of the risk positions and the applicable $CCRM_j$s conservatively, or require the institution to use of the method set out in Section 3.Netting shall not be recognised (that is, the exposure value shall be determined as if there were a netting set that comprises just an individual transaction).

7. An institution shall have internal procedures to verify that, prior to including a transaction in a hedging set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Section 7.

8. An institution that makes use of collateral to mitigate its CCR shall have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in Chapter 4.

SECTION 6
INTERNAL MODEL METHOD

Article 277
Internal Model Method

1. Provided that the competent authorities are satisfied that the requirement in paragraph 2 have been met by an institution, they shall permit that institution to use the Internal Model Method (IMM) to calculate the exposure value for any of the following transactions:

   (a) transactions in Article 268(2)(a);

   (b) transactions in Article 268(2)(b), (c) and (d);

   (c) transactions in Article 268(2)(a) to (d),

   Where an institution is permitted to use the IMM to calculate exposure value for any of the transactions mentioned in points (a) to (c) of the preceding sub-paragraph, it may also use the IMM for the transactions in Article 268(2)(e).

   Notwithstanding Article 268(1), third sub-paragraph, an institution may choose not to apply this method to exposures that are immaterial in size and risk. In such case, an institution shall apply one of the methods set out in Sections 3 to 5 to these exposures.

2. Competent authorities shall permit institutions to use IMM for the calculations referred to in paragraph 1 only if the institution has demonstrated that it complies with the requirements set out in this Section, and the competent authorities verified that the systems for the management of CCR maintained by the institution are sound and properly implemented.

3. The competent authorities may permit institutions for a limited period to implement the IMM sequentially across different transaction types. During this period of sequential

implementation institutions may use the methods set out in Section 3 or Section 5 for transaction type for which they do not use the IMM.

4. For all OTC derivative transactions and for long settlement transactions for which an institution has not received permission under paragraph 1 to use the IMM, the institution shall use the methods set out in Section 3 or Section 5.

Those methods may be used in combination on a permanent basis within a group. Within an institution those methods may be used in combination only where one of the methods is used for the cases set out in Article 276(6)

5. An institution which is permitted in accordance with paragraph 1 to use the IMM shall not revert to the use of the methods set out in Section 3 or Section 5 unless it is permitted by the competent authority to do so. Competent authorities shall give such permission if the institution demonstrates good cause.

6. If an institution ceases to comply with the requirements laid down in this Section, it shall notify the competent authority and do one of the following:

(a) present to the competent authority a plan for a timely return to compliance;

(b) demonstrate to the satisfaction of the competent authority that the effect of non-compliance is immaterial.

Article 278
Exposure value

1. Where an institution is permitted, in accordance with Article 277(1), to use the IMM to calculate the exposure value of some or all transactions mentioned in that paragraph, it shall measure the exposure value of those transactions at the level of the netting set.

The model used by the institution for that purpose shall:

(a) specify the forecasting distribution for changes in the market value of the netting set attributable to joint changes in relevant market variables, such as interest rates, foreign and exchange rates;

(b) calculate the exposure value for the netting set at each future date on the basis of the joint changes in the market variables.

2. In order for the model to capture the effects of margining, the model of the collateral value shall meet the quantitative, qualitative and data requirements for the IMM model in accordance with this Section and the institution may include in its forecasting distributions for changes in the market value of the netting set only eligible financial collateral as defined in Article 193(2) and Article 232.

3. The own funds requirement for counterparty credit risk with respect to the CCR exposures to which an institution applies the IMM, shall be the higher of the following:

(a) the own funds requirement for those exposures calculated on the basis of Effective EPE using current market data;

(b) the own funds requirement for those exposures calculated on the basis of Effective EPE using a single consistent stress calibration for all CCR exposures to which they apply the IMM.

4. Except for counterparties identified as having Specific Wrong-Way Risk that fall within the scope of paragraphs 4 and 5 of Article 285, institutions shall calculate the exposure value as the product of alpha (α) times Effective EPE, as follows:

$$Exposure\ value = \alpha \cdot Effective\ EPE$$

where:

α = 1.4, unless competent authorities require a higher α or permit institutions to use their own estimates in accordance with paragraph 9;

Effective EPE shall be calculated by estimating expected exposure (EE_t) as the average exposure at future date t, where the average is taken across possible future values of relevant market risk factors.

The model shall estimate EE at a series of future dates t_1, t_2, t_3, etc.

5. Effective EE shall be calculated recursively as:

$$Effective\ EE_{t_k} = \max\left\{Effective\ EE_{t_{k-1}}, EE_{t_k}\right\}$$

where:

the current date is denoted as t_0;

Effective EEt_0 equals current exposure.

6. Effective EPE is the average Effective EE during the first year of future exposure. If all contracts in the netting set mature within less than one year, EPE shall be the average of EE until all contracts in the netting set mature. Effective EPE shall be calculated as a weighted average of Effective EE:

$$Effective\ EPE = \sum_{k=1}^{\min\{1\,year, maturity\}} Effective\ EE_{t_k} \cdot \Delta t_k$$

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

7. Institutions shall calculate EE or peak exposure measures on the basis of a distribution of exposures that accounts for the possible non-normality of the distribution of exposures.

8. An institution may use a measure of the distribution calculated by the model that is more conservative than α multiplied by Effective EPE as calculated in accordance with the equation in paragraph 4 for every counterparty.

9. Notwithstanding paragraph 4, competent authorities may permit institutions to use their own estimates of alpha, where:

(a) alpha shall equal the ratio of internal capital from a full simulation of CCR exposure across counterparties (numerator) and internal capital based on EPE (denominator);

(b) in the denominator, EPE shall be used as if it were a fixed outstanding amount.

When estimated in accordance with this paragraph, alpha shall be no lower than 1.2.

10. For the purposes of an estimate of alpha under paragraph 9, an institution shall ensure that the numerator and denominator are calculated in a manner consistent with the modelling methodology, parameter specifications and portfolio composition. The approach used to estimate α shall be based on the institution's internal capital approach, be well documented and be subject to independent validation. In addition, an institution shall review its estimates of alpha on at least a quarterly basis, and more frequently when the composition of the portfolio varies over time. An institution shall also assess the model risk.

11. An institution shall demonstrate to the satisfaction of the competent authorities that its internal estimates of alpha capture in the numerator material sources of dependency of distribution of market values of transactions or of portfolios of transactions across counterparties. Internal estimates of alpha shall take account of the granularity of portfolios.

12. In supervising the use of estimates under paragraph 9, competent authorities shall have regard to the significant variation in estimates of alpha that arises from the potential for mis-specification in the models used for the numerator, especially where convexity is present.

13. Where appropriate, volatilities and correlations of market risk factors used in the joint modelling of market and credit risk shall be conditioned on the credit risk factor to reflect potential increases in volatility or correlation in an economic downturn.

Article 279
Exposure value for netting sets subject to a margin agreement

1. If the netting set is subject to a margin agreement and daily mark-to-market valuation, an institution may use one of the following EPE measures:

(a) Effective EPE, without taking into account any collateral held or posted by way of margin plus any collateral that has been posted to the counterparty independent of the daily valuation and margining process or current exposure;

(b) An add-on that reflects the potential increase in exposure over the margin period of risk, plus the larger of:

(i) the current exposure including all collateral currently held or posted, other than collateral called or in dispute;

(ii) the largest net exposure, including collateral under the margin agreement, that would not trigger a collateral call. This amount shall reflect all applicable thresholds, minimum transfer amounts, independent amounts and initial margins under the margin agreement;

(c) If the model captures the effects of margining when estimating EE, the institution may, subject to the permission of the competent authority, use the model's EE measure directly in the equation in Article 13(5). Competent authorities shall grant such permission only if they verify that the model properly captures the effects of margining when estimating EE.

