

**REVIEW OF CAPITAL REQUIREMENTS  
FOR BANKS AND INVESTMENT FIRMS**

**COMMISSION SERVICES THIRD  
CONSULTATION PAPER**

**EXPLANATORY DOCUMENT**

1 July 2003

**Responses to the Commission Services third consultation paper should be sent in electronic and paper form to:**

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**To be received by close of business on the 22 October 2003.**

**Please note that unless respondents request otherwise, comments received will be published on the Commission's website.**

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## **Section 1 – Introduction and overview**

1. The Commission Services have published for consultation a Working Document based closely on the draft directive proposal as so far developed for the implementation of a new capital requirements regime for credit institutions and investment firms in the European Union.
2. This consultation is the fourth in a series of consultation and dialogue exercises carried out since 1999.<sup>1</sup> This long and intensive dialogue process has been central to the development of the draft proposals that are now presented. This consultation paper takes that process towards its culmination and will contribute to the finalisation of the directive proposal to be adopted by the Commission in early 2004.
3. Notwithstanding the significant and invaluable input of the supervisory authorities of Member States in the development of the proposals to date – in particular through the efforts of the Banking Advisory Committee (in its expanded composition to include investment firms supervisors) – the Working Document is the sole responsibility of the Commission Services.
4. The purpose of this Explanatory Document is to act as a guide to the Working Document, to set out the reasons behind key aspects of the proposed new framework, and to provide feedback on comments received during the recent structured dialogue exercise
5. Interested parties are asked to send their comments – preferably in both paper and electronic forms – to the address indicated to be received by 22 October 2003. This is an open consultation – all responses will be warmly welcomed. As well as the banking and investment firms industry, the Commission Services looks forward to comments from supervisory authorities, from the Small- and Medium-Sized enterprises sector and other industry sectors, and from consumers.
6. Unless respondents request otherwise, comments received will be published on the Commission's website.

### **Objectives of the Commission Services**

7. In the Cover Document published in November 2002, the Commission Services set out in detail the key objectives of the review and the approach adopted.
8. The existing capital requirements framework<sup>2</sup> has played a central role in the ongoing development of a single market in financial services. It has contributed significantly to the key objectives of financial stability and consumer protection while promoting the economic and social benefits

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<sup>1</sup> *A review of regulatory capital requirements for EU credit institutions and investment firms – consultation document* (November 1999); *Commission Services' second consultation document on review of regulatory capital for credit institutions and investment firms* (February 2001); *Cover document and Working document of the Commission Services on capital requirements for credit institutions and investment firms* (November 2002).

<sup>2</sup> Directive 2000/12/EC relating to the taking up and pursuit of the business of credit institutions; Council Directive 93/6/EEC on the capital adequacy of investment firms and credit institutions (CAD), as amended.

deriving from a competitive level playing field within European financial services markets.

9. However financial innovation, advances in techniques for risk measurement and management, and increased regulatory and supervisory sophistication mean that the need to update the existing rules is now pressing. For this reason the review of capital requirements forms a significant component of the Financial Services Action Plan and of the EU's economic reform agenda.

### **Parallel review of the Basel Accord**

10. The Commission Services' review of the existing legislation in this area is taking place in the context of the parallel review by the Basel Committee on Banking Supervision<sup>3</sup> of the 1988 Capital Accord ('the 1988 Accord') upon which the existing EU framework is based.

11. The Commission Services strongly support the efforts of the Basel Committee in the revision of the 1988 Accord which, though formally applicable only to internationally active banks in the 13 countries represented on the Committee, has been adopted in over 100 countries throughout the world and applied to institutions of all sizes and levels of sophistication.

12. The existence of an international framework governing regulatory capital requirements has brought and will continue to bring significant benefits to the global economy as a whole. The Basel Accord makes a central contribution to a sound and stable global financial system, enhancing the resilience of the banking system in the face of adverse events. It facilitates an international level playing field which helps prevent the benefits of competition from being undermined by regulatory arbitrage. And it promotes the efficiencies that result from having similar prudential standards in force throughout the world.

