

Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Text with EEA relevance)

PART THREE

**CAPITAL REQUIREMENTS**

TITLE II

**CAPITAL REQUIREMENTS FOR CREDIT RISK**

*CHAPTER 4*

*Credit risk mitigation*

*Section 1*

***Definitions and general requirements***

*Article 192*

**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 CIU' means a CIU in the shares or units of which another CIU has invested.

*Article 193*

**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 applicable, 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 amend 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 194*

##### **Principles governing the eligibility of credit risk mitigation techniques**

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

The lending institution shall provide, upon request of the competent authority, the most recent version of the independent, written and reasoned legal opinion or opinions that it used to establish whether its credit protection arrangement or arrangements meet the condition laid down in the first subparagraph.

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 Institutions may recognise funded credit protection in the calculation of the effect of credit risk mitigation only where the assets relied upon for protection meet both of the following conditions:

- a they are included in the list of eligible assets set out in Articles 197 to 200, 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 Institutions may recognise funded credit protection in the calculation of the effect of credit risk mitigation only where the lending institution has 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 the protection provider is included in the list of eligible protection providers set out in Article 201 or 202, as applicable.

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 203 and 204(1);
- 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;
- c the protection provider meets the criteria laid down in paragraph 5.

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

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 fact that credit risk mitigation has been taken into account for the purposes of calculating risk-weighted exposure amounts and, where applicable, 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 and securities lending 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 what constitutes sufficiently liquid assets and when asset values can be considered as sufficiently stable for the purpose of paragraph 3.

EBA shall submit those draft regulatory technical standards to the Commission by 30 September 2014.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with 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 195

#### **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 196, eligibility is limited to reciprocal cash balances between the institution and the counterparty. Institutions may amend 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 196

#### **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 223 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 299, 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 197 and 198.

##### Article 197

#### **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 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 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 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 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 115(2);
  - b debt securities issued by public sector entities which are treated as exposures to central governments in accordance with Article 116(4);
  - c debt securities issued by multilateral development banks to which a 0 % risk weight is assigned under Article 117(2);
  - d debt securities issued by international organisations which are assigned a 0 % risk weight under Article 118.
- 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 debt securities referred to in point (a) of paragraph 2;
  - b debt securities issued by public sector entities, exposures to which are treated in accordance with Article 116(1) and (2);
  - c debt securities issued by multilateral development banks other than those to which a 0 % risk weight is assigned under Article 117(2).
- 4 An institution may use debt securities that are issued by other institutions and that do not have a credit assessment by an 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 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 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 point (c);
  - e the market liquidity of the instrument is sufficient for these purposes.
- 5 Institutions may use units or shares in CIUs as eligible collateral where all the following conditions are satisfied:
- a the units or shares have a daily public price quote;

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- b the CIUs are limited to investing in instruments that are eligible for recognition under paragraphs 1 and 2;
- c the CIUs meet the conditions laid down in Article 132(3).

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

The use by a CIU 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 CIU ('the original CIU') or any of its underlying CIUs 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 CIUs have invested in non-eligible assets to the maximum extent allowed under their respective mandates.

Where any underlying CIU has underlying CIUs of its own, institutions may use units or shares in the original CIU as eligible collateral provided that they apply the methodology laid down in the first subparagraph

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 the absolute value of 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 ECAs, institutions shall apply the less favourable assessment. Where a security has more than two credit assessments by ECAs, 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 implementing technical standards to specify the following:
- a the main indices referred to in point (f) of paragraph 1 of this Article, in point (a) of Article 198(1), in Article 224(1) and (4), and in point (e) of Article 299(2);
  - b the recognised exchanges referred to in point (a) of paragraph 4 of this Article, in point (a) of Article 198(1), in Article 224(1) and (4), in point (e) of Article 299(2), in point (k) of Article 400(2), in point (e) of Article 416(3), in point (c) of Article 428(1), and in point 12 of Annex III in accordance with the conditions laid down in point (72) of Article 4(1).