For the purposes of point (b), institutions shall calculate the add-on as the expected positive change of the mark-to-market value of the transactions during the margin period of risk. Changes in the value of collateral shall be reflected using the supervisory volatility adjustments in accordance with Section 3 of Chapter 4 or the own estimates of volatility adjustments of the Financial Collateral Comprehensive Method, but no collateral payments shall be assumed during the margin period of risk. The margin period of risk is subject to the minimum periods set out in paragraphs 2 to 4.

2. For transactions subject to daily re-margining and mark-to-market valuation, the margin period of risk used for the purpose of modelling the exposure value with margin agreements shall not be less than:

(a) 5 business days for netting sets consisting only of repurchase transactions, securities or commodities lending or borrowing transactions and margin lending transactions;

(b) 10 business days for all other netting sets.

Points (a) and (b) shall be subject to the following exceptions:

(i) for all netting sets where the number of trades exceeds 5,000 at any point during a quarter, the margin period of risk for the following quarter shall not be less than 20 business days. This exception shall not apply to institutions' trade exposures;

(ii) for netting sets containing one or more trades involving either illiquid collateral, or an OTC derivative that cannot be easily replaced, the margin period of risk shall not be less than 20 business days.

An institution shall determine whether collateral is illiquid or whether OTC derivatives cannot be easily replaced in the context of stressed market conditions, characterised by the absence of continuously active markets where a counterparty would, within two days or fewer, 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).

An institution shall consider whether trades or securities it holds as collateral are concentrated in a particular counterparty and if that counterparty exited the market precipitously whether the institution would be able to replace those trades or securities.

3. If an institution has been involved in more than two margin call disputes on a particular netting set or counterparty over the immediately preceding two quarters that have lasted longer than the applicable margin period of risk under paragraph 2, the institution shall use a margin period of risk that is at least double the period specified in paragraph 2 for that netting set for the subsequent two quarters.

4. For re-margining with a periodicity of N days, the margin period of risk shall be at least equal to the period specified in paragraph 2, F, plus N days minus one day. That is:

Margin Period of Risk = F + N - 1

5. If the internal model includes the effect of margining on changes in the market value of the netting set, an institution shall model collateral, other than cash of the same currency as the exposure itself, jointly with the exposure in its exposure value calculations for OTC derivatives and securities-financing transactions.

6. If an institution is not able to model collateral jointly with the exposure, it shall not recognise in its exposure value calculations for OTC derivatives and securities-financing transactions the effect of collateral other than cash of the same currency as the exposure itself, unless it uses either volatility adjustments that meet the standards of the financial collateral comprehensive method with own volatility adjustments estimates or the standard supervisory volatility adjustments in accordance with Chapter 4.

7. An institution using the IMM shall ignore in its models the effect of a reduction of the exposure value due to any clause in a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates.

Article 280
Management of CCR – Policies, processes and systems

1. An institution shall establish and maintain a CCR management framework, consisting of:

(a) policies, processes and systems to ensure the identification, measurement, management, approval and internal reporting of CCR;

(b) procedures for ensuring that those policies, processes and systems are complied with.

Those polices, processes and systems shall be conceptually sound, implemented with integrity and documented. The documentation shall include an explanation of the empirical techniques used to measure CCR.

2. The CCR risk management framework required by paragraph 1 shall take account of market, liquidity, and legal and operational risks that are associated with CCR. In particular, the framework shall ensure that the institution complies with the following principles:

(a) it does not undertake business with a counterparty without assessing its creditworthiness;

(b) it takes due account of settlement and pre-settlement credit risk;

(c) it manages such risks as comprehensively as practicable at the counterparty level by aggregating CCR exposures with other credit exposures and at the firm-wide level.

3. An institution using the IMM shall ensure that its CCR risk management framework accounts to the satisfaction of the competent authority for the liquidity risks of all of the following:

(a) potential incoming margin calls in the context of exchanges of variation margin or other margin types, such as initial or independent margin, under adverse market shocks;

(b) potential incoming calls for the return of excess collateral posted by counterparties;

(c) calls resulting from a potential downgrade of its own external credit quality assessment.

An institution shall ensure that the nature and horizon of collateral re-use is consistent with its liquidity needs and does not jeopardise its ability to post or return collateral in a timely manner.

4. An institution's management body and senior management shall be actively involved in, and ensure that adequate resources are allocated to, the management of CCR. Senior management shall be aware of the limitations and assumptions of the model used and the impact those limitations and assumptions can have on the reliability of the output through a formal process. Senior management shall be also aware of the uncertainties of the market environment and operational issues and of how these are reflected in the model.

5. The daily reports prepared on an institution's exposures to CCR in accordance with Article 281(2)(b) shall be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the institution's overall CCR exposure.

6. An institution's CCR management framework established in accordance with paragraph 1 shall be used in conjunction with internal credit and trading limits. Credit and trading limits shall be related to the institution's risk measurement model in a manner that is consistent over time and that is well understood by credit managers, traders and senior management. An institution shall have a formal process to report breaches of risk limits to the appropriate level of management.

7. An institution's measurement of CCR shall include measuring daily and intra-day use of credit lines. The institution shall measure current exposure gross and net of collateral. At portfolio and counterparty level, the institution shall calculate and monitor peak exposure or potential future exposure at the confidence interval chosen by the institution. The institution shall take account of large or concentrated positions, including by groups of related counterparties, by industry and by market.

8. An institution shall establish and maintain a routine and rigorous program of stress testing. The results of that stress testing shall be reviewed regularly and at least quarterly by senior management and shall be reflected in the CCR policies and limits set by the management body or senior management. Where stress tests reveal particular vulnerability to a given set of circumstances, the institution shall take prompt steps to manage those risks.

Article 281
Organisation structures for CCR risk management

1. An institution using the IMM shall establish and maintain:

   (a) a risk control unit that complies with paragraph 2;

   (b) a collateral management unit that complies with paragraph 3.

2. The risk control unit shall be responsible for the design and implementation of its CCR management, including the initial and on-going validation of the model, and shall carry out the following functions and meet the following requirements:

   (a) it shall be responsible for the design and implementation of the CCR management system of the institution;

   (b) it shall produce daily reports on and analyse the output of the institution's risk measurement model. That analysis shall include an evaluation of the relationship between measures of CCR exposure values and trading limits;

   (c) it shall control input data integrity and produce and analyse reports on the output of the institution's risk measurement model, including an evaluation of the relationship between measures of risk exposure and credit and trading limits;

   (d) it shall be independent from units responsible for originating, renewing or trading exposures and free from undue influence;

   (e) it shall be adequately staffed;

   (f) it shall report directly to the senior management of the institution;

   (g) its work shall be closely integrated into the day-to-day credit risk management process of the institution;

   (h) its output shall be an integral part of the process of planning, monitoring and controlling the institution's credit and overall risk profile.

3. The collateral management unit shall carry out the following tasks and functions:

   (a) calculating and making margin calls, managing margin call disputes and reporting levels of independent amounts, initial margins and variation margins accurately on a daily basis;

   (b) controlling the integrity of the data used to make margin calls, and ensuring that it is consistent and reconciled regularly with all relevant sources of data within the institution;

   (c) tracking the extent of re-use of collateral and any modification of the rights of the institution to or in connection with the collateral that it posts;

(d) reporting to the appropriate level of management the types of collateral assets that are reused, and the terms of such reuse including instrument, credit quality and maturity;

(e) tracking concentration to individual types of collateral assets accepted by the institution;

(f) reporting collateral management information on a regular basis, but at least quarterly, to senior management, including information on the type of collateral received and posted, the size, aging and cause for margin call disputes. That internal reporting shall also reflect trends in these figures.

