SECTION III.1 - CREDIT RISK MITIGATION
General Principles

1. Credit institutions utilising either the Standardised Approach or the Foundation IRB Approach to calculate their credit risk capital requirement, may recognise credit risk mitigation in line with this Section, credit institutions utilising the Advanced IRB Approach, and therefore authorised to calculate their own estimates of LGD and conversion factors, will incorporate any credit risk mitigations in these estimates in line with the provisions of Appendix 2: Section II.

2. These credit risk mitigation techniques may be utilised for the calculation of risk weighted exposure amounts and expected loss amounts included in the calculation of Own Funds under Banking Rule BR/03. These latter amounts may be modified in accordance with Section III.4- III.7 of Appendix 2.

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

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

5. In the case of funded credit protection, to be eligible for recognition the assets relied upon must be 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.

6. Eligible assets are set out in Section III.2 of Appendix 2.

7. In the case of funded credit protection, the lending credit institution shall have the right to liquidate or retain, in a timely manner, the assets from which the protection derives in the event of the default, insolvency or bankruptcy of the obligor – or other credit event set out in the transaction documentation – 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 must not be undue.

8. In the case of unfunded credit protection, to be eligible for recognition the party giving the undertaking must be sufficiently reliable, and the protection agreement legally effective in the relevant jurisdictions, to provide appropriate certainty as tot the credit protection achieved having regard to the approach used to calculate risk-weighted exposure amounts and to the degree of recognition allowed. Eligibility shall be limited to the protection providers and types of protection agreements set out in Section III.2 of Appendix 2.

9. **For collateral to the recognised, all the requirements set out in Section III.3 of Appendix 2 must be complied with.**

10. No exposure in respect of which credit risk mitigation is obtained shall produce a higher risk-weighted exposure amount or expected loss amount than an otherwise identical exposure in respect of which there is no credit risk mitigation.

11. Where exposures are collateralised by residential or commercial real estate, their risk-weighted exposure amount would already take account of the credit protection. Therefore, no further mitigation may be recognised under this Section.

SECTION III.2 - CREDIT RISK MITIGATION
Eligibility

Section III.2 sets out eligible forms of credit risk mitigation.

For the purposes of this Section:

‘Secured lending transaction’ shall mean any transaction giving rise to an exposure secured by collateral which does not include a provision conferring upon the credit institution the right to receive margin frequently.

‘Capital market-driven transaction’ shall mean any transaction giving rise to an exposure secured by collateral which includes a provision conferring upon the credit institution the right to receive margin frequently.

‘Lending credit institution’ shall mean the credit institution which has the exposure in question, whether or not deriving from a loan.

1.0.0 FUNDED CREDIT PROTECTION

1.1.0 On-balance sheet netting

1.1.1 The on-balance sheet netting of mutual claims between the credit institution and its counterparty may be recognised.

1.1.2 Without prejudice to paragraph 1.2.1, eligibility is limited to reciprocal cash balances between the credit institution and the counterparty. Only loans and deposits of the lending credit institution may be subject to a modification of risk-weighted exposure amounts and, as relevant, expected loss amounts as a result of an on-balance sheet netting agreement.

1.2.0 Master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions

1.2.1 For credit institutions adopting the Financial Collateral Comprehensive Method under Section III.4 of this Appendix, the effects of bilateral netting contracts covering repurchase transactions, securities or commodities lending or borrowing transactions, and/or other capital market-driven transactions with a counterparty may be recognised. Without prejudice to Annex II of Banking Rule BR/08 (Settlement and Counterparty Risk), to be recognised, the collateral taken and securities or commodities borrowed within such agreements must comply with the eligibility requirements for collateral set out at paragraphs 1.3.2 to 1.3.6.

1.3.0 Collateral

1.3.1 Where the credit risk mitigation technique used relies on the right of the credit institution to liquidate or retain assets, eligibility depends upon whether risk-weighted exposure amounts, and, as relevant, expected loss amounts, are calculated under the Standardised or the IRB approaches. Eligibility further depends upon whether the Financial Collateral Simple Method is used or the Financial Collateral Comprehensive Method as defined under Section III.4 of this Appendix. In relation to repurchase transactions and securities or

commodities lending or borrowing transactions, eligibility also depends upon whether the transaction is booked in the non-trading book or the trading book.

Eligibility under all approaches and methods

1.3.2 The following financial items may be recognised as eligible collateral under all approaches and methods:

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

(b) Debt securities issued by central governments or central banks which securities have a credit assessment by an eligible ECAI or export credit agency, which has been determined by the authority 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 the Standardised Approach;

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

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

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

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

(g) Gold.

For the purposes of sub-paragraph (b) above, ‘debt securities issued by central governments or central banks shall be deemed to include –

(i) 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 the Standardised Approach;

(ii) debt securities issued by public sector entities which are treated as exposures to central governments in accordance with paragraph 3.4 of Appendix 2 Section I.2.

(iii) debt securities issued by multilateral development banks to which a 0% risk weight is applied under the Standardised Approach;

(iv) debt securities issued by international organisations which are assigned a 0% risk weight under the Standardised Approach.

For the purposes of sub-paragraph (c) above, 'debt securities issued by institutions' include

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

(ii) debt securities issued by public sector entities, exposures to which are treated as exposures to credit institutions under the Standardised Approach;

(iii) debt securities issued by multilateral development banks other than those to which a 0% risk weight is applied under the Standardised Approach.

1.3.3 Debt securities issued by institutions which securities do not have a credit assessment by an eligible ECAI may be recognised as eligible collateral if they fulfil 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 having a credit assessment by a recognised ECAI have a credit assessment by an eligible ECAI which has been determined by the authority 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 the Standardised Approach;

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

(e) the credit institution can demonstrate to the authority that the market liquidity of the instrument is sufficient for these purposes.

1.3.4 Units in collective investment undertakings may be recognised as eligible collateral if the following conditions are satisfied:

(a) they have a daily public price quote;

(b) the collective investment undertaking is limited to investing in instruments that are eligible for recognition under paragraphs 1.3.2 and 1.3.3.

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

If the collective investment undertaking is not limited to investing in instruments that are eligible for recognition under paragraphs 1.3.2 and 1.3.3, units may be recognised with the value of the eligible assets as collateral under the assumption that the CIU has invested to the maximum extent allowed under its mandate in non-eligible assets. In cases where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, the credit institution shall calculate the total value of the non-eligible assets and shall reduce the value of the eligible assets by that of the non-eligible assets in case the latter is negative in total.

1.3.5 In relation to points (b) to (e) of paragraph 1.3.2, where a security has two credit assessments by eligible ECAIs, the less favourable assessment shall be deemed to apply. In cases where a security has more than two credit assessments by eligible ECAIs, the two most favourable assessments shall be deemed to apply. If the two most favourable credit assessments are different, the less favourable of the two shall be deemed to apply.

Additional eligibility under the Financial Collateral Comprehensive Method

1.3.6 In addition to the collateral set out in paragraphs 1.3.2 to 1.3.5, where a credit institution uses the Financial Collateral Comprehensive Method under Section III.4, the following financial items may be recognised as eligible collateral:

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

(b) Units in collective investment undertakings if the following conditions are met:

(i) they have a daily public price quote; and

(ii) the collective investment undertaking is limited to investing in instruments that are eligible for recognition under paragraph 1.3.2 and 1.3.3 and the items mentioned in the point (a) of this paragraph.

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

If the collective investment undertaking is not limited to investing in instruments that are eligible for recognition under paragraphs 1.3.2 and 1.3.3 and the items mentionin in point (a) of this paragraph, units may be recognised with the value of the eligible assets as collateral under the assumption that the CIU has invested to the maximum extent allowed under its mandate in non-eligible assets. In cases where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, the credit institution shall calculate the total value of the non-eligible assets and shall reduce the value of the eligible assets by that of the non-eligible assets in case the latter is negative in total.

Additional eligibility for calculations under the IRB Approach

1.3.7 In addition to the collateral set out above the provisions of paragraphs 1.3.8 to 1.3.12 apply where a credit institution calculates risk-weighted exposure amounts and expected loss amounts under the IRB approach:

(a) Real estate collateral

1.3.8 Residential real estate 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 real estate i.e. offices and other commercial premises may be recognised as eligible collateral where the following conditions are met:

(a) The value of the property does not materially depend upon the credit quality of the obligor. This requirement does not preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower.

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

1.3.9 Credit institutions may also recognise as eligible collateral shares in Finnish residential housing companies operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation in respect of residential property which is or will be occupied or let by the owner, as residential real estate collateral, provided that these conditions are met.