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 Article 15 of Regulation (EU) No 1095/2010.

## Article 198

### **Additional eligibility of collateral under the Financial Collateral Comprehensive Method**

1 In addition to the collateral established in Article 197, where an institution uses the Financial Collateral Comprehensive Method set out in Article 223, 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 CIUs where both the following conditions are met:
  - (i) the units or shares have a daily public price quote;
  - (ii) the CIU is limited to investing in instruments that are eligible for recognition under Article 197(1) and (4) 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 CIU of derivative instruments to hedge permitted investments shall not prevent units or shares in that undertaking from being eligible as collateral.

2 Where the CIU or any underlying CIU are not limited to investing in instruments that are eligible for recognition under Article 197(1) and (4) and the items mentioned in point (a) of paragraph 1 of this Article, 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 CIUs 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 the absolute value of that amount from the total value of the eligible assets.

## Article 199

### **Additional eligibility for collateral under the IRB Approach**

1 In addition to the collateral referred to in Articles 197 and 198, 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, 3 and 4;
- b receivables in accordance with paragraph 5;
- c other physical collateral in accordance with paragraphs 6 and 8;
- d leasing in accordance with paragraph 7.

2 Unless otherwise specified under Article 124(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 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 124(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.

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 set out in that subparagraph until both conditions are satisfied in a subsequent year.

4 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 do not exceed any of the following limits:

- 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 set out in that subparagraph until both conditions are satisfied in a subsequent year.

5 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.

6 Competent authorities shall permit an institution to use as eligible collateral physical collateral of a type other than those indicated in paragraphs 2, 3 and 4 where all the following conditions are met:

- a there are liquid markets, evidenced by frequent transactions taking into account the asset type, for the disposal of the collateral in an expeditious and economically efficient



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- 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, the institution demonstrates to the satisfaction of the competent authorities that its 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 210.

7 Subject to the provisions of Article 230(2), where the requirements set out in Article 211 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.

8 EBA shall disclose a list of types of physical collateral for which institutions can assume that the conditions referred to in points (a) and (b) of paragraph 6 are met.

#### *Article 200*

### **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 201*

### **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;

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- c multilateral development banks;
- d international organisations exposures to which a 0 % risk weight under Article 117 is assigned;
- e public sector entities, claims on which are treated in accordance with Article 116;
- f institutions, and financial institutions for which exposures to the financial institution are treated as exposures to institutions in accordance with Article 119(5);
- 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 an ECAI;
  - (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 by the institution;
- h central counterparties.

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.

Competent authorities shall publish and maintain the list of those financial institutions that are eligible providers of unfunded credit protection under point (f) of paragraph 1, or the guiding criteria for identifying such 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 117 of Directive 2013/36/EU.

#### *Article 202*

#### **Eligibility of protection providers under the IRB Approach which qualify for the treatment set out in Article 153(3)**

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 153(3) 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.

### *Article 203*

#### **Eligibility of guarantees as unfunded credit protection**

Institutions may use guarantees as eligible unfunded credit protection.

### *Sub-Section 3*

#### ***Types of derivatives***

### *Article 204*

#### **Eligible types 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 this Chapter 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 205*

**Requirements for on-balance sheet netting agreements other than master netting agreements referred to in Article 206**

On-balance sheet netting agreements other than master netting agreements referred to in Article 206 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 206*

**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 laid down in Article 207(2) to (4) 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 an agreement so that a single net amount is owed by one party to the other.

## Article 207

### 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. Where the value of the collateral is reduced significantly, this shall not alone imply a significant deterioration of the credit quality of the obligor. Where the credit quality of the obligor becomes critical, this shall not alone imply a significant reduction in the value of the collateral.