4. Senior management shall allocate sufficient resources to the collateral management unit required under paragraph 1(b) to ensure that its systems achieve an appropriate level of operational performance, as measured by the timeliness and accuracy of margin calls by the institution and the timeliness of the response of the institution to margin calls by its counterparties. Senior management shall ensure that the unit is adequately staffed to process calls and disputes in a timely manner even under severe market crisis, and to enable the institution to limit its number of large disputes caused by trade volumes.

Article 282
Review of CCR risk management system

An institution shall regularly conduct an independent review of its CCR management system through its internal auditing process. That review shall include both the activities of the control and collateral management units required by Article 281 and shall specifically address, as a minimum:

(a) the adequacy of the documentation of the CCR management system and process required by Article 280;

(b) the organisation of the CCR control unit required by Article 281(1)(a);

(c) the organisation of the collateral management unit required by Article 281(1)(b);

(d) the integration of CCR measures into daily risk management;

(e) the approval process for risk pricing models and valuation systems used by front and back-office personnel;

(f) the validation of any significant change in the CCR measurement process;

(g) the scope of CCR captured by the risk measurement model;

(h) the integrity of the management information system;

(i) the accuracy and completeness of CCR data;

(j) the accurate reflection of legal terms in collateral and netting agreements into exposure value measurements;

(k) the verification of the consistency, timeliness and reliability of data sources used to run models, including the independence of such data sources;

(l) the accuracy and appropriateness of volatility and correlation assumptions;

(m) the accuracy of valuation and risk transformation calculations;

(n) the verification of the model's accuracy through frequent back-testing as set out in points (b) to (e) of Article 287(1);

(o) the compliance of the CCR control unit and collateral management unit with the relevant regulatory requirements.

Article 283
Use test

1. Institutions shall ensure that the distribution of exposures generated by the model used to calculate effective EPE is closely integrated into the day-to-day CCR management process of the institution, and that the output of the model is taken into account in the process of credit approval, CCR management and internal capital allocation.

2. The institution shall demonstrate to the satisfaction of the competent authorities that it has been using a model to calculate the distribution of exposures upon which the EPE calculation is based that meets, broadly, the requirements set out in this Section for at least one year prior to permission to use the IMM by the competent authorities in accordance with Article 277.

3. The model used to generate a distribution of exposures to CCR shall be part of the CCR management framework required by Article 280. This framework shall include the measurement of usage of credit lines, aggregating CCR exposures with other credit exposures and internal capital allocation.

4. In addition to EPE, an institution shall measure and manage current exposures. Where appropriate, the institution shall measure current exposure gross and net of collateral. The use test is satisfied if an institution uses other CCR measures, such as peak exposure, based on the distribution of exposures generated by the same model to compute EPE.

5. An institution shall have the systems capability to estimate EE daily if necessary, unless it demonstrates to the satisfaction of its competent authorities that its exposures to CCR warrant less frequent calculation. The institution shall estimate EE along a time profile of forecasting horizons that adequately reflects the time structure of future cash flows and maturity of the contracts and in a manner that is consistent with the materiality and composition of the exposures.

6. Exposure shall be measured, monitored and controlled over the life of all contracts in the netting set and not only to the one year horizon. The institution shall have procedures in place to identify and control the risks for counterparties where the exposure rises beyond the one-year horizon. The forecast increase in exposure shall be an input into the institution's internal capital model.

Article 284
Stress testing

1. An institution shall have a comprehensive stress testing programme for CCR, including for use in assessment of own funds requirements for CCR, which complies with the requirements laid down in paragraphs 2 to 10.

2. It shall identify possible events or future changes in economic conditions that could have unfavourable effects on an institution's credit exposures and assess the institution's ability to withstand such changes.

3. The stress measures under the programme shall be compared against risk limits and considered by the institution as part of the process set out in Article 79 of Directive [inserted by OP].

4. The programme shall comprehensively capture trades and aggregate exposures across all forms of counterparty credit risk at the level of specific counterparties in a sufficient time frame to conduct regular stress testing.

5. It shall provide for at least monthly exposure stress testing of principal market risk factors such as interest rates, FX, equities, credit spreads, and commodity prices for all counterparties of the institution, in order to identify, and enable the institution when necessary to reduce outsized concentrations in specific directional risks. Exposure stress testing -including single factor, multifactor and material non-directional risks- and joint stressing of exposure and creditworthiness shall be performed at the counterparty-specific, counterparty group and aggregate institution-wide CCR levels.

6. It shall apply at least quarterly multifactor stress testing scenarios and assess material non-directional risks including yield curve exposure and basis risks. Multiple-factor stress tests shall, at a minimum, address the following scenarios in which the following occurs:

   (a) severe economic or market events have occurred;

   (b) broad market liquidity has decreased significantly;

   (c) a large financial intermediary is liquidating positions.

7. The severity of the shocks of the underlying risk factors shall be consistent with the purpose of the stress test. When evaluating solvency under stress, the shocks of the underlying risk factors shall be sufficiently severe to capture historical extreme market environments and extreme but plausible stressed market conditions. The stress tests shall evaluate the impact of such shocks on own funds, own funds requirements and earnings. For the purpose of day-to-day portfolio monitoring, hedging, and management of concentrations the testing programme shall also consider scenarios of lesser severity and higher probability.

8. The programme shall include provision, where appropriate, for reverse stress tests to identify extreme, but plausible, scenarios that could result in significant adverse outcomes. Reverse stress testing shall account for the impact of material non-linearity in the portfolio.

9. The results of the stress testing under the programme shall be reported regularly, at least on a quarterly basis, to senior management. The reports and analysis of the results shall cover the largest counterparty-level impacts across the portfolio, material concentrations within segments of the portfolio (within the same industry or region), and relevant portfolio and counterparty specific trends.

10. Senior management shall take a lead role in the integration of stress testing into the risk management framework and risk culture of the institution and ensure that the results are meaningful and used to manage CCR. The results of stress testing for significant exposures shall be assessed against guidelines that indicate the institution's risk appetite, and referred to senior management for discussion and action when excessive or concentrated risks are identified.

Article 285
Wrong-Way Risk

1. For the purposes of this Article:

   (a) 'General Wrong-Way risk' arises when the likelihood of default by counterparties is positively correlated with general market risk factors;

   (b) 'Specific Wrong-Way risk' arises when there is a legal connection between the counterparty and the issuer of the underlying of the OTC derivative or securities financing transaction.

2. An institution shall give due consideration to exposures that give rise to a significant degree of Specific and General Wrong-Way Risk.

3. In order to identify General Wrong-Way Risk, an institution shall design stress testing and scenario analyses to stress risk factors that are adversely related to counterparty credit worthiness. Such testing shall address the possibility of severe shocks occurring when relationships between risk factors have changed. An institution shall monitor General Wrong Way Risk by product, by region, by industry, or by other categories that are relevant to the business.

4. An institution shall maintain procedures to identify, monitor and control cases of Specific Wrong-Way risk for each legal entity, beginning at the inception of a transaction and continuing through the life of the transaction. Transactions with counterparties where Specific Wrong-Way risk has been identified shall be treated in accordance with paragraph 5.

5. Institutions shall calculate the own funds requirements for CCR in relation to counterparties where Specific Wrong-Way risk has been identified in accordance with the following principles:

   (a) the instruments where Specific Wrong-Way risk exists shall not be included in the same netting set as other transactions with the counterparty, and shall each be treated as a separate netting set;

(b) within any such separate netting set, for single-name credit default swaps the exposure value equals the full expected loss in the value of the remaining fair value of the underlying instruments based on the assumption that the underlying issuer is in liquidation;

(c) LGD for an institution using the approach set out in Chapter 3 shall be 100% for such swap transactions;

(d) for an institution using the approach set out in Chapter 2, the applicable risk weight shall be that of an unsecured transaction;

(e) for all other transactions referencing a single name in any such separate netting set, the exposure value equals the value of the transaction under the assumption of a jump-to-default of the underlying obligation;

(f) to the extent that this uses existing market risk calculations for own funds requirements for incremental default and migration risk as set out in Title IV, Chapter 5, Section 4 that already contain an LGD assumption, the LGD in the formula used shall be 100%.