1.3.10 Credit institutions may also recognise as eligible collateral shares in Finnish housing companies operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation as commercial real estate collateral, provided that these conditions are met.

1.3.11 If real estate property is deemed eligible in another member state, by virtue of removing condition (b) above, local credit institutions may also deem that property as eligible.

(b) Receivables

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

(c) Other physical collateral

1.3.13 The authority may recognise as eligible collateral physical items of a type other than those types indicated in paragraphs 1.3.8 to 1.3.11 if satisfied as to the following:

(a) the existence of liquid markets for disposal of the collateral in an expeditious and economically efficient manner; and

(b) the existence of well-established publicly available market prices for the collateral. The credit institution must be able to demonstrate that there is no evidence that the net prices it receives when collateral is realised deviates significantly from these market prices.

(d) Leasing

1.3.14 Subject to the provisions of paragraph 1.5.11 of Appendix 2 Section III.4, where the requirements set out in paragraph 1.7.1 of Appendix 2 section III.3 are met, exposures arising from transactions whereby a credit institution leases property to a third party will be treated the same as loans collateralised by the type of property leased.

1.4.0 Other funded credit protection

Cash on deposit with, or cash assimilated instruments held by, a third party institution.

1.4.1. Cash on deposit with, or cash assimilated instruments held by, a third party institution in a non-custodial arrangement and pledged to the lending credit institution may be recognised as eligible credit protection.

Life insurance policies pledged to the lending credit institution

1.4.2 Life insurance policies pledged to the lending credit institution may be recognised as eligible credit protection.

Institution instruments repurchased on request

1.4.3 Instruments issued by third party institutions which will be repurchased by that institution on request may be recognised as eligible credit protection.

2.0.0 UNFUNDED CREDIT PROTECTION

2.1.0 Eligibility of protection providers under all approaches

2.1.1 The following parties may be recognised as eligible providers of unfunded credit protection:

(a) Central governments and central banks;

(b) regional governments or local authorities;

(c) multi-lateral development banks;

(d) international organisations exposures to which receive a 0% risk weight under the Standardised Approach;

(e) public sector entities, claims on which are treated by the competent authorities as claims on institutions or central governments under the Standardised Approach;

(f) institutions;

(g) Other corporate entities, including parent, subsidiary and affiliate corporate entities of the credit institution, that

(i) have a credit assessment by a recognised ECAI which has been determined by the authority to be associated with credit quality step 2 or above under the rules for the risk weighting of exposures to corporates under the Standardised Approach;

(ii) in the case of credit institutions calculating risk-weighted exposure amounts and expected loss amounts under the IRB Approach, do not have a credit assessment by a recognised ECAI and are internally rated as having a probability of default equivalent to that associated with the credit assessments of ECAIs determined by

the authority to be associated with credit quality step 2 or above under the rules for the risk weighting of exposures to corporates under the Standardised Approach.

2.1.2 Where risk-weighted exposure amounts and expected loss amounts are calculated under the IRB Approach, to be eligible a guarantor must be internally rated by the credit institution in accordance with the provisions of Appendix 2 Section II.5.

2.2.0 Eligibility of protection providers under the IRB Approach which qualify for the treatment set out in paragraph 1.2.2 of Appendix 2 Section II.2

2.2.1 Institutions, insurance and reinsurance undertakings and export credit agencies which fulfil the following conditions may be recognised as eligible providers of unfunded credit protection which qualify for the treatment set out in paragraph 1.2.2 of Appendix 2 Section II.2:

– the protection provider has sufficient expertise in providing unfunded credit protection;

– the protection provider is regulated in a manner equivalent to the rules laid down in this Directive, or had, at the time the credit protection was provided, a credit assessment by a recognised ECAI which had been determined by the authority to be associated with credit quality assessment step 3, or above, under the rules for the risk weighting of exposures to corporates under the Standardised Approach;

– the protection provider 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 assessment step 2 or above under the rules for the risk weighting of exposures to corporates under the Standardised Approach;

– the provider has an internal rating with a PD equivalent to or lower than that associated with credit quality assessment step 3 or above under the rules for the risk weighting of exposures to corporates under the Standardised Approach.

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

3.0.0 TYPES OF CREDIT DERIVATIVES

3.0.1 The following types of credit derivatives, and instruments that may be composed of such credit derivatives or that are economically effectively similar, may be recognised as eligible.

(a) credit default swaps

(b) total return swaps

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

3.0.2 Where a credit 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 offsetting deterioration in the value of the asset that is protected (either through reductions in fair value or by an addition to reserves), the credit protection shall not be recognised.

3.1.0 Internal hedges

3.1.1 When a credit institution conducts an internal hedge using a credit derivative - i.e. hedges the credit risk of an exposure in the non-trading book with a credit derivative booked in the trading book - in order for the protection to be recognised for the purposes of this Section the credit risk transferred to the trading book shall be transferred out to a third party or parties. In such circumstances, subject to the compliance of such transfer with the requirements for the recognition of credit risk mitigation set out in this Annex, the rules for the calculation of risk-weighted exposure amounts and expected loss amounts where unfunded credit protection is acquired set out in Section III.4 to III.7 shall be applied.

SECTION III.3 - CREDIT RISK MITIGATION
Minimum Requirements

The credit institution must satisfy the authority that it has adequate risk management processes to control those risks to which the credit institution may be exposed as a result of carrying out credit risk mitigation practices.

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

1.0.0 FUNDED CREDIT PROTECTION

1.1.0 On-balance sheet netting (other than master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions and/or other capital market-driven transactions)

1.1.1 For on-balance sheet netting agreements - other than master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions and/or other capital market-driven transactions - to be recognised for credit risk mitigation purposes the following conditions shall be satisfied:

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

(b) the credit institution must be able to determine at any time those assets and liabilities that are subject to the netting agreement;

(c) the credit institution must monitor and control the risks associated with the termination of the credit protection;

(d) the credit institution must monitor and control the relevant exposures on a net basis.

1.2.0 Master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market driven transactions

1.2.1 For master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market driven transactions to be recognised for credit risk mitigation purposes, they shall:

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

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

1.2.2 In addition the minimum requirements for the recognition of financial collateral under the Financial Collateral Comprehensive Method set out in paragraph 1.3.1 shall be fulfilled.

1.3.0 Financial collateral

Minimum requirements for the recognition of financial collateral under all Approaches and Methods

1.3.1 For the recognition of financial collateral and gold, the following conditions shall be met:

(a) Low correlation

- The credit quality of the obligor and the value of the collateral must not have a material positive correlation.
- Securities issued by the obligor, or any related group entity are not eligible. This notwithstanding, the obligor's own issues of covered bonds falling within the terms of paragraphs 12.1 to 12.7 of Appendix 2 Section I.2 may be recognised as eligible when they are posted as collateral for repurchase transactions, provided that the first subparagraph of this point is complied with.

(b) Legal certainty

- Credit 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.
- Credit 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.

(c) Operational requirements

- The collateral arrangements shall be properly documented, with a clear and robust procedure for the timely liquidation of collateral.
- Credit institutions shall employ 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 credit institution's overall risk profile.
- The credit institution shall have documented policies and practices concerning the types and amounts of collateral accepted.
- Credit institutions shall calculate the market value of the collateral, and revalue it accordingly, with a minimum frequency of once every six months and whenever the credit institution has reason to believe that there has occurred a significant decrease in its market value.
- Where the collateral is held by a third party, credit institutions must take reasonable steps to ensure that the third party segregates the collateral from its own assets.

Additional minimum requirements for the recognition of financial collateral under the Financial Collateral Simple Method

1.3.2 In addition to the requirements set out in paragraph 1.3.1 above, for the recognition of financial collateral under the Financial Collateral Simple Method the residual maturity of the protection must be at least as long as the residual maturity of the exposure.

1.4.0 Minimum requirements for the recognition of real estate collateral

1.4.1 For the recognition of real estate collateral the following conditions shall be met:

(a) Legal certainty

The mortgage or charge shall be legally enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement, and the mortgage or charge shall be properly filed on a timely basis. The arrangements shall reflect a perfected lien (i.e. all legal requirements for establishing the pledge shall been fulfilled). The protection agreement and the legal process underpinning it shall enable the credit institution to realise the value of the protection within a reasonable timeframe.

(b) Monitoring of property values

The value of the property shall be monitored on a frequent basis and at a minimum once every year for commercial real estate and once every three years for residential real estate. More frequent monitoring shall be carried out where the market is subject to significant changes in conditions. Statistical methods may be used to monitor the value of the property and to identify property that needs revaluation. The property valuation shall be reviewed by an independent valuer when information indicates that the value of the property may have declined materially relative to general market prices. For loans exceeding EUR 3 million or 5% of the own funds of the credit institution, the property valuation shall be reviewed by an independent valuer at least every three years.