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 129 qualify as eligible collateral when they are posted as collateral for a repurchase transaction, 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, at least 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 margin calls and response time to incoming margin 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;

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- (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 meeting all the requirements set out in paragraphs 2 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 208*

### **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 certainty 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 209*

### **Requirements for receivables**

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

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- 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 collateral including the right to the proceeds from the sale of the collateral;
  - 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 the institution relies on its borrowers to ascertain the credit risk of the customers, the institution shall review the borrowers' credit practices to ascertain their soundness and credibility;
  - b the difference 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 210*

#### **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

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- shall enable that institution to realise the value of the collateral within a reasonable timeframe;
- (b) with the sole exception of permissible first priority claims referred to in Article 209(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 least 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 the following:
    - (i) appropriate collateral requirements relative to the exposure amount;
    - (ii) the ability to liquidate the collateral readily;
    - (iii) the ability to establish objectively a price or market value;
    - (iv) the frequency with which the value can readily be obtained, including a professional appraisal or valuation;
    - (v) the volatility or a proxy of the volatility of the value of the collateral.
  - (g) when conducting valuation and revaluation, institutions shall take fully into account any deterioration or obsolescence of the collateral, paying 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 211*

#### **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 Article 208 or 210, as applicable, 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 212*

#### **Requirements for other funded credit protection**

1 Cash on deposit with, or cash assimilated instruments held by, a third party institution shall be eligible for the treatment set out in Article 232(1), where all the following conditions are 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 and is unconditional and irrevocable;
- 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.

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, as a result of the notification, 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 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 213*

#### **Requirements common to guarantees and credit derivatives**

1 Subject to Article 214(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 and incontrovertible;
- 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 a deterioration in the 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 134(7) and 166(4);
  - (iv) could allow the maturity of the credit protection to be reduced by the protection provider;
- d the credit protection contract 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 An institution 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 its interest in the credit protection.

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

#### *Article 214*

#### **Sovereign and other public sector counter-guarantees**

1 Institutions may treat the exposures referred to 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;

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- b both the original guarantee and the counter-guarantee meet the requirements for guarantees set out in Articles 213 and 215(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 set out 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 116(4);
- d a multilateral development bank or an international organisation, to which a 0 % risk weight is assigned under or by virtue of Articles 117(2) and 118 respectively;
- e a public sector entity, claims on which are treated in accordance with Article 116(1) and (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 215*

#### **Additional requirements for guarantees**

1 Guarantees shall qualify as eligible unfunded credit protection where all the conditions in Article 213 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 213(1)(c)(iii) and in the first subparagraph of this point 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 listed in Article 214(2), the requirements in point (a) of paragraph 1 of this Article 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:

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- (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 216*

#### **Additional requirements for credit derivatives**

1 Credit derivative shall qualify as eligible unfunded credit protection where all the conditions in Article 213 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 equal to 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 233(2);

2 A mismatch between the underlying obligation and the reference obligation under the credit derivative 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 the purpose of determining whether a credit event has occurred, as the case may be, ranks *pari passu* with or is junior to the underlying obligation;
- b the underlying obligation and the reference obligation or the obligation used for the purpose 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 217*

#### **Requirements to qualify for the treatment set out in Article 153(3)**

1 To be eligible for the treatment set out in Article 153(3), 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 referred to in Article 147, 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 in accordance with Article 147;
  - (iii) an exposure to an SME, classified as a retail exposure in accordance with Article 147(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 213, 215 and 216, as applicable;
- e the risk weight that is associated with the exposure prior to the application of the treatment set out in Article 153(3), 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;

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- 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 153(3) 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 153(3) 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 218*

### **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. For the purpose of determining whether the credit default swap embedded in a credit linked note qualifies as eligible unfunded credit protection, the institution may consider the condition in point (c) of Article 194(6) to be met.