6. Institutions shall provide senior management and the appropriate committee of the management body with regular reports on both Specific and General Wrong-Way risks and the steps being taken to manage those risks.

Article 286
Integrity of the modelling process

1. An institution shall ensure the integrity of modelling process as set out in Article 278 by adopting at least the following measures:

(a) the model shall reflect transaction terms and specifications in a timely, complete, and conservative fashion;

(b) those terms shall include at least contract notional amounts, maturity, reference assets, margining arrangements and netting arrangements;

(c) those terms and specifications shall be maintained in a database that is subject to formal and periodic audit;

(d) a process for recognising netting arrangements that requires legal staff to verify that netting under those arrangements is legally enforceable;

(e) the verification required by point (d) shall be entered into the database mentioned in point (c) by an independent unit;

(f) the transmission of transaction terms and specification data to the EPE model shall be subject to internal audit;

(g) there shall be processes for formal reconciliation between the model and source data systems to verify on an ongoing basis that transaction terms and specifications are being reflected in EPE correctly or at least conservatively.

2. Current market data shall be used to determine current exposures. An institution may calibrate its EPE model using either historic market data or market implied data to establish parameters of the underlying stochastic processes, such as drift, volatility and correlation. If an institution uses historical data, it shall use at least three years of such data. The data shall be updated at least quarterly, and more frequently if necessary to reflect market conditions.

To calculate the Effective EPE using a stress calibration, an institution shall calibrate Effective EPE using either three years of data that includes a period of stress to the credit default spreads of its counterparties or market implied data from such a period of stress.

The requirements in paragraphs 3, 4 and 5 shall be applied by the institution for that purpose.

3. An institution shall demonstrate to the satisfaction of the competent authority, at least quarterly, that the stress period used for the calculation under this paragraph coincides with a period of increased credit default swap or other credit (such as loan or corporate bond) spreads for a representative selection of its counterparties with traded credit spreads. In situations where the institution does not have adequate credit spread data for a counterparty, it shall map that counterparty to specific credit spread data based on region, internal rating and business types.

4. The EPE model for all counterparties shall use data, either historic or implied, that include the data from the stressed credit period and shall use such data in a manner consistent with the method used for the calibration of the EPE model to current data.

5. To evaluate the effectiveness of its stress calibration for EEPE, an institution shall create several benchmark portfolios that are vulnerable to the main risk factors to which the institution is exposed. The exposure to these benchmark portfolios shall be calculated using (a) a stress methodology, based on current market values and model parameters calibrated to stressed market conditions, and (b) the exposure generated during the stress period, but applying the method set out in this Section (end of stress period market value, volatilities, and correlations from the 3-year stress period).

The competent authorities shall require an institution to adjust the stress calibration if the exposures of those benchmark portfolios deviate substantially from each other.

6. An institution shall subject the model to a validation process that is clearly articulated in the institutions' policies and procedures. That validation process shall:

(a) specify the kind of testing needed to ensure model integrity and identify conditions under which the assumptions underlying the model are inappropriate and may therefore result in an understatement of EPE;

(b) include a review of the comprehensiveness of the model.

7. An institution shall monitor the relevant risks and have processes in place to adjust its estimation of EEPE when those risks become significant. In complying with this paragraph, the institution shall:

(a) identify and manage its exposures to Specific Wrong-Way risk arising as specified in Article 285(1)(b) and exposures to General Wrong-Way risk arising as specified in Article 285(1)(a);

(b) for exposures with a rising risk profile after one year, compare on a regular basis the estimate of a relevant measure of exposure over one year with the same exposure measure over the life of the exposure;

(c) for exposures with a residual maturity below one year, compare on a regular basis the replacement cost (current exposure) and the realised exposure profile, and store data that would allow such a comparison.

8. An institution shall have internal procedures to verify that, prior to including a transaction in a netting set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Section 7.

9. An institution that uses collateral to mitigate its CCR shall have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in Chapter 4 .

10. EBA shall monitor the range of practices in this area and shall, in accordance with Article 16 of Regulation (EU) No 1093/2010, issue guidelines on the application of this Article.

Article 287
Requirements for the risk management system

1. An institution shall comply with the following requirements:

(a) it shall meet the qualitative requirements set out in Part Three, Title IV, Chapter 5;

(b) it shall conduct a regular programme of back-testing, comparing the risk measures generated by the model with realised risk measures, and hypothetical changes based on static positions with realised measures;

(c) it shall carry out an initial validation and an on-going periodic review of its CCR exposure model and the risk measures generated by it. The validation and review shall be independent of the model development;

(d) the management body and senior management shall be involved in the risk control process and shall ensure that adequate resources are devoted to credit and counterparty credit risk control. In this regard, the daily reports prepared by the independent risk control unit established in accordance Article 281(1)(a) shall be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual traders and reductions in the overall risk exposure of the institution;

(e) the internal risk measurement exposure model shall be integrated into the day-to-day risk management process of the institution;

(f) the risk measurement system shall be used in conjunction with internal trading and exposure limits. In this regard, exposure limits shall be related to the institution's risk measurement model in a manner that is consistent over time and that is well understood by traders, the credit function and senior management;

(g) an institution shall ensure that its risk management system is well documented. In particular, it shall maintain a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system, and arrangements to ensure that those policies are complied with;

(h) an independent review of the risk measurement system shall be carried out regularly in the institution's own internal auditing process. This review shall include both the activities of the business trading units and of the independent risk control unit. A review of the overall risk management process shall take place at regular intervals (and no less than once a year) and shall specifically address, as a minimum, all items referred to in Article 282;

(i) the on-going validation of counterparty credit risk models, including back-testing, shall be reviewed periodically by a level of management with sufficient authority to decide the action that will be taken to address weaknesses in the models.

2. Competent authorities shall take into account the extent to which an institution meets the requirements of paragraph 1 when setting the level of alpha, as set out in Article 278(4). Only those institutions that comply fully with those requirements shall be eligible for application of the minimum multiplication factor.

3. An institution shall document the process for initial and on-going validation of its CCR exposure model and the calculation of the risk measures generated by the models to a level of detail that would enable a third party to recreate, respectively, the analysis and the risk measures. That documentation shall set out the frequency with which back testing analysis and any other on-going validation will be conducted, how the validation is conducted with respect to data flows and portfolios and the analyses that are used.

4. An institution shall define criteria with which to assess its CCR exposure models and the models that input into the calculation of exposure and maintain a written policy that describes the process by which unacceptable performance will be identified and remedied.

5. An institution shall define how representative counterparty portfolios are constructed for the purposes of validating an CCR exposure model and its risk measures.

6. The validation of CCR exposure models and their risk measures that produce forecast distributions shall consider more than a single statistic of the forecast distribution.