'Independent valuer' shall mean a person who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process. "Necessary qualifications" need not be solely professional qualifications, but the credit institution should be able to demonstrate that the valuer has the necessary ability and experience to undertake the review.

A property will need to be revalued over time to ensure that the original purchase price does not overstate the degree of security provided by the property.

The monitoring of property values should be an inherent part of the institution's risk management processes and tracking of the portfolio. The requirement to monitor property values does not include the physical assessment of each property in the portfolio.

However, the review of a property valuation is more in-depth than the normal monitoring process requires. This requirement is likely to include a review of the property value on an individual exposure basis. When an exposure is secured by multiple properties, the review can be undertaken at the level of the exposure, rather than at the level of each individual property. The review of property values may lead to an amendment of the value assigned to the property.

(c) Documentation

The types of residential and commercial real estate accepted by the credit institution and its lending policies in this regard shall be clearly documented.

(d) Insurance

The credit institution shall have procedures to monitor that the property taken as protection is adequately insured against damage. It should, as a minimum, ensure that it is a requirement of each loan that the property taken as collateral must have adequate buildings insurance at all times, which should be reviewed when any new loan is extended against the property.

1.5.0 Minimum requirements for the recognition of receivables as collateral

1.5.1 For the recognition of receivables the following conditions shall be met:

(a) Legal certainty

(i) The legal mechanism by which the collateral is provided shall be robust and effective and ensure that the lender has clear rights over the proceeds.

(ii) Credit institutions must take all steps necessary to fulfil local requirements in respect of the enforceability of security interest. There shall be a framework which allows the lender to have a first priority claim over the collateral subject to national discretion to allow such claims to be subject to the claims of preferential creditors provided for in legislative or implementing provisions.

(iii) Credit institutions shall have conducted sufficient legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions.

(iv) The collateral arrangements must be properly documented, with a clear and robust procedure for the timely collection of collateral. Credit institutions procedures shall ensure that any legal conditions required for declaring the default of the borrower and timely collection of collateral are observed. In the event of the borrower's financial distress or default, the credit institution shall have legal authority to sell or assign the receivables to other parties without consent of the receivables obligors.

(b) Risk management

(i) The credit institution must have a sound process for determining the credit risk associated with the receivables. Such a process shall include, among other things, analyses of the borrower's business and industry and the types of customers with whom the borrower does business. Where the credit institution relies on the borrower to ascertain the credit risk of the customers, the credit institution must review the borrower's credit practices to ascertain their soundness and credibility.

(ii) The margin between the amount of the exposure and the value of the receivables must 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 credit institution's total exposures beyond that

controlled by the credit institution's general methodology. The credit institution must maintain a continuous monitoring process appropriate to the receivables. Additionally, compliance with loan covenants, environmental restrictions, and other legal requirements shall be reviewed on a regular basis.

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

(iv) Receivables from affiliates of the borrower (including subsidiaries and employees) shall not be recognised as risk mitigants.

(v) The credit institution shall have a documented process for collecting receivable payments in distressed situations. The requisite facilities for collection shall be in place, even when the credit institution normally looks to the borrower for collections.

1.6.0 Minimum requirements for the recognition of other physical collateral

1.6.1 For the recognition of other physical collateral the following conditions shall be met:

(a) The collateral arrangement shall be legally effective and enforceable in all relevant jurisdictions and shall enable the credit institution to realise the value of the property within a reasonable timeframe.

(b) With the sole exception of permissible prior claims referred to in paragraph 1.5.1(a)(ii), only first liens on, or charges over, collateral are permissible. As such, the credit institution shall have priority over all other lenders to the realised proceeds of the collateral.

(c) The value of the property shall be monitored on a frequent basis and at a minimum once every year. More frequent monitoring shall be required where the market is subject to significant changes in conditions.

(d) The loan agreement shall include detailed descriptions of the collateral plus detailed specifications of the manner and frequency of revaluation.

(e) The types of physical collateral accepted by the credit institution and policies and practices in respect of the appropriate amount of each type of collateral relative to the exposure amount shall be clearly documented in internal credit policies and procedures available for examination.

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

(g) Both initial valuation and revaluation shall take fully into account any deterioration or obsolescence of the collateral. Particular attention must be paid in valuation and

revaluation to the effects of the passage of time on fashion- or date-sensitive collateral.

(h) The credit institution must have the right to physically inspect the property. It shall have policies and procedures addressing its exercise of the right to physical inspection.

(i) The credit institution must have procedures to monitor that the property taken as protection is adequately insured against damage.

1.7.0 Minimum requirements for treating lease exposures as collateralised

1.7.1 For the exposures arising from leasing transactions to be treated as collateralised by the type of property leased, the following conditions shall be met:

(a) The conditions set out in paragraphs 1.4.1 or 1.6.1 as appropriate for the recognition as collateral of the type of property leased shall be met;

(b) There shall be robust risk management on the part of the lessor with respect to the use to which the leased asset is put, its age, and planned duration of use, including appropriate monitoring of the value of the security;

(c) There shall be in place a robust legal framework establishing the lessor's legal ownership of the asset and its ability to exercise its rights as owner in a timely fashion; and

(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 must not be so large as to overstate the credit risk mitigation attributed to the leased assets.

1.8.0 Minimum requirements for the recognition of other funded credit protection

Cash on deposit with, or cash assimilated instruments held by, a third party institution

1.8.1 To be eligible for the treatment set out in paragraph 1.7.1 of Appendix 2 Section III.4, the protection referred to in paragraph 1.4.1 of Appendix 2 Section III.2 must satisfy the following conditions:

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

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

(c) As a result of the notification, the third party institution is able to make payments solely to the lending credit institution or to other parties with the lending credit institution's consent.

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

Life insurance policies pledged to the lending credit institution.

1.8.2 For life insurance policies pledged to the lending credit institution to be recognised, all the following conditions shall be met:

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

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

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

(d) the lending credit 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 credit institution must ensure that the amount deriving from the insurance contract serves the credit 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 in a timely manner upon request;

(i) The surrender value cannot be requested without the consent of the credit institution; and,

(j) the company providing the life insurance is subject to Directive 2002/83/EC and Directive 2001/17/EC of the European Parliament and of the Council or is subject to supervision by a competent authority of a third country which applies supervisory and regulatory arrangements at least equivalent to those applied in the Community.

2.0.0 UNFUNDED CREDIT PROTECTION AND CREDIT LINKED NOTES

2.1.0 Requirements common to guarantees and credit derivatives

2.1.1 Subject to paragraph 2.1.3, for the credit protection deriving from a guarantee or credit derivative to be recognised the following conditions shall be met:

(a) The credit protection shall be direct.

(b) The extent of the credit protection shall be clearly defined and incontrovertible.

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

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

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

(iii) could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make any payments due; or

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

(d) It must be legally effective and enforceable in all relevant jurisdictions relevant at the time of the conclusion of the credit agreement.

Operational requirements

2.1.2 The credit institution shall satisfy its supervisor that it has systems in place to manage potential concentration of risk arising from the credit institution's use of guarantees or credit derivatives. The credit institution must be able to demonstrate how its strategy in respect of its use of credit derivatives and guarantees interacts with its management of its overall risk profile.

2.2.0 Sovereign and other public sector counter-guarantees

2.2.1 Where an exposure is protected by a guarantee which is counter-guaranteed by a central government or central bank, a regional government or local authority, a public sector entity, claims on which are treated as claims on the central government in whose jurisdiction they are established under the Standardised Approach, a multilateral development bank or an international organisation, to which a 0% risk weight is applied under the same Approach, or a public sector entity, claims on which are treated as claims on credit institutions under the Standardised Approach, the exposure may be treated as protected by a guarantee provided by the entity in question, provided the following conditions are satisfied:

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

(b) both the original guarantee and the counter-guarantee meet the requirements for guarantees set out in paragraphs 2.1.1, 2.1.2 and 2.3.1, except that the counter-guarantee need not be direct;

(c) the authority is satisfied that the cover is robust and that 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.

2.2.2 The treatment of paragraph 2.2.1 applies, also, to an exposure counter-guaranteed not by the entities listed there if the exposure's counter-guarantee is in its turn directly guaranteed by one of the listed entities and the conditions listed in the same paragraph are met.