#### *Article 219*

### **On-balance sheet netting**

Loans to and deposits with the lending institution subject to on-balance sheet netting are to be treated by that institution 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 220

### **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 223 to 226 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\*, institutions shall:
- a calculate the net position in each group of securities or in each type of commodity by subtracting the amount in point (ii) from the amount in point (i):
    - (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 master netting agreement;
  - b calculate the net position in each currency, other than the settlement currency of the master netting agreement, by subtracting the amount in point (ii) from the amount in point (i):
    - (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 that agreement;
    - (ii) the sum of the total value of securities denominated in that currency borrowed, purchased or received under the master netting agreement and the amount of cash in that currency borrowed or received under that agreement;
  - c 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 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:

$$E^* = \max \left\{ 0, \left( \sum_i E_i - \sum_i C_i \right) + \sum_j |E_{sec}^j| \cdot H_{sec}^j + \sum_k |E_{fx}^k| \cdot H_{fx}^k \right\}$$

where:

- E<sub>i</sub> = 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;

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$C_i$	<p>= 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 <math>i</math>;</p> <p>= the net position (positive or negative) in a given group of securities <math>j</math>;</p>
$E_{sec}^j$	<p>= the net position (positive or negative) in a given currency <math>k</math> other than the settlement currency of the agreement as calculated under point (b) of paragraph 2;</p>
$E_{je}^k$	<p>= the volatility adjustment appropriate to a particular group of securities <math>j</math>;</p>
$H_{sec}^j$	<p>= the foreign exchange volatility adjustment for currency <math>k</math>.</p>
$H_{je}^k$	

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 113 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 224 and 225, as applicable.

#### *Article 221*

#### **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 220.

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 292(8) and (9) and in Article 294.

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

An institution 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:

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

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

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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 285(2), (3) and (4), the minimum holding period shall be brought in line with the margin period of risk that would apply under those paragraphs, in combination with Article 285(5).

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 113 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 constitutes 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 purpose of paragraphs 4 and 5 and master netting agreements.

EBA shall submit those draft regulatory technical standards to the Commission by 31 December 2015.

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

## *Article 222*

### **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 148(1) and 150(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 207(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 111(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 227. 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 114, 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 115;
- b debt securities issued by multilateral development banks to which a 0 % risk weight is assigned under or by virtue of Article 117(2);
- c debt securities issued by international organisations which are assigned a 0 % risk weight under Article 118;
- d debt securities issued by public sector entities which are treated as exposures to central governments in accordance with Article 116(4).

### Article 223

#### 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 224 to 227, 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 224 to 227.

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:

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

where:

- C = the value of the collateral;
- $H_C$  = the volatility adjustment appropriate to the collateral, as calculated under Articles 224 and 227;
- $H_{fx}$  = the volatility adjustment appropriate to currency mismatch, as calculated under Articles 224 and 227.

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 220 and 221 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 applicable, where the exposure was not collateralised;
- $H_E$  = the volatility adjustment appropriate to the exposure, as calculated under Articles 224 and 227.

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:

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- 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 111(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 166(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 ( $E^*$ ), taking into account both volatility and the risk-mitigating effects of collateral as follows:

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

where:

$E_{VA}$  = the volatility adjusted value of the exposure as calculated in paragraph 3;  
 $C_{VAM}$  =  $C_{VA}$  further adjusted for any maturity mismatch in accordance with the provisions of Section 5;

6 Institutions may calculate volatility adjustments either by using the Supervisory Volatility Adjustments Approach referred to in Article 224 or the Own Estimates Approach referred to in Article 225.

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 ( $H$ ) 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;  
 $H_i$  = the volatility adjustment applicable to eligible item  $i$ .