Article 288
Validation requirements for EPE models

1. As part of the initial and on-going validation of its CCR exposure model and its risk measures, an institution shall ensure that the following requirements are met:

(a) the institution shall carry out back-testing using historical data on movements in market risk factors prior to the permission by the competent authorities in accordance with Article 277(1). That back-testing shall consider a number of distinct prediction time horizons out to at least one year, over a range of various initialisation dates and covering a wide range of market conditions;

(b) the institution using the approach set out in paragraph 12(b) of Article 278 shall regularly validate its model to test whether realised current exposures are consistent with prediction over all margin periods within one year. If 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 validation shall take this into account;

(c) it shall back-test the performance of its CCR exposure model and the model's relevant risk measures as well as the market risk factor predictions. For collateralised trades, the prediction time horizons considered shall include those reflecting typical margin periods of risk applied in collateralised or margined trading;

(d) if the model validation indicates that effective EPE is underestimated, the institution shall take the action necessary to address the inaccuracy of the model;

(e) it shall test the pricing models used to calculate CCR exposure for a given scenario of future shocks to market risk factors as part of the initial and on-going model validation process. Pricing models for options shall account for the nonlinearity of option value with respect to market risk factors;

(f) the CCR exposure model shall capture the transaction-specific information necessary to be able to aggregate exposures at the level of the netting set. An institution shall verify that transactions are assigned to the appropriate netting set within the model;

(g) the CCR exposure model shall include transaction-specific information to capture the effects of margining. It shall take into account both the current amount of margin and margin that would be passed between counterparties in the future. Such a model shall account for the nature of margin agreements that are unilateral or bilateral, the frequency of margin calls, the margin period of risk, the minimum threshold of un-margined exposure the institution is willing to accept, and the minimum transfer amount. Such a model shall either estimate the mark-to-market change in the value of collateral posted or apply the rules set out in Chapter 4;

(h) the model validation process shall include static, historical back-testing on representative counterparty An institution shall conduct such back-testing on a number of representative counterparty portfolios that are actual or hypothetical at regular intervals. Those representative portfolios shall be chosen on the basis of their sensitivity to the material risk factors and combinations of risk factors to which the institution is exposed;

(i) an institution shall conduct back-testing that is designed to test the key assumptions of the CCR exposure model and the relevant risk measures, including the modelled relationship between tenors of the same risk factor, and the modelled relationships between risk factors;

(j) the performance of CCR exposure models and its risk measures shall be subject to appropriate back-testing practice. The back testing programme shall be capable of identifying poor performance in an EPE model's risk measures;

(k) an institution shall validate its CCR exposure models and all risk measures out to time horizons commensurate with the maturity of trades covered by the IMM waiver in accordance to the Article 277;

(l) an institution shall regularly test the pricing models used to calculate counterparty exposure against appropriate independent benchmarks as part of the on-going model validation process;

(m) the on-going validation of an institution's CCR exposure model and the relevant risk measures shall include an assessment of the adequacy of the recent performance;

(n) the frequency with which the parameters of an CCR exposure model are updated shall be assessed by an institution as part of the initial and on-going validation process;

(o) the initial and on-going validation of CCR exposure models shall assess whether or not the counterparty level and netting set exposure calculations of exposure are appropriate.

2. A measure that is more conservative than the metric used to calculate regulatory exposure value for every counterparty may be used in place of alpha multiplied by Effective EPE with the prior permission of the competent authorities. The degree of relative conservatism will be assessed upon initial approval by the competent authorities and at the regular supervisory reviews of the EPE models. An institution shall validate the conservatism regularly. The on-going assessment of model performance shall cover all counterparties for which the models are used.

3. If back-testing indicates that a model is not sufficiently accurate, the competent authorities shall revoke its permission for the model, or impose appropriate measures to ensure that the model is improved promptly.

SECTION 7
CONTRACTUAL NETTING

Article 289
Recognition of contractual netting as risk-reducing

1. Institutions may treat as risk reducing in accordance with Article 292 only the following types of contractual netting agreements where the netting agreement has been recognised by competent authorities in accordance with Article 290 and where the institution meets the requirements set out in Article 291:

(a) bilateral contracts for novation between an institution and its counterparty under which mutual claims and obligations are automatically amalgamated in such a way that the novation fixes one single net amount each time it applies so as to create a single new contract that replaces all former contracts and all obligations between parties pursuant to those contracts and is binding on the parties;

(b) other bilateral agreements between an institution and its counterparty;

(c) contractual cross-product netting agreements for institutions that use the method set out in Section 6 for transactions falling under the scope of that method.

Netting across transactions entered into by different legal entities of a group shall not be recognised for the purposes of calculating the own funds requirements.

Article 290
Recognition of contractual netting agreements

1. Competent authorities shall recognise a contractual netting agreement only where the conditions in paragraph 2 and, where relevant, 3 are fulfilled.

2. The following conditions shall be fulfilled by all contractual netting agreements used by an institution for the purposes of determining exposure value in this Part:

(a) the institution has concluded a contractual netting agreement with its counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of default by the counterparty it would be entitled to receive or obliged to pay only the net sum of the positive and negative mark-to-market values of included individual transactions;

(b) the institution has made available to the competent authorities written and reasoned legal opinions to the effect that, in the event of a legal challenge of the netting agreement, the institution's claims and obligations would not exceed those referred to in point (a). The legal opinion shall refer to the applicable law:

(i) the jurisdiction in which the counterparty is incorporated;

(ii) if a branch of an undertaking is involved, which is located in another country than the one where the undertaking is incorporated, the jurisdiction in which the branch is located;

(iii) the jurisdiction whose law governs the individual transactions included in the netting agreement;

(iv) the jurisdiction whose law governs any contract or agreement necessary to effect the contractual netting;

(c) credit risk to each counterparty is aggregated to arrive at a single legal exposure across transactions with each counterparty. This aggregation shall be factored into credit limit purposes and internal capital purposes;

(d) the contract shall not contain any clause which, in the event of default of a counterparty, permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulting party, even if the defaulting party is a net creditor.

Competent authorities shall be satisfied that the contractual netting is legally valid and enforceable under the law of each of the jurisdictions referred to in point (b). If any of the competent authorities are not satisfied in that respect, the contractual netting agreement shall not be recognised as risk-reducing for either of the counterparties. Competent authorities shall inform each other accordingly.

3. The legal opinions referred to in point (b) may be drawn up by reference to types of contractual netting. The following additional conditions shall be fulfilled by contractual cross-product netting agreements:

(a) the net sum referred to in Article 290(2)(a) is the net sum of the positive and negative close out values of any included individual bilateral master agreement and of the positive and negative mark-to-market value of the individual transactions (the 'Cross-Product Net Amount');

(b) the legal opinions referred to in Article 290(2)(b) shall address the validity and enforceability of the entire contractual cross-product netting agreement under its terms and the impact of the netting arrangement on the material provisions of any included individual bilateral master agreement.

Article 291
Obligations of institutions

1. An institution shall establish and maintain procedures to ensure that the legal validity and enforceability of its contractual netting is reviewed in the light of changes in the law of relevant jurisdictions referred to in Article 290(2)(b).

2. The institution shall maintain all required documentation relating to its contractual netting in its files.

3. The institution shall factor the effects of netting into its measurement of each counterparty's aggregate credit risk exposure and the institution shall manage its CCR on the basis of those effects of that measurement.

4. In case of contractual cross-product netting agreements referred to in Article 289, the institution shall maintain procedures under Article 290(2)(c) to verify that any transaction which is to be included in a netting set is covered by a legal opinion referred to in Article 290(2)(b).

Taking into account the contractual cross-product netting agreement, the institution shall continue to comply with the requirements for the recognition of bilateral netting and the requirements of Chapter 4 for the recognition of credit risk mitigation, as applicable, with respect to each included individual bilateral master agreement and transaction.

Article 292
Effects of recognition of netting as risk-reducing

1. The following treatment applies to contractual netting agreements:

(a) netting for the purposes of Sections 5 and 6 shall be recognised as set out in those Sections;

(b) in the case of contracts for novation, the single net amounts fixed by such contracts rather than the gross amounts involved, may be weighted.

In the application of Section 3, institutions may take the contract for novation into account when determining:

(i) the current replacement cost refrerred to in Article 269(1);

(ii) the notional principal amounts or underlying values referred to in Article 269(2).

In the application of Section 4, in determining the notional amount referred to in Article 270(1) institutions may take into account the contract for novation for the purposes of calculating the notional principal amount In such cases, institutions shall apply the percentages of Table 3.