2.3.0 Additional requirements for guarantees

2.3.1 For a guarantee to be recognised the following conditions shall also be met:

(a) On the qualifying default of and/or non-payment by the counterparty, the lending credit institution shall have 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. Payment by the guarantor shall not be subject to the lending credit institution first having to pursue the obligor. In the case of unfunded credit protection covering residential mortgage loans, the requirements in paragraph 2.1.1(c) (iii) and in first subparagraph of this point, have only to be satisfied within an overall period of 24 months.

(b) The guarantee shall be an explicitly documented obligation assumed by the guarantor.

(c) Subject to the following sentence, the guarantee shall cover all types of payments the obligor is expected to make in respect of the claim. Where certain types of payment are excluded from the guarantee, the recognised value of the guarantee shall be adjusted to reflect the limited coverage.

2.3.2 In the case of guarantees provided in the context of mutual guarantee schemes recognised for these purposes by the competent authorities or provided by or counter-guaranteed by entities referred to in paragraph 2.2.1, the requirements in paragraph 2.3.1(a) shall be considered to be satisfied where either of the following conditions are met:

(a) the lending credit institution has the right to obtain in a timely manner a provisional payment by the guarantor calculated to represent a robust estimate of the amount of the economic loss, including losses resulting from the non-payment of interest and other types of payment which the borrower is obliged to make, likely to be incurred by the lending credit institution proportional to the coverage of the guarantee;

(b) the lending credit institution can demonstrate that the loss-protecting effects of the guarantee, including losses resulting from the non-payment which the borrower is obliged to make, justify such treatment.

2.4.0 Additional requirements for credit derivatives

2.4.1 For a credit derivative to be recognised the following conditions shall also be met:

(a) Subject to (b), the credit events specified under the credit derivative shall at a minimum include:

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

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

(iii) the restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. value adjustment or other similar debit to the profit and loss account).

(b) Where the credit events specified under the credit derivative do not include restructuring of the underlying obligation as described in point (iii) of subparagraph (a), the credit protection may nonetheless be recognised subject to a reduction in the recognised value as specified in paragraph 2.1.1 of Section III.4.

(c) In the case of credit derivatives allowing for cash settlement a robust valuation process shall be in place in order to estimate loss reliably. There shall be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation.

(d) If 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 shall provide that any required consent to such transfer may not be unreasonably withheld.

(e) The identity of the parties responsible for determining whether a credit event has occurred shall be clearly defined. This determination shall not be the sole responsibility of the protection seller. The protection buyer shall have the right/ability to inform the protection provider of the occurrence of a credit event;

2.4.2 A mismatch between the underlying obligation and the reference obligation under the credit derivative (i.e. the obligation used for the purposes of determining cash settlement value or the deliverable obligation) or between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible only if the following conditions are met:

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

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

2.5.0 Requirements to qualify for the treatment set out in paragraph 1.2.2 of Appendix 2 Section II.2.

2.5.1 To be eligible for the treatment set out in paragraph 1.2.2 of Appendix 2 Section II.2, credit protection deriving from a guarantee or credit derivative shall meet the following conditions:

(a) the underlying obligation shall be to:

- a corporate exposure as defined in paragraphs 18.0 to 26.0 of Appendix 2 Section II.1, excluding insurance and reinsurance undertakings; or
- an exposure to a regional government, local authority or Public Sector Entity which is not treated as an exposure to a central government or a central bank according to paragraphs 18.0 to 26.0 of Appendix 2 Section II.1; or
- an exposure to a small or medium sized entity, classified as a retail exposure according to paragraphs 21.0 of Appendix 2 Section II.1;

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

(c) the exposure shall be hedged by one of the following instruments:
- single-name unfunded credit derivatives or single-name guarantees;
- first-to-default basket products – the treatment shall be applied to the asset within the basket with the lowest risk-weighted exposure amount;
- n^{th}-to-default basket products – the protection obtained is only eligible for consideration under this framework if eligible (n-1)th default protection has also be obtained or where (n-1) of the assets within the basket has/have already defaulted. Where this is the case the treatment shall be applied to the asset within the basket with the lowest risk-weighted exposure amount;

(d) the credit protection meets the requirements set out in paragraphs 2.1.1, 2.1.2, 2.3.1, 2.4.1 and 2.4.2;

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

(f) a credit institution shall have 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, a credit 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 shall absorb all credit losses incurred on the hedged portion of an exposure that arise due to the credit events outlined in the contract;

(h) if the payout structure provides for physical settlement, then there shall be legal certainty with respect to the deliverability of a loan, bond, or contingent liability. If a credit institution intends to deliver an obligation other than the underlying exposure, it shall ensure that the deliverable obligation is sufficiently liquid so that the credit institution would have the ability to purchase it for delivery in accordance with the contract;

(i) the terms and conditions of credit protection arrangements shall be legally confirmed in writing by both the protection provider and the credit institution;

(j) credit institutions shall have a process in place 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;

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

SECTION III.4 - CREDIT RISK MITIGATION
Calculating the Effects of Credit Risk Mitigation

Where the provisions in Sections III.2 and III.3 are satisfied, 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 may be modified in accordance with the provisions of this Section.

Cash, securities or commodities purchased, borrowed or received under a repurchase transaction or securities or commodities lending or borrowing transaction shall be treated as collateral.

1.0.0 FUNDED CREDIT PROTECTION

1.1.0 Credit linked notes

1.1.1 Investments in credit linked notes issued by the lending credit institution may be treated as cash collateral.

1.2.0 On-balance sheet netting

1.2.1 Loans and deposits with the lending credit institution subject to on-balance sheet netting are to be treated as cash collateral.

1.3.0 Master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions

Calculation Of the fully-adjusted exposure value

(a) Using the 'Supervisory' volatility adjustments or the 'Own Estimates' volatility adjustments approaches

1.3.1 Subject to paragraphs 1.3.8 to 1.3.17, in calculating the 'fully adjusted exposure value' (E*) for the exposures subject to an eligible master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions, the volatility adjustments to be applied shall be calculated in the manner set out below either using the Supervisory volatility adjustments approach or the Own estimates volatility adjustments approach as set out in paragraphs 1.4.11 to 1.4.36 for the Financial Collateral Comprehensive Method. For the use of the Own estimates approach the same conditions and requirements shall apply as those under the Financial Collateral Comprehensive Method.

1.3.2 The net position in each type of security or commodity shall be calculated by subtracting from the total value of the securities or commodities of that type lent, sold or provided under the master netting agreement, the total value of securities or commodities of that type borrowed, purchased or received under the agreement.

1.3.3 For the purposes of paragraph 1.3.2, type of security means securities which are issued by the same entity, have the same issue date, the same maturity and are subject to the same terms and conditions and are subject to the same liquidation periods as indicated in paragraphs 1.4.11 to 1.4.36.

1.3.4 The net position in each currency other than the settlement currency of the master netting agreement, shall be calculated by subtracting from the total value of securities denominated in that currency lent, sold or provided under the master netting agreement added to the amount of cash in that currency lent or transferred under the agreement, the total value of securities denominated in that currency borrowed, purchased or received under the agreement added to the amount of cash in that currency borrowed or received under the agreement.

1.3.5 The volatility adjustment appropriate to a given type of security or cash position shall be applied to the positive or negative net position in the securities of that type.

1.3.6 The foreign exchange risk (fx) volatility adjustment shall be applied to the net positive or negative position in each currency other than the settlement currency of the master netting agreement.

1.3.7 E* shall be calculated according to the following formula:

$$E^* = \max \{0, [(\sum(E) - \sum(C)) + \sum(|\text{net position in each security}| \times H_{sec)} + + (\sum|E_{fx}| \times Hfx)]\}$$

Where risk-weighted exposure amounts are calculated under the Standardised Approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

Where risk-weighted exposure amounts and expected loss amounts are calculated under the IRB Approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

C is the value of the securities or commodities borrowed, purchased or received or the cash borrowed or received in respect of each such exposure.
$\sum(E)$ is the sum of all Es under the agreement.
$\sum(C)$ is the sum of all Cs under the agreement.
E_{fx} is the net position (positive or negative) in a given currency other than the settlement currency of the agreement as calculated under paragraph 1.3.4.
H_{sec} is the volatility adjustment appropriate to a particular type of security.
H_{fx} is the foreign exchange volatility adjustment.
E* is the fully adjusted exposure value.

(b) Using the Internal Models approach

1.3.8 As an alternative to using the Supervisory volatility adjustments approach or the Own Estimates volatility adjustments 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, and/or other capital market driven transactions other than derivative transactions, credit institutions may be permitted to 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. Internal models used in this approach shall provide estimates of the potential change in value of the unsecured exposure amount ($\sum E - \sum C$). Subject to the approval of the authority, credit institutions may also use their internal models for margin lending transactions, if the transactions are covered under a bilateral master netting agreement that meets the Contractual Netting requirements set out in Annex IV.