#### Article 224

### **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.

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## 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 Article 197(1)(b)			Volatility adjustments for debt securities issued by entities described in Article 197(1) (c) and (d)			Volatility adjustments for securitisation positions and meeting the criteria in Article 197(1) (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	16,97
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	Volatility adjustments for debt securities issued by entities described in Article 197(1)(b) with short-term credit assessments	Volatility adjustments for debt securities issued by entities described in Article 197(1) (c) and (d) with short-term credit assessments	Volatility adjustments for securitisation positions and meeting the criteria in Article 197(1)(h)
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Table 2

assessment of a short term debt security is associated									
	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	0,707	0,5	0,354	1,414	1	0,707	2,829	2	1,414
2-3	1,414	1	0,707	2,828	2	1,414	5,657	4	2,828

Table 3

**Other collateral or exposure types**

	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
<b>Main Index Equities, Main Index Convertible Bonds</b>	21,213	15	10,607
<b>Other Equities or Convertible Bonds listed on a recognised exchange</b>	35,355	25	17,678
<b>Cash</b>	0	0	0
<b>Gold</b>	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.

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Where an institution has a transaction or netting set which meets the criteria set out in Article 285(2), (3) and (4), 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 197(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 CIUs 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 197(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 225*

##### **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 an 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 an 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 Section 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;

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- 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 226*

#### **Scaling up of volatility adjustment under the Financial Collateral Comprehensive method**

The volatility adjustments set out in Article 224 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 225, 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 <sub>M</sub> | = the volatility adjustment where there is daily revaluation;     |
| N <sub>R</sub> | = the actual number of business days between revaluations;        |
| T <sub>M</sub> | = the liquidation period for the type of transaction in question. |

#### *Article 227*

#### **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 224 or the Own Estimates Approach under Article 225 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 224 to 226, apply a 0 % volatility adjustment. Institutions using the internal models approach set out in Article 221 shall not use the treatment set out in this Article.

2 Institutions may apply a 0 % volatility adjustment where all the following conditions are met:

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- a both the exposure and the collateral are cash or debt securities issued by central governments or central banks within the meaning of Article 197(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 in 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 197(1)(b) exposures to which are assigned a 0 % risk weight under Chapter 2;
  - b institutions;
  - c other financial undertakings within the meaning of points (25)(b) and (d) of Article 13 of Directive 2009/138/EC 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 by the institution;
  - d regulated CIUs that are subject to capital or leverage requirements;
  - e regulated pension funds;
  - f recognised clearing organisations.

#### *Article 228*

### **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 223(5) as the exposure value for the purposes of Article 113. 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 111(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 in accordance with Article 223(3);
- E\* = the fully adjusted exposure value in accordance with Article 223(5).

### Article 229

#### **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 at 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 at less than the mortgage lending value. Institutions shall require the independent valuer not to take into account speculative elements in the assessment of the mortgage lending value and to 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 208(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. For the purposes of this Article, the market value is 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 230

#### **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 (C) to the exposure value (E) 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 Article 166(8) to (10) by using a conversion factor or percentage of 100 % rather than the conversion factors or percentages indicated in those paragraphs.

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**

	<b>LGD* for senior exposure</b>	<b>LGD* for subordinated exposures</b>	<b>Required minimum collateralisation level of the exposure (C*)</b>	<b>Required minimum collateralisation level of the exposure (C**)</b>
<b>Receivables</b>	35 %	65 %	0 %	125 %
<b>Residential real estate/ commercial real estate</b>	35 %	65 %	30 %	140 %
<b>Other collateral</b>	40 %	70 %	30 %	140 %

3 As an alternative to the treatment set out in paragraphs 1 and 2, and subject to Article 124(2), institutions may assign a 50 % risk weight to the part of the exposure that is, within the limits set out in Article 125(2)(d) and Article 126(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 199(4) are met.

*Article 231*

**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 223(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 applicable.

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 232*

**Other funded credit protection**

1 Where the conditions set out in Article 212(1) are met, deposits with third party institutions may be treated as a guarantee by the third party institution.

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2 Where the conditions set out in Article 212(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 the event of a currency mismatch, institutions shall reduce the current surrender value in accordance with Article 233(3), the value of the credit protection being the current surrender value of the life insurance policy.