(c) In the case of other netting agreements, institutions shall apply Section 3 as follows:

(i) the current replacement cost referred to in Article 269(1) for the contracts included in a netting agreement shall be obtained by taking account of the actual hypothetical net replacement cost which results from the agreement; in the case where netting leads to a net obligation for the institution calculating the net replacement cost, the current replacement cost is calculated as '0';

(ii) the figure for potential future credit exposure referred to in Article 269(1) for all contracts included in a netting agreement shall be reduced in accordance with the following formula:

$$PCE_{red} = 0.4 \cdot PCE_{gross} + 0.6 \cdot NGR \cdot PCE_{gross}$$

where:

PCE_{red} = the reduced figure for potential future credit exposure for all contracts with a given counterparty included in a legally valid bilateral netting agreement;

PCE_{gross} = the sum of the figures for potential future credit exposure for all contracts with a given counterparty which are included in a legally valid bilateral netting agreement and are calculated by multiplying their notional principal amounts by the percentages set out in Table 1;

NGR = the net-to-gross ratio calculated as the quotient of the net replacement cost for all contracts included in a legally valid bilateral netting

agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a legally valid bilateral netting agreement with that counterparty (denominator).

2. When carrying out the calculation of the potential future credit exposure in accordance with the above formula, institutions may treat perfectly matching contracts included in the netting agreement as if they were a single contract with a notional principal equivalent to the net receipts.

In the application of Article 270(1) institutions may treat perfectly matching contracts included in the netting agreement as if they were a single contract with a notional principal equivalent to the net receipts, and the notional principal amounts shall be multiplied by the percentages given in Table 3.

For the purposes of this paragraph, perfectly matching contracts are forward foreign-exchange contracts or similar contracts in which a notional principal is equivalent to cash flows if the cash flows fall due on the same value date and fully in the same currency.

3. For all other contracts included in a netting agreement, the percentages applicable may be reduced as indicated in Table 6:

Table 6		
Original maturity	Interest-rate contracts	Foreign-exchange contracts
One year or less	0,35 %	1,50 %
More than one year but not more than two years	0,75 %	3,75 %
Additional allowance for each additional year	0,75 %	2,25 %

4. In the case of interest-rate contracts, credit institutions may, subject to the consent of their competent authorities, choose either original or residual maturity.

SECTION 8
ITEMS IN THE TRADING BOOK

Article 293
Items in the trading book

1. For the purposes of the application of this Article, Annex II shall include a reference to derivative instruments for the transfer of credit risk as mentioned in point (8) of Section C of Annex I to Directive 2004/39/EC.

2. When calculating risk-weighted exposure amounts for counterparty risk of items in the trading book, institutions shall comply with the following principles:

(a) in the case of total return swap credit derivatives and credit default swap credit derivatives, to obtain a figure for potential future credit exposure under the method set out in Section 3, the nominal amount of the instrument shall be multiplied by the following percentages:

(i) 5%, where the reference obligation is one that, if it gave rise to a direct exposure of the institution, would be a qualifying item for the purposes of Part Three, Title IV, Chapter 2;

(ii) 10%, where the reference obligation is one that, if it gave rise to a direct exposure of the institution, would not be a qualifying item for the purposes of Part Three, Title IV, Chapter 2**.**

In the case of an institution whose exposure arising from a credit default swap represents a long position in the underlying, the percentage for potential future credit exposure may be 0%, unless the credit default swap is subject to close-out upon the insolvency of the entity whose exposure arising from the swap represents a short position in the underlying, even though the underlying has not defaulted.

Where the credit derivative provides protection in relation to 'nth to default' amongst a number of underlying obligations, an institution shall determine which of the percentage figures prescribed above applies by reference to the obligation with the nth lowest credit quality which, if incurred by the institution, would be a qualifying item for the purposes of Part Three, Title IV, Chapter 2;

(b) institutions shall not use the Financial Collateral Simple Method set out in Article 217 for the recognition of the effects of financial collateral;

(c) in the case of repurchase transactions and securities or commodities lending or borrowing transactions booked in the trading book, institutions may recognise as eligible collateral all financial instruments and commodities that are eligible to be included in the trading book;

(d) for exposures arising from OTC derivative instruments booked in the trading book, institutions may recognise commodities that are eligible to be included in the trading book as eligible collateral;

(e) for the purposes of calculating volatility adjustments where such financial instruments or commodities which are not eligible under Chapter 4 are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise under such a transaction, and an institution is using the Supervisory volatility adjustments approach under Section 3 of Chapter 4, institutions shall treat such instruments and commodities in the same way as non-main index equities listed on a recognised exchange;

(f) where an institution is using the Own Estimates of Volatility adjustments approach under Section 3 of Chapter 4 in respect of financial instruments or commodities which are not eligible under Chapter 4, it shall calculate volatility adjustments for each

individual item. Where an institution is using the Internal Models Approach defined in Chapter 4, it may also apply that approach in the trading book;

(g) in relation to the recognition of master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions, or other capital market-driven transactions, institutions shall only recognise netting across positions in the trading book and the non-trading book when the netted transactions fulfil the following conditions:

(i) all transactions are marked to market daily;

(ii) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral under Chapter 4 without the application of points (c) to (f) of this paragraph;

(h) where a credit derivative included in the trading book forms part of an internal hedge and the credit protection is recognised under this Regulation in accordance with Article 199, institutions shall apply one of the following approaches:

(i) treat it as if there were no counterparty risk arising from the position in that credit derivative;

(ii) consistently include for the purpose of calculating the own funds requirements for counterparty credit risk all credit derivatives in the trading book forming part of internal hedges or purchased as protection against a CCR exposure where the credit protection is recognised as eligible under Chapter 4.

SECTION 9
OWN FUNDS REQUIREMENTS FOR EXPOSURES TO A CENTRAL COUNTERPARTY

Article 294
Definitions

The following definitions shall apply for the purposes of this Section:

(1) 'bankruptcy remote', in relation to assets, means that effective arrangements exist which ensure that the assets will not be available to the creditors of a CCP or of a clearing member in the event of the insolvency of that CCP or clearing member;

(2) 'CCP-related transaction' means a contract or a transaction listed in Article 295(1) between a client and a clearing member that is directly related to a contract or a transaction listed in Article 295(1) between that clearing member and a CCP;

(3) ‘clearing member’ means an undertaking which participates in a CCP and which is responsible for discharging the financial obligations arising from that participation;

(4) ‘client’ means an undertaking with a contractual relationship with a clearing member which enables that undertaking to clear its transactions with that CCP;

(5) 'pre-funded contribution' means a contribution to the default fund of a CCP that is paid by an institution.

Article 295
Material scope

1. This section applies to the following contracts and transactions for as long as they are outstanding with a CCP:

   (a) the contracts listed in Annex II and credit derivatives;

   (b) repurchase transactions;

   (c) securities or commodities lending or borrowing transactions;

   (d) long settlement transactions;

   (e) margin lending transactions;

2. Institutions shall apply the treatment specified in Articles 297 and 298 to the contracts and transactions outstanding with a CCP listed in paragraph 1, provided that all the following conditions are met:

   (a) the CCP in question has either been authorised in its home Member State to provide clearing services in accordance with national law or, in case of a third country CCP or a CCP providing services in a Member State other than its home Member State, has been permitted to provide clearing services in that Member State in accordance with that Member State's national law;

   (b) the competent authority of the CCP referred to in point (a) has published a document confirming that that CCP complies with all the recommendations for central counterparties published by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions;

   (c) the contracts or transactions have not been rejected by the CCP.

3. Where one or more criteria listed in paragraph 2 have not been met, institutions shall apply the treatment specified in Article 300.

Article 296
Treatment of clearing members' and clients' transactions

1. Institutions shall monitor all their exposures to CCPs and shall regularly report information on those exposures to their senior management and appropriate committee or committees of the management body.