1.3.9 A credit institution may choose to use an internal models approach independently of the choice it has made between the Standardised and the IRB approach for the calculation of risk-weighted exposure amounts. However, if a credit institution seeks to use an internal models approach, it must do so for all counterparties and securities, excluding immaterial portfolios where it may use the Supervisory volatility adjustments approach or the Own estimates volatility adjustments approach as set out in paragraphs 1.3.1 to 1.3.7.

1.3.10 The internal models approach is available to credit institutions that have received recognition for an internal risk-management model under Banking Rule BR/08.

1.3.11 Credit institutions which have not received supervisory recognition for use of such a model under Banking Rule BR/08, may apply to the authority for-recognition of an internal risk-measurement model for the purposes of this Section.

1.3.12 Recognition shall only be given if the authority is satisfied that the credit institution's risk-management system for managing the risks arising on the transactions covered by the master netting agreement is conceptually sound and implemented with integrity and that, in particular, the following qualitative standards are met:

(a) the internal risk-measurement model used for calculation of potential price volatility for the transactions is closely integrated into the daily risk-management process of the credit institution and serves as the basis for reporting risk exposures to senior management of the credit institution;

(b) the credit institution has a risk control unit that is independent from business trading units and reports directly to senior management. The unit must be responsible for designing and implementing the credit institution's risk-management system. It shall produce and analyse 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 credit institution has sufficient numbers of staff skilled in the use of sophisticated models in the risk control unit;

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

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

(i) at least once a year, the credit institution must conduct a review of its risk management system.

(j) the internal model shall meet the requirements set out in paragraphs 4.40 to 4.42 of Annex IV.

1.3.13 The calculation of potential change in value shall be subject to the following minimum standards:

(a) at least daily calculation of potential change in value;

(b) a 99th percentile, one-tailed confidence interval;

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

(d) 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) three-monthly data set updates.

1.3.14 The authority shall require that the internal risk-measurement model captures a sufficient number of risk factors in order to capture all material price risks.

1.3.15 The authority may allow credit institutions to use empirical correlations within risk categories and across risk categories if they are satisfied that the credit institution's system for measuring correlations is sound and implemented with integrity`.

1.3.16 The fully adjusted exposure value (E*) for credit institutions using the Internal models approach shall be calculated according to the following formula:

$$E^* = \max \{0, [(\sum E - \sum C) + (\text{VaR output of the internal model})]\}$$

Where risk-weighted exposure amounts are calculated under the Standardised Approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

Where risk-weighted exposure amounts and expected loss amounts are calculated under the IRB Approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

C is the value of the securities borrowed, purchased or received or the cash borrowed or received in respect of each such exposure.
$\sum(E)$ is the sum of all Es under the agreement
$\sum(C)$ is the sum of all Cs under the agreement.

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

Calculating risk-weighted exposure amounts and expected loss amounts for repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions covered by master netting agreements

Standardised Approach

1.3.18 E* as calculated under paragraphs 1.3.1 to 1.3.18 shall be taken as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement for the purposes of Appendix 2 Section I.1.

IRB Approach

1.3.19 E* as calculated under paragraphs 1.3.1 to 1.3.18 shall be taken as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement for the purposes of Appendix 2 - Section II.

1.4.0 Financial collateral

Financial Collateral Simple Method

1.4.1 The Financial Collateral Simple Method shall be available only where risk-weighted exposure amounts are calculated under the Standardised Approach. A credit institution shall not use both the Financial Collateral Simple Method and the Financial Collateral Comprehensive Method, unless for the credit institution is authorised to implement the IRB approach on a partial use basis in line with Appendix 2 Section II.1 para 44. Credit institutions shall demonstrate to the authority that this exceptional application of both methods is not used selectively with the purpose of achieving reduced minimum capital requirements and does not lead to regulatory arbitrage.

Valuation

1.4.2 Under this method, recognised financial collateral is assigned a value equal to its market value as determined in accordance with Section III.3. paragraph 1.3.1.

Calculating risk-weighted exposure amounts

1.4.3 The risk weight that would apply under the Standardised Approach if the lender had a direct exposure to the collateral instrument shall apply to those portions of exposure values collateralised by the market value of recognised collateral. For this purpose, the exposure value of an off-balance sheet item listed in Annex II shall be 100% of its value. The risk weight of the collateralised portion shall be a minimum of 20% except as specified in paragraphs 1.4.4 to 1.4.7. The remainder of the exposure shall receive the risk weight that would be applied to an unsecured exposure to the counterparty under the Standardised Approach.

Repurchase transactions and securities lending or borrowing transactions

1.4.4 A risk weight of 0% shall be applied to the collateralised portion of the exposure arising from transactions which fulfil the criteria enumerated in paragraphs 1.4.35 and 1.4.36. If

the counterparty to the transaction is not a core market participant a risk weight of 10% shall be applied.

OTC derivative transactions subject to daily mark-to-market

1.4.5 A risk weight of 0% shall, to the extent of the collateralisation, be applied to the exposure values determined under Annex IV for the derivative instruments listed in Annex III and subject to daily marking-to-market, collateralised by cash or cash-assimilated instruments where there is no currency mismatch. A risk weight of 10% shall apply 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 receive a 0% risk weight under the Standardised Approach.

For the purposes of this paragraph 'debt securities issued by central governments or central banks shall be deemed to 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 the Standardised Approach;

(b) debt securities issued by multilateral development banks to which a 0% risk weight is applied under the Standardised Approach;

(c) debt securities issued by international organisations which are assigned a 0% risk weight under the Standardised approach.

Other transactions

1.4.6 A 0% risk weight may be applied where the exposure and the collateral are denominated in the same currency, and either:

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

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

For the purposes of this paragraph 'debt securities issued by central governments or central banks shall be deemed to include those indicated under the previous heading.

Financial Collateral Comprehensive Method

1.4.7 In valuing financial collateral for the purposes of the Financial Collateral Comprehensive Method, 'volatility adjustments' shall be applied to the market value of collateral, as set out in paragraphs 1.4.11 to 1.4.36 below, in order to take account of price volatility.

1.4.8. Subject to the treatment for currency mismatches in the case of OTC derivatives transactions set out in paragraph 1.4.9, where collateral is denominated in a currency that differs from that in which the underlying exposure is denominated, an adjustment reflecting currency volatility shall be added to the volatility adjustment appropriate to the collateral as set out in paragraphs 1.4.11 to 1.4.36.

1.4.9 In the case of OTC derivatives transactions covered by netting agreements recognised by the authority under Annex IV, a volatility adjustment reflecting currency volatility shall be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where multiple currencies are involved in the transactions covered by the netting agreement, only a single volatility adjustment shall be applied.

(a) Calculating adjusted values

1.4.10 The volatility-adjusted value of the collateral to be taken into account is calculated as follows in the case of all transactions except those transactions subject to recognised master netting agreements to which the provisions set out in subsection 1.3.0 above are be applied:

$C_{VA} = C \times (1 - H_C - H_{FX})$

The volatility-adjusted value of the exposure to be taken into account is calculated as follows:

$E_{VA} = E \times (1 + H_E)$, and in the case of OTC derivative transactions $E_{VA} = E$.

The fully adjusted value of the exposure, taking into account both volatility and the risk-mitigating effects of collateral is calculated as follows:

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

Where

E is the exposure value as would be determined under the Standardised or the IRB approaches if the exposure was not collateralised. For this purpose, for credit institutions calculating risk-weighted exposure amounts under the Standardised Approach, the exposure value of an off-balance sheet item listed in Annex II shall be 100% of its value rather than the exposure value indicated in paragraph 1.0 of Appendix 2 Section I.1. For credit institutions calculating risk-weighted exposure amounts under the IRB Approach, the exposure value of the items listed in paragraphs 1.9 to 1.11 of Appendix 2 Section II.4 shall be calculated using a conversion factor of 100% rather than the conversion factors or percentages indicated in those paragraphs.

E_{VA} is the volatility-adjusted exposure amount.

C_{VA} is the volatility-adjusted value of the collateral.

C_{VAM} is C_{VA} further adjusted for any maturity mismatch in accordance with the provisions of Appendix 2 Section III.5.

H_E is the volatility adjustment appropriate to the exposure (E), as calculated under paragraphs 1.4.11 to 1.4.36.

H_C is the volatility adjustment appropriate for the collateral, as calculated under paragraphs 1.4.11 to 1.4.36.