3 For the 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 undertaking providing the life insurance is assigned a risk weight of 20 %;
- b a risk weight of 35 %, where the senior unsecured exposure to the undertaking providing the life insurance is assigned a risk weight of 50 %;
- c a risk weight of 70 %, where the senior unsecured exposure to the undertaking providing the life insurance is assigned a risk weight of 100 %;
- d a risk weight of 150 %, where the senior unsecured exposure to the undertaking providing the life insurance is assigned a risk weight of 150 %.

4 Institutions may treat instruments repurchased on request that are eligible under Article 200(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 that meet the conditions in Article 197(4).

## *Sub-Section 2*

### ***Unfunded credit protection***

#### *Article 233*

#### **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:

$$G^* = G \cdot (1 - H_{fx})$$

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 224 and 225 respectively. Institutions shall scale up the volatility adjustments in accordance with Article 226.

#### *Article 234*

### **Calculating risk-weighted exposure amounts and expected loss amounts in the event 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 tranching transfer of risk.

#### *Article 235*

### **Calculating risk-weighted exposure amounts under the Standardised Approach**

1 For the purposes of Article 113(3) institutions shall calculate the risk-weighted exposure amounts in accordance with the following formula:

$$\max\{0, E - G_A\} \cdot \tau + G_A \cdot g$$

where:

- $E$  = the exposure value in accordance with Article 111; 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 111(1);

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- $G_A$  = the amount of credit risk protection as calculated under Article 233(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 set out in Article 114(4) and (7) 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 236*

#### **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 4 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 4 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 For the purposes of this Article,  $G_A$  is the value of  $G^*$  as calculated under Article 233(3) further adjusted for any maturity mismatch as laid down in Section 5.  $E$  is the exposure value determined in accordance with Section 5 of Chapter 3. For this purpose, institutions shall calculate the exposure value of the items listed in Article 166(8) to (10) by using a conversion factor or percentage of 100 % rather than the conversion factors or percentages indicated in those paragraphs.

### *Section 5*

#### ***Maturity mismatches***

### *Article 237*

#### **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 162(3).

#### *Article 238*

### **Maturity of credit protection**

1 Subject to a maximum of five 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 239*

### **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 223(2) or the amount of the exposure, whichever is lower;                                |
| $t$      | = the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 238, 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 238, or five years, whichever is lower;                 |
| $t^*$    | = 0,25.  |

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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 223(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:

$G_A$	=	$G^*$ adjusted for any maturity mismatch;
$G^*$	=	the amount of the protection adjusted for any currency mismatch;
$t$	=	is the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 238, 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 238, or five years, whichever is lower;
$t^*$	=	0,25.

Institutions shall use  $G_A$  as the value of the protection for the purposes of Articles 233 to 236.

## *Section 6*

### ***Basket CRM techniques***

#### *Article 240*

#### **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 amend 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 risk weighted exposure amount in accordance with this Chapter:

- (a) for institutions using the Standardised Approach, the risk-weighted exposure amount shall be that calculated under the Standardised Approach;
- (b) for institutions using the IRB Approach, the risk-weighted exposure amount shall be the sum of the risk-weighted exposure amount calculated under the IRB Approach and 12.5 times the expected loss amount.

The treatment set out in this Article applies only where the exposure value is less than or equal to the value of the credit protection.

### *Article 241*

#### **Nth-to-default credit derivatives**

Where the *n*th 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 applicable, 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 amend the calculation of the risk-weighted exposure amount and, as applicable, the expected loss amount of the exposure which would, in the absence of the credit protection, produce the *n*-th lowest risk-weighted exposure amount in accordance with this Chapter. Institutions shall calculate the *n*th lowest amount as specified in points (a) and (b) of Article 240.

The treatment set out in this Article applies only where the exposure value is less than or equal to the value of the credit protection.

All exposures in the basket shall meet the requirements laid down in Article 204(2) and Article 216(1)(d).