2. Where an institution acts as a clearing member, either for its own purposes or as a financial intermediary between a client and a CCP, it shall calculate the own funds requirements for its exposures to a CCP in accordance with Articles 297 to 300.

3. Where an institution acts as a clearing member and, in that capacity, acts as a financial intermediary between a client and a CCP, it shall calculate the own funds requirements for its CCP-related transactions with the client in accordance with the remaining Sections of this Chapter, as applicable.

4. Where an institution is a client of a clearing member, it shall calculate the own funds requirements for its CCP-related transactions with the clearing member in accordance with the remaining Sections of this Chapter, as applicable.

5. As an alternative to the approach specified in paragraph 4, where an institution is a client, it may calculate the own funds requirements for its CCP-related transactions with the clearing member in accordance with Articles 297 to 300 provided that both of the following conditions are met:

   (a) the positions and assets of that institution related to those transactions are distinguished and segregated, at the level of both the clearing member and the CCP, from the positions and assets of both the clearing member and the other clients of that clearing member and as a result of that segregation those positions and assets are bankruptcy remote in the event of the default or insolvency of the clearing member or one or more of its other clients;

   (b) relevant laws, regulations, rules and contractual arrangements applicable to or binding that institution or the CCP ensure that in the event of default or insolvency of the clearing member, the transfer of the institution's positions relating to those contracts and transactions and of the corresponding collateral to another clearing member within the relevant margin period of risk.

6. Where an institution acting as a clearing member enters into a contractual arrangement with a client of another clearing member in order to ensure that client the portability of assets and positions referred to in point (b) of paragraph 5, that institution may attribute an exposure value of zero to the contingent obligation that is created due to that contractual arrangement.

Article 297
Own funds requirements for trade exposures

1. An institution shall apply a risk weight of 2% to the exposure values of all its trade exposures with CCPs.

2. Notwithstanding paragraph 1, where assets posted as collateral to a CCP or a clearing member are bankruptcy remote in the event that the CCP, the clearing member or one or more of the other clients of the clearing member becomes insolvent, an institution may attribute an exposure value of zero to the counterparty credit risk exposures for those assets.

3. An institution shall calculate exposure values of its trade exposures with a CCP in accordance with the remaining Sections of this Chapter, as applicable.

4. An institution shall calculate the risk weighted exposure amounts for its trade exposures with CCPs for the purposes of Articles 108(8) and 151 as the sum of the exposure values of its trade exposures with CCPs, calculated in accordance with paragraphs 2 and 3, multiplied by the risk weight determined in accordance with paragraph 1.

5. Notwithstanding paragraphs 1 and 2, where an institution posts assets as collateral to a CCP, it shall apply to those assets a risk weight that otherwise applies under Chapters 2 to 4 to the exposure values calculated in accordance with paragraph 3.

Article 298
Own funds requirements for default fund contributions

1. Institutions acting as clearing members shall hold own funds to cover the exposures arising from their contributions to the default fund of a CCP. They shall calculate the own funds requirement for those exposures in accordance with the methodology set out in this Article.

Where a CCP does not have separate default funds for transactions in products with settlement risks only as set out in Title V and for contracts and transactions listed in Article 295(1), but uses instead the same default fund to mutualise losses associated with all those transactions and contracts, institutions shall apply the methodology set out in this Article to all their contributions to that default fund.

2. An institution shall calculate the own funds requirement (K_i) to cover the exposure arising from its pre-funded contribution (DF_i) as follows:

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

where:

β= the concentration factor communicated to the institution by the CCP;

N= the number of clearing members communicated to the institution by the CCP;

DF_{CM}= the sum of pre-funded contributions of all clearing members of the CCP ($\sum_i DF_i$) communicated to the institution by the CCP;

K_{CM}= the sum of the own funds requirements of all clearing members of the CCP calculated in accordance with the applicable formula specified in paragraph 3 ($\sum_i K_i$).

Where a CCP has in place a binding contractual arrangement with its clearing members that allows it to use all or part of the initial margin received from its clearing members as if they were pre-funded contributions, the clearing member shall consider that initial margin as pre-funded contributions for the purposes of the calculation in this paragraph.

3. Institutions shall calculate K_{CM} as follows:

(a) where $K_{CCP} \leq DF_{CCP}$ institutions shall use the following formula:

$$K_{CM} = c_1 \cdot DF_{CM}^{*};$$

(b) where $DF_{CCP} < K_{CCP} \leq DF^{*}$ institutions shall use the following formula:

$$K_{CM} = c_2 \cdot \left(K_{CCP} - DF_{CCP}\right) + c_1 \cdot \left(DF^{*} - K_{CCP}\right);$$

(c) where $DF^{*} < K_{CCP}$ institutions shall use the following formula:

$$K_{CM} = c_2 \cdot \mu \cdot \left(K_{CCP} - DF^{*}\right) + c_2 \cdot DF_{CM}^{*}$$

where:

DF_{CCP} = the pre-funded financial resources of the CCP communicated to the institution by the CCP;

K_{CCP} = the hypothetical capital of the CCP communicated to the institution by the CCP;

DF = the total pre-funded contributions communicated to the institution by the CCP;

DF^{*} = $DF_{CCP} + DF_{CM}^{*}$;

DF_{CM}^{*} = $DF_{CM} - 2 \cdot \overline{DF_i}$;

$\overline{DF_i}$ = the average pre-funded contribution, $\frac{1}{N} \cdot DF_{CM}$, communicated to the institution by the CCP;

c_1 = a capital factor equal to $\max\left\{\frac{1.6\%}{\sqrt{\frac{DF^{*}}{K_{CCP}}}}, 0.16\%\right\}$;

c_2 = a capital factor equal to 100%;

μ = 1.2.

4. Institutions acting as clearing members shall calculate the own funds requirement (K_i^c) for the exposure arising from its contractually committed contributions (DF_i^c) as follows:

(a) where $DF^{*} \geq K_{CCP}$, institutions shall use the following formula:

$$K_i^c = c_1 \cdot DF_i^c$$

where:

c_1 = a capital factor equal to $\max\left\{\frac{1.6\%}{\sqrt{\frac{DF^* + DF^c_{CM}}{K_{CCP}}}}, 0.16\%\right\}$;

DF^c_{CM} = the sum of all of the contractually committed contributions ($\sum_i DF^c_i$), communicated to the institution by the CCP;

(b) where $DF^* < K_{CCP}$, institutions shall use the following formula:

$$K^c_i = c_2 \cdot \mu \cdot \max\{0, DF^c_i - (K_{CCP} - DF^*)\}.$$

5. Risk weighted exposure amounts for exposures arising from an institution's pre-funded contribution for the purposes of Article 108(8) and Article 151 shall be calculated as the own funds requirement (K_i) determined in accordance with paragraphs 2 to 4 multiplied by 12.5.

6. 'Contractually committed contribution' means a contribution to the default fund of a CCP that an institution is contractually required to pay on a specified event, but which is not a pre-funded contribution.

7. Where a CCP does not have a default fund and it does not have in place a binding contractual arrangement with its clearing members that allows it to use all or part of the initial margin received from its clearing members as if they were pre-funded contributions, the following shall apply:

(a) institutions shall substitute the formula for calculating the own funds requirement (K_i) in paragraph 2 with the following one:

$$K_i = \left((1+\beta)\cdot\frac{N}{N-2}\right)\cdot\frac{IM_i}{IM}\cdot K_{CM}$$

where:

IM_i = the initial margin posted to the CCP by clearing member i;

IM = the sum of initial margin communicated to the institution by the CCP;

(b) where DF_{CCP} is equal to zero, institutions shall use a value for c_1 of 1.6% for the purpose of the calculation in paragraph 3.

8. Where K_{CCP} is equal to zero, institutions shall use the value for c_1 of 1.6% for the purpose of the calculation in paragraphs 3 and 4.