H_{FX} is the volatility adjustment appropriate for currency mismatch, as calculated under paragraphs 1.4.11 to 1.4.36.

E* is the fully adjusted exposure value taking into account volatility and the risk-mitigating effects of the collateral.

(b) Calculation of volatility adjustments to be applied

1.4.11 Volatility adjustments may be calculated in two ways: the Supervisory volatility adjustments approach and the Own estimates of volatility adjustments approach (the 'Own estimates' approach).

1.4.12 A credit 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 and the IRB approach for the calculation of risk-weighted exposure amounts. However, if credit institutions seek to use the Own estimates approach, they must do so for the full range of instrument types, excluding immaterial portfolios where they may use the Supervisory volatility adjustments approach.

Where the collateral consists of a number of recognised items, the volatility adjustment shall be

$$H = \sum_i a_i H_i$$

where a_i is the proportion of an item to the collateral as a whole and H_i is the volatility adjustment applicable to that item.

(i) Supervisory volatility adjustments

1.4.13 The volatility adjustments to be applied under the Supervisory volatility adjustments approach (assuming daily revaluation) shall be those set out in tables 2 to 5.

Table 2 – Volatility Adjustments

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 paragraph 1.3.2(b) of Appendix 2 Section III.2			Volatility adjustments for debt securities issued by entities described in paragraph 1.3.2 (c) and (d) of Appendix 2 Section III.2		
		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
	>1 ≤ 5 yrs	2.828	2	1.414	5.657	4	2.828
	> 5 yrs	5.657	4	2.828	11.314	8	5.657
2-3	≤ 1 yr	1.414	1	0.707	2.828	2	1.414
	>1 ≤ 5 yrs	4.243	3	2.121	8.485	6	4.243
	> 5 yrs	8.485	6	4.243	16.971	12	8.485
4	≤ 1 year	21.213	15	10.607	N/A	N/A	N/A
	>1 ≤ 5 yrs	21.213	15	10.607	N/A	N/A	N/A
	> 5 years	21.213	15	10.607	N/A	N/A	N/A

Table 3

Credit quality step with which the credit assessment of a short term debt security is associated	Volatility adjustments for debt securities issued by entities described in Part 1, paragraph 7 (b) with short-term credit assessments			Volatility adjustments for debt securities issued by entities described in Part 1, paragraph 7 (c) and (d) with short-term credit assessments		
	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
1	0.707	0.5	0.354	1.414	1	0.707
2-3	1.414	1	0.707	2.828	2	1.414

Table 4 – Other Collateral or exposure types

	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
Main Index Equities, Main Index Convertible Bonds	21.213	15	10.607
Other Equities or Convertible Bonds listed on a recognised exchange	35.355	25	17.678
Cash	0	0	0
Gold	21.213	15	10.607

Table 5 – Volatility Adjustment for currency mismatch

20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
11.314	8	5.657

1.4.14 For secured lending transactions the liquidation period shall be 20 business days. 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. For other capital market driven transactions, the liquidation period shall be 10 business days.

1.4.15 In tables 2 to 5 and in paragraphs 1.4.16 to 1.4.18, the credit quality step with which a credit assessment of the debt security is associated is the credit quality step with which the external credit assessment is determined by the competent authorities to be associated under the Standardised Approach. For these purposes paragraph 1.3.5 of Appendix 2 section III.2 also applies.

1.4.16 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.

1.4.17 For eligible units in collective investment undertakings the volatility adjustment is the weighted average volatility adjustments that would apply, having regard to the liquidation period of the transaction as specified in paragraph 1.4.14, to the assets in which the fund has invested. If the assets in which the fund has invested are not known to the credit 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.

1.4.18 For unrated debt securities issued by institutions and satisfying the eligibility criteria in paragraph 1.3.3 of appendix 2 Section III.2. the volatility adjustments shall be the same as for securities issued by institutions or corporates with an external credit assessment associated with credit quality steps 2 or 3.

(ii) Own estimates of volatility adjustments

1.4.19 The competent authorities shall permit credit institutions complying with the requirements set out in paragraphs 1.4.24 to 1.4.33 to use their own estimates of volatility for calculating the volatility adjustments to be applied to collateral and exposures.

1.4.20 When debt securities have a credit assessment from a recognised ECAI equivalent to investment grade or better, the competent authorities may allow credit institutions to calculate a volatility estimate for each category of security.

1.4.21 In determining relevant categories, credit 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 must be representative of the securities included in the category by the credit institution.

1.4.22 For debt securities having a credit assessment from a recognised ECAI equivalent to below investment grade and for other eligible collateral the volatility adjustments must be calculated for each individual item.

1.4.23 Credit institutions using the Own estimates approach must estimate volatility of the collateral or foreign exchange mismatch without taking into account any correlations between the unsecured exposure, collateral and/or exchange rates.

Quantitative Criteria

1.4.24 In calculating the volatility adjustments, a 99th percentile one-tailed confidence interval shall be used.

1.4.25 The liquidation period shall be 20 business days for secured lending transactions; 5 business days 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; and 10 business days for other capital market driven transactions.

1.4.26 Credit 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 paragraph 1.4.25 for the type of transaction in question, using the square root of time formula:

$$H_M = H_N \sqrt{T_M / T_N}$$

where:

T_M is the relevant liquidation period;
H_M is the volatility adjustment under the relevant liquidation period;
H_N is the volatility adjustment based on the liquidation period T_N;

1.4.27 Credit institutions shall take into account the illiquidity of lower-quality assets. The liquidation period shall be adjusted upwards in cases where there is doubt concerning the liquidity of the collateral. They shall also identify where historical data may understate potential volatility, e.g. a pegged currency. Such cases shall be dealt with by means of a stress scenario.

1.4.28 The historical observation period (sample period) for calculating volatility adjustments shall be a minimum length of one year. For credit institutions that use a weighting scheme or other methods for the historical observation period, the effective observation period shall be at least one year (that is, the weighted average time lag of the individual observations shall not be less than 6 months). The competent authorities may also require a credit institution to calculate its volatility adjustments using a shorter observation period if, in the competent authorities' judgement, this is justified by a significant upsurge in price volatility.

1.4.29 Credit institutions shall update their data sets no less frequently than once every three months and shall also reassess them whenever market prices are subject to material changes. This implies that volatility adjustments shall be computed at least every three months.

Qualitative Criteria

1.4.30 The volatility estimates shall be used in the day-to-day risk management process of the credit institution including in relation to its internal exposure limits.

1.4.31 If the liquidation period used by the credit 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, the credit institution's volatility adjustments shall be scaled up in accordance with the square root of time formula set out in paragraph 1.4.26.

1.4.32 The credit institution shall have 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.

1.4.33 An independent review of the credit institution's system for the estimation of volatility adjustments shall be carried out regularly in the credit institution's own internal auditing process. A review of the overall system for the estimation of volatility adjustments and for integration of those adjustments into the credit institution's risk management process shall take place at least once a year and shall specifically address, at a minimum:

(a) the integration of estimated volatility adjustments into daily risk management;

(b) the validation of any significant change in the process for the estimation of volatility adjustments;

(c) 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;

(d) the accuracy and appropriateness of the volatility assumptions.

(iii) Scaling up of volatility adjustments

1.4.34 The volatility adjustments set out in paragraphs 1.4.13 to 1.4.18 are the volatility adjustments to be applied where there is daily revaluation. Similarly where a credit institution uses its own estimates of the volatility adjustments in accordance with paragraphs 1.4.19 to 1.4.33, these must be calculated in the first instance on the basis of daily revaluation. If the frequency of revaluation is less than daily, larger volatility adjustments shall be applied. These shall be calculated by scaling up the daily revaluation volatility adjustments, using the following 'square root of time' formula :

$$H = H_M \sqrt{\frac{N_R + (T_M - 1)}{T_M}}$$

where:

H is the volatility adjustment to be applied
H_M is the volatility adjustment where there is daily revaluation
N_R is the actual number of business days between revaluation
T_M is the liquidation period for the type of transaction in question.

(iv) Conditions for applying a 0% volatility adjustment

1.4.35 In relation to repurchase transactions and securities lending or borrowing transactions, where a credit institution uses the Supervisory volatility adjustments approach or the Own Estimates approach and where the conditions set out in points (a) to (h) are satisfied, credit institutions may, instead of applying the volatility adjustments calculated under paragraphs 1.4.12 to 1.4.34, apply a 0% volatility adjustment. This option is not available in respect of credit institutions using the internal models approach set out in paragraphs 1.3.8 to 1.3.18.

(a) Both the exposure and the collateral are cash or debt securities issued by central governments or central banks and eligible for a 0% risk weight under the Standardised Approach;

(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 remargining;

(d) It is considered that the time between the last marking-to-market before a failure to remargin by the counterparty and the liquidation of the collateral shall be no more than four business days;

(e) The transaction is settled across a settlement system proven for that type of transaction;

(f) The documentation covering the agreement 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 if 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. Core market participants shall include the following entities:
- The entities mentioned in paragraph 1.3.2(b) of Appendix 2 Section III.2 exposures to which receive a 0% risk weight under the Standardised Approach;
- institutions;
- other financial companies (including insurance companies) exposures to which receive a 20 % risk weight under the Standardised Approach or which, in the case of credit institutions calculating risk-weighted exposure amounts and expected loss amounts under IRB Approach, do not have a credit assessment by a recognised ECAI and are internally rated as having a probability of default equivalent to that associated with the credit assessments of ECAIs determined by the competent authorities to be associated with credit quality step 2 or above under the rules for the risk weighting of exposures to corporates under the Standardised Approach.
- regulated collective investment undertakings that are subject to capital or leverage requirements;
- regulated pension funds; and
- recognised clearing organisations.

1.4.36 Where an authority permits the treatment set out in paragraph 1.4.35 to be applied in the case of repurchase transactions or securities lending or borrowing transactions in securities issued by its domestic government, then other competent authorities may choose to allow credit institutions incorporated in their jurisdiction to adopt the same approach to the same transactions.

(c) Calculating risk-weighted exposure amounts and expected loss amounts

Standardised Approach

1.4.37 E* as calculated under paragraph 1.4.11 shall be taken as the exposure value for the purposes of paragraph 6.0 to 9.0 of Appendix 2 Section I.1. In the case of off-balance sheet items listed in Annex II, E* shall be taken as the value at which the percentages indicated in paragraph 2.0 of Appendix 2 Section I.1 shall be applied to arrive at the exposure value.

IRB Approach

1.4.38 LGD* (the effective Loss Given Default) calculated as set out in this paragraph shall be taken as the LGD for the purposes of Appendix 2 – Section II.

$$LGD^* = LGD \times (E^*/E)$$

Where:

LGD is the loss given fault that would apply to the exposure under the IRB Approach if the exposure was not collateralised;
E is the exposure value as calculated under paragraph 1.4.12.
E* is as calculated under paragraph 1.4.12.

1.5.0 Other eligible collateral Under the IRB Approach

Valuation

(a) Real estate collateral

1.5.1 The property shall be valued by an independent valuer at or less than the market value. In those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions the property may instead be valued by an independent valuer at or less than the mortgage lending value.

1.5.2 Market value means the estimated amount for which the property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. The market value shall be documented in a transparent and clear manner.

1.5.3 Mortgage lending value means the value of the property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, the normal and local market conditions, the current use and alternative appropriate uses of the property. Speculative elements shall not be taken into account in the assessment of the mortgage lending value. The mortgage lending value shall be documented in a transparent and clear manner.

1.5.4 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 Section III.3 paragraph 1.4.1 and to take account of the any prior claims on the property.

(b) Receivables

1.5.5 The value of receivables shall be the amount receivable.

(c) Other physical collateral

1.5.6 The property shall be valued at its market value – that 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.

Calculating risk-weighted exposure amounts and expected loss amounts

(a) General treatment

1.5.7 LGD* (the effective Loss Given Default) calculated as set out in paragraphs 1.5.8 to 1.5.11 shall be taken as the LGD for the purposes of the IRB Approach under Appendix 2 – Section II.

1.5.8 Where the ratio of the value of the collateral (C) to the–exposure value (E) is below a threshold level of C* (the required minimum collateralisation level for the exposure) as laid down in Table 6, LGD* shall be the LGD laid down in Appendix 2 – Section II for uncollateralised exposures to the counterparty. For this purpose, the exposure value of the

items listed in Appendix 2 Section II.4 paragraphs 1.9, 1.10 and 1.11 shall be calculated using a conversion factor or percentage of 100% rather than the conversion factors or percentages indicated in those points.

1.5.9 Where the ratio of the value of the collateral to the exposure value exceeds a second, higher threshold level of C** (i.e. the required level of collateralisation to receive full LGD recognition) as laid down in Table 6, LGD* shall be that prescribed in Table 6.

1.5.10 For these purposes, where the required level of collateralisation C** is not achieved in respect of the exposure as a whole, the exposure shall be considered to be two exposures – that part in respect of which the required level of collateralisation C** is achieved and the remainder.

1.5.11 Table 6 sets out the applicable LGD* and required collateralisation levels for the secured parts of exposures:

Table 6 - Minimum LGD for secured portion of exposures

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

Until 31 December 2012, credit institutions may, subject to the indicated levels of collateralisation

(a) assign a 30% LGD for senior exposures in the form of Commercial Real Estate leasing; and

(b) assign a 35% LGD for senior exposures in the form of equipment leasing.

(c) assign a 30% LGD for senior exposures secured by residential or commercial real estate.

At the end of this period, this derogation shall be reviewed.

(b) Alternative treatment for real estate

1.5.12 Where credit institutions have exposures collateralised by residential or commercial real estate property located in other Member States, whose authority has permitted a preferential risk weight of 50% to such exposures, the local credit institution may also apply this preferential risk weight subject to the fulfilment of the same conditions as applying in that Member State.

1.6.0 Calculating risk-weighted exposure amounts and expected loss amounts in the case of mixed pools of collateral

1.6.1 Where risk-weighted exposure amounts and expected loss amounts are calculated under the IRB Approach, and an exposure is collateralised by both financial collateral and other eligible collateral, LGD* (the effective Loss Given Default) to be taken as the LGD for the purposes of Annex VII shall be calculated as follows.

1.6.2 The credit institution shall be required to subdivide the volatility-adjusted value of the exposure (i.e. the value after the application of the volatility adjustment) into portions each covered by only one type of collateral. That is, the credit institution must divide the exposure into the portion covered by eligible financial collateral, the portion covered by receivables, the portions covered by commercial real estate property collateral and/or residential real estate property collateral, the portion covered by other eligible collateral, and the unsecured portion, as relevant.

1.6.3 LGD* for each portion of exposure shall be calculated separately in accordance with the relevant provisions of this Section.

1.7.0 Other funded credit protection

Deposits with third party institutions

1.7.1 Where the conditions set out in paragraph 1.8.1 of Appendix 2 Section III.3 are satisfied, credit protection falling within the terms of paragraph 1.4.1 of Appendix 2 section III.2 may be treated as a guarantee by the third party institution.

Life insurance policies pledged to the lending credit institution

1.7.2 Where the conditions set out in paragraph 1.8.2 of Appendix 2 Section III.3 are satisfied, the portion of the exposure collateralised by the current surrender value of credit protection falling within the terms of paragraph 1.4.2 of Appendix 2 Section III.2 shall be either of the following:

(a) subject to the risk weights specified in 1.7.2A below where the exposure is subject to the Standardised Approach;

(b) assigned an LGD of 40% where the exposure is subject to the IRB approach but not subject to the credit institution's own estimates of LGD.

In the case of a currency mismatch, the current surrender value shall be reduced according to paragraph 2.1.2 below, the value of the credit protection being the current surrender value of the life insurance policy.

1.7.2A For the purposes of paragraph 1.7.2(a) above, the following risk weights shall be assigned on the basis of the risk weight assigned on the basis of the risk weight assigned to a senior unsecured exposure to the company providing the life insurance:

(a) a risk weight of 20%, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 20%;

(b) a risk weight of 35%, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 50%;

(c) a risk weight of 70%, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight of 100%;

(d) a risk weight of 150%, where the senior unsecured exposure to the company providing the life insurance is assigned a risk weight to 150%.

Institution instruments repurchased on request

1.7.3 Instruments eligible under paragraph 1.4.3 of Appendix 2 section III.2 may be treated as a guarantee by the issuing institution.

1.7.4 For these purposes the value of the credit protection recognised shall be the following:
(a) where the instrument will be repurchased at its face value, the value of the protection shall be that amount;
(b) where the instrument will be repurchased at market price, the value of the protection shall be the value of the instrument valued in the same way as the debt securities specified in paragraph 1.3.3 of Appendix 2 section III.2.

2.0.0 UNFUNDED CREDIT PROTECTION

2.1.0 Valuation

2.1.1 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. 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 (e.g. value adjustment, the making of a value adjustment or other similar debit to the profit and loss account),
(a) where the amount that the protection provider has undertaken to pay is not higher than the exposure value, the value of the credit protection calculated under the first sentence of this paragraph shall be reduced 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.