Article 299
Calculation of the hypothetical capital of a CCP

1. For contracts and transactions listed in Article 295(1), a CCP shall calculate the hypothetical capital needed by its clearing members for the purposes of this Section as follows:

$$K_{CCP} = \sum_i \max\{EBRM_i - VM_i - IM_i - DF_i, 0\} \cdot RW \cdot capital\ ratio$$

where:

$EBRM_i$=	exposure value before risk mitigation that is equal to the exposure value of the CCP to clearing member i arising from the contracts and transactions listed in Article 295(1) calculated without taking into account the collateral posted by that clearing member;
VM_i=	the variation margin associated with clearing member i;
IM_i=	the initial margin posted to the CCP by clearing member i;
DF_i=	the pre-funded contribution of clearing member i;
RW =	a risk weight of 20%;
capital ratio=	8%.

2. For the purposes of the calculation required by paragraph 1, the following shall apply:

(a) a CCP shall calculate the value of the exposures it has to its clearing members in accordance with the Mark-to-Market Method specified in Article 269. When calculating those values, the CCP shall subtract from its exposures the collateral posted by its clearing members, appropriately reduced by the supervisory volatility adjustments in accordance with the Financial Collateral Comprehensive Method specified in Article 219;

(b) where the clearing member is entitled to receive - but has not yet received - the variation margin from the CCP, the CCP shall enter the corresponding amount of VM_i into the equation with a positive sign. Conversely, where the CCP is entitled to receive - but has not yet received - the variation margin from the clearing member, the CCP shall enter the corresponding amount of VM_i into the equation with a negative sign;

(c) where a CCP has an exposure to one or more CCPs it shall treat any such exposure as if it were an exposure to clearing members and include any margin or pre-funded contributions received from those CCPs in the calculation of K_{CCP};

(d) where a CCP's financial resources are used in parallel, and on a pro-rata basis, to the pre-funded contributions of its clearing members, the CCP shall add the corresponding amount of those resources to DF_{CM};

(e) where a CCP has in place a binding contractual arrangement with its clearing members that allows it to use all or part of the initial margin received from its clearing members as if they were pre-funded contributions, the CCP shall consider that initial margin as pre-funded contributions for the purposes of the calculation in paragraph 1 and for the purpose of the notification in point (b) of paragraph 4;

(f) A CCP shall replace the formula in point (c)(ii) of Article 292(1) with the following one:

$$PCE_{red} = 0.3 \cdot PCE_{gross} + 0.7 \cdot NGR \cdot PCE_{gross};$$

(g) where a CCP cannot calculate the value of NGR as defined in point (c)(ii) of Article 292(1), it shall do the following:

(i) notify those of its clearing members which are institutions about its inability to calculate NGR;

(ii) for a period of 3 months, it may use a value of NGR of 0.3 to perform the calculation of PCE_{red} specified in point (f);

(h) where, at the end of the period specified in point (ii) of point (g), the CCP would still be unable to calculate the value of NGR, it shall do the following:

(i) stop calculating K_{CCP};

(ii) notify those of its clearing members which are institutions that it has stopped calculating K_{CCP};

(i) for the purpose of calculating the potential future exposure for options and swaptions under the Mark-to-Market Method specified in Article 269, a CCP shall multiply the notional amount of the contract by the absolute value of the option's delta ($\partial V / \partial p$) as defined in point (a) of Article 274(1);

(j) where the rules of a CCP foresee that it shall use part of its financial resources to cover its losses due to the default of one or more of its clearing members after it has depleted its default fund, but before it calls on the contractually committed contributions of its clearing members, the CCP shall add the amount of those additional financial resources (DF^{a}_{CCP}) to the total amount of pre-funded contributions (DF):

$$DF = DF_{CCP} + DF_{CM} + DF^{a}_{CCP}.$$

3. A CCP shall undertake the calculation required by paragraph 1 at least quarterly or more frequently where required by the competent authorities of those of its clearing members which are institutions.

4. A CCP shall notify the following information to those of its clearing members which are institutions and to their competent authorities:

(a) the hypothetical capital (K_{CCP});

(b) either the sum of pre-funded contributions (DF_{CM}) or, where the CCP does not have a default fund and it does not have in place a binding contractual arrangement with its clearing members that allows it to use all or part of the initial margin received from its clearing members as if they were pre-funded contributions, the sum of initial margin received from its clearing members ($IM = \sum_i IM_i$);

(c) the amount of its pre-funded financial resources that it is required to use - by law or due to a contractual agreement with its clearing members - to cover its losses following the default of one or more of its clearing members before using the default fund contributions of the remaining clearing members (DF_{CCP});

(d) the average pre-funded contribution ($\overline{DF_i}$);

(e) the total number of its clearing members (N);

(f) the concentration factor (β), as defined in paragraph 5;

(g) the sum of all of the contractually committed contributions (DF_{CM}^{c}).

The CCP shall notify those of its clearing members which are institutions at least quarterly or more frequently where required by the competent authorities of those clearing members.

5. A CCP shall calculate the concentration factor (β) according to the following formula:

$$\beta = \frac{\max_i \{PCE_{red,i}\}}{\sum_i PCE_{red,i}}$$

where:

$PCE_{red,i}$= the reduced figure for potential future credit exposure for all contracts and transaction of a CCP with clearing member i.

6. Institutions shall inform their competent authorities about the receipt of the notifications referred to in point (i) of points (g) and (h) of paragraph 2 and in paragraph 4.

7. EBA shall develop implementing technical standards to specify the following:

(a) the frequency and dates of the calculations specified in paragraph 1;

(b) the frequency, dates and uniform format of the notification specified in paragraph 4;

(c) the situations in which the competent authority of an institution acting as a clearing member may require higher frequencies of calculation and reporting than the ones set out following points a and b.

EBA shall submit those draft implementing technical standards to the Commission by 1 January 2014.

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with the procedure laid down in Article 15 of Regulation (EU) No 1093/2010.

Article 300

Own funds requirements for exposures to non-complying CCPs and for exposures from non-complying transactions

1. Where the condition set in Article 295(3) has been met, institutions shall do the following:

   (a) they shall apply the Standardised Approach for credit risk as set out in Chapter 2 to calculate the exposure values and risk weighted amounts of trade exposures for their contracts and transactions with a CCP;

   (b) they shall apply the following formula to calculate the own funds requirement for the exposures arising from their pre-funded and their contractually committed contributions:

   $$K_i = c_2 \cdot \mu \cdot \left(DF_i + DF_i^c\right).$$

   Where only the condition in point (c) of Article 295(2) is not met, institutions shall apply point (a) in relation to the trade exposures relating to the contract or transaction rejected by the CCP, and the treatment specified in Article 298 to exposures arising from both their pre-funded and their contractually committed contributions.

2. Institutions shall calculate the own funds requirement for their exposures to a CCP in accordance with paragraph 3 in the following circumstances:

   (a) they have received from the CCP a notification required by point (h)(ii) of Article 299(2) that the CCP has stopped calculating K_{CCP};

   (b) it becomes known to institutions – following a public announcement or notification from the competent authority of that CCP or from the CCP itself - that the CCP in question will no longer comply with the condition set out in point (a) of Article 295(2);

   (c) the condition set out in point (b) of Article 295(2) ceases to be met.

3. Within 3 months of a circumstance set in points (a) to (c) of paragraph 2 arising, or earlier where the competent authority of the institution requires it, an institution shall cease to apply Articles 297 and 298 for the calculation of own funds requirements for trade exposures and default fund contributions, and shall instead do the following:

   (a) it shall calculate the own funds requirement for trade exposures to that CCP in accordance with point (a) of paragraph 1;

   (b) it shall calculate the own funds requirement for exposures arising from both its pre-funded and its contractually committed contributions to that CCP in accordance with point (b) of paragraph 1.