2.1.2 Where unfunded credit protection is denominated in a currency different from that in which the exposure is denominated (a currency mismatch) the value of the credit protection shall be reduced by the application of a volatility adjustment H_{FX} as follows:
$G^* = G \times (1-H_{FX})$

Where:
G is the nominal amount of the credit protection;
G* is G adjusted for any foreign exchange risk, and
H_{fx} is the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation.

Where there is no currency mismatch
$G^* = G$

2.1.3 The volatility adjustments to be applied for any currency mismatch may be calculated based on the Supervisory volatility adjustments approach or the Own estimates approach as set out in paragraphs 1.4.11 to 1.4.34.

2.2.0 Calculating risk-weighted exposure amounts and expected loss amounts

Partial protection – tranching

2.2.1 Where the credit institution transfers a portion of the risk of a loan in one or more tranches, the rules set out in Appendix 3 Section I.1 shall apply. Materiality thresholds on payments below which no payment shall be made in the event of loss are considered to be equivalent to retained first loss positions and to give rise to a tranched transfer of risk.

Standardised Approach

(a) Full protection

2.2.2 For the purposes of paragraphs 6.0 to 9.0 of Appendix 2 Section I.1, g shall be the risk weight to be assigned to an exposure, the exposure value (E) of which is fully protected by unfunded protection (G_A),

where:

E is the exposure value according to Appendix 2 Section I.1 paragraphs 1.0, 2.0 and 3.0; for this purpose the exposure value of an off-balance sheet item listed in Annex II shall be 100% of its value, i.e. without applying the credit conversion factons define in Annex II

g is the risk weight of exposures to the protection provider as specified under the Standardised Approach; and

G_A is the value of G* as calculated under paragraph 2.1.2 further adjusted for any maturity mismatch as laid down in Section III.5.

(b) Partial protection – equal seniority

2.2.3 Where the protected amount is less than the exposure value and the protected and unprotected portions are of equal seniority – ie the credit institution and the protection provider share losses on a pro-rata basis, proportional regulatory capital relief shall be afforded. For the purposes of paragraphs 6.0 to 9.0 of Appendix 2 Section I.1, risk-weighted exposure amounts shall be calculated in accordance with the following formula:

$$(E-G_A) \text{ x } r + G_A \text{ x } g$$

where:

E is the exposure value according to Appendix 2 Section I.1 paragraphs 1.0, 2.0 and 3.0; for this purpose the exposure value of an off-balance sheet item listed in Annex II shall be 100% of its value, i.e. without applying the credit conversion factons define in Annex II;

G_A is the value of G* as calculated under paragraph 2.1.2 further adjusted for any maturity mismatch as laid down in Section III.5;

r is the risk weight of exposures to the obligor as specified under the Standardised Approach;

g is the risk weight of exposures to the protection provider as specified under the Standardised Approach.

(c) Sovereign guarantees

2.2.4 The competent authorities may extend the treatment provided for in paragraphs 1.4 and 1.5 of Appendix 2 Section I.2 to exposures or portions 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.

IRB Approach

Full protection / Partial protection – equal seniority

2.2.5 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 Appendix 2 Section II.3 may be the PD of the protection provider, or a PD between that of the borrower and that of the guarantor if 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 for the purposes of Appendix 2 Section II.3 may be that associated with senior claims.

2.2.6 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.

2.2.7 G_A is the value of G* as calculated under paragraph 2.1.2 above further adjusted for any maturity mismatch as laid down in Section III.5. E is the exposure value according to Appendix 2 Section II.4. For this purpose, the exposure value of items listed in Appendix II Section II.4 paragraphs 1.9, 1.10 and 1.11 shall be calculated using a conversion factor of percentage of 100% rather than the conversion factors or percentages indicated in those paragraphs.

SECTION III.5 - CREDIT RISK MITIGATION
Maturity Mismatches

1.0.0 For the purposes 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. Protection of less than three months residual maturity, the maturity of which is less than the maturity of the underlying exposure, shall not be recognised.

2.0.0 Where there is a maturity mismatch the credit protection shall not be recognised where
(a) the original maturity of the protection is less than 1 year; or
(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 paragraph 1.3.3 of Appendix 2 Section II.3.

3.0.0 DEFINITION OF MATURITY

3.0.1 Subject to a maximum of 5 years, the effective maturity of the underlying shall be the longest possible remaining time before the obligor is scheduled to fulfil its obligations. Subject to paragraph 3.0.2, the maturity of the credit protection shall be the time to the earliest date at which the protection may terminate or be terminated.

3.0.2 Where there is an option to terminate the protection which is at the discretion of the protection seller, the maturity of the protection shall be taken 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 credit institution to call the transaction before contractual maturity, the maturity of the protection shall be taken to be the time to the earliest date at which that option may be exercised; otherwise such an option may be considered not to affect the maturity of the protection.

3.0.3 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 the maturity of the protection shall be reduced by the amount of the grace period.

4.0.0 VALUATION OF PROTECTION

4.1.0 Transactions subject to funded credit protection – Financial Collateral Simple Method

4.1.1 Where there is a mismatch between the maturity of the exposure and the maturity of the protection, the collateral shall not be recognised.

4.2.0 Transactions subject to funded credit protection - Financial Collateral Comprehensive Method

4.2.1. The maturity of the credit protection and that of the exposure must be reflected in the adjusted value of the collateral according to the following formula:

$$C_{VAM} = C_{VA} \text{ x } (t-t^*)/(T-t^*)$$

where:

C_{VA} is the volatility adjusted value of the collateral as specified in paragraph 1.4.10 of Appendix 2 Section III.4 or the amount of the exposure, whichever is the lowest;

t is the number of years remaining to the maturity date of the credit protection calculated in accordance with paragraphs 3 to 5, or the value of T, whichever is the lower;

T is the number of years remaining to the maturity date of the exposure calculated in accordance with paragraphs 3 to 5, or 5 years, whichever is the lower; and

t* is 0.25.

C_{VAM} shall be taken as C_{VA} further adjusted for maturity mismatch to be included in the formula for the calculation of the fully adjusted value of the exposure (E*) set out at paragraph 1.4.10 of Appendix 2 Section III.4.

4.3.0 Transactions subject to unfunded credit protection

4.3.1 The maturity of the credit protection and that of the exposure must be reflected in the adjusted value of the credit protection according to the following formula

$G_A = G^* \times (t-t^*)/(T-t^*)$

where:

G^* is the amount of the protection adjusted for any currency mismatch

G_A is G^* adjusted for any maturity mismatch

t is the number of years remaining to the maturity date of the credit protection calculated in accordance with paragraphs 3 to 5, or the value of T, whichever is the lower;

T is the number of years remaining to the maturity date of the exposure calculated in accordance with paragraphs 3 to 5, or 5 years, whichever is the lower; and

t* is 0.25.

G_A is then taken as the value of the protection for the purposes of paragraphs 2.1.1 to 2.2.6 of Appendix 2 Section III.4.

SECTION III.6 - CREDIT RISK MITIGATION
Combinations of credit risk mitigation in the Standardised Approach

1.0 In the case where a credit institution calculating risk-weighted exposure amounts under the Standardised Approach has more than one form of credit risk mitigation covering a single exposure (e.g. a credit institution has both collateral and a guarantee partially covering an exposure), the credit institution shall be required to subdivide the exposure into portions covered by each type of credit risk mitigation tool (e.g. a portion covered by collateral and a portion covered by guarantee) and the risk-weighted exposure amount for each portion must be calculated separately in accordance with the provisions of the Standardised Approach and this Appendix 2 – Section III.

2.0 When credit protection provided by a single protection provider has differing maturities, a similar approach to that described in paragraph 1.0 shall be applied.

SECTION III.7 - CREDIT RISK MITIGATION
Basket CRM Techniques

1.0 FIRST-TO-DEFAULT CREDIT DERIVATIVES

1.1 Where a credit 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 credit institution may modify the calculation of the risk-weighted exposure amount and, as relevant, the expected loss amount of the exposure which would in the absence of the credit protection produce the lowest risk-weighted exposure amount under the Standardised or IRB Approaches as appropriate in accordance with this Section, but only if the exposure value is less than or equal to the value of the credit protection.

2.0 *N*TH-TO-DEFAULT CREDIT DERIVATIVES

2.1 In the case where the *n*th default among the exposures triggers payment under the credit protection, the credit institution purchasing the protection may only recognise the protection for the calculation of risk-weighted exposure amounts and, as relevant, expected loss amounts if protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred. In such cases the methodology shall follow that set out in paragraph 1 for first-to-default derivatives appropriately modified for *n*th-to-default products.