### **Suitability of the new Basel Accord as the basis for the new EU regime**

13. In the Cover Document to its structured dialogue exercise published in November, the Commission Services indicated that they were in particular supportive of the overall design of the proposed new Accord, which is conceived to ensure its continued suitability for banks of all sizes and levels of complexity. It is based on a differentiated and evolutionary approach which incorporates significant flexibility around a range of methods for the calculation of capital requirements. This in the Commission Services view represents a design which makes the new Accord a highly suitable basis for the new capital adequacy framework in the EU. For this reason among others, the different approaches offered by the new Accord will be made available to EU institutions.

14. For example, in relation to the calculation of capital charges for credit risk, three approaches are prescribed. The Standardised Approach, while

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<sup>3</sup> The Basel Committee was established by the central bank Governors of the Group of Ten countries. It consists of representatives of the central bank, and of the authority responsible for prudential supervision of banks where this is not the central bank, from the following countries: Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States. The European Commission, along with the European Central Bank, is an observer at the Committee and participates in the task forces and working groups working on the capital review.

incorporating increased sensitivity and the wider recognition of risk mitigation techniques, is closely linked to the approach under the 1988 Accord. Thus it represents an appropriate methodology for those institutions not seeking to adopt the more sophisticated internal ratings based methods for the calculation of capital charges.

15. The Internal Ratings Based Approach will be made available in two modalities. The Foundation Approach, which will require institutions to calculate own estimates only in relation to the probability of the borrower defaulting; and the Advanced Approach under which institutions' internal estimates of losses in the event of default and of exposure amounts at default will also be recognised.

16. The incorporation of the Foundation Approach as a core feature of the new Accord and its availability to institutions for ongoing use in their calculation of capital charges, is of particular significance in the EU, where it can be expected to be adopted by a large number of institutions seeking to improve their risk measurement and management techniques and to receive appropriate recognition for this in their capital requirements.

### **Calibration – QIS3**

17. In their November document, the Commission Services made it clear that in addition to its design, the calibration of the new Accord was a key aspect. The Commission Services indicated that it supported the calibration objectives of the Basel Committee. These include broad capital neutrality of the new framework as compared with the old, together with appropriate incentives for institutions to move to the more advanced approaches.

18. A central aspect in assessing the achievement of calibration aspects was the third Quantitative Impact Study (QIS3) which took place during the latter part of 2002 and early 2003. All EU Member States and a number of Acceding Countries took part in this exercise with the Commission Services co-ordinating the participation of countries not represented on the Basel Committee. The exercise included a large number of both internationally and non-internationally active banks.

19. The results of QIS3 – both those compiled by the Basel Committee and the further EU analysis carried out by the Commission Services – have now been published.<sup>4</sup> These results are positive and indicate that the proposed new framework is on target to achieve the calibration objectives outlined above.

20. The outcomes for the different approaches are in line with the stated objectives outlined above – broad capital neutrality combined with appropriate incentives. Many smaller banks will face reduced capital charges. For loans to SMEs the capital requirements are reduced as compared with the current Accord.

21. In order to assess the impact of the proposals for investment firms, the Commission Services have coordinated a data-sharing exercise in

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<sup>4</sup> [http://europa.eu.int/comm/internal\\_market/en/finances/capitaladequacy/index.htm](http://europa.eu.int/comm/internal_market/en/finances/capitaladequacy/index.htm) The significant assistance of the Joint Research Centre at Ispra in carrying out this work is gratefully acknowledged.

cooperation with national authorities. This is discussed further at Section 14 below.

### **Approach of the Commission Services**

22. Against this background, the Commission Services with the support of competent authorities in the Member States continue to adopt the working principle that the EU capital adequacy framework should be revised in a manner that is consistent with the new Basel Accord, but appropriately differentiated where necessary to take account of specificities of the EU context.

23. In addition to the prudential implications, failure to reflect the new Accord in the legislative framework within the EU would have the potential to undermine the competitive position of EU financial institutions in the global market place, with significant implications for EU economic and social objectives.

24. At the same time, there are a number of highly significant specificities of the European context which must be fully taken into account and reflected in the design of the new framework. Ensuring that this objective is achieved is a central focus of the work of the Commission Services in this area.

25. Significant features of the EU context include the following:

26. ***The scope of application of the proposed new EU framework.*** In accordance with the principle that capital requirements should be proportionate to the risks of activities carried on regardless of the legal nature and level of complexity of the institution in question, the new EU requirements will, as is the case under the existing directives, apply to all credit institutions and investment firms within the Union with adjustments where necessary. As well as fulfilling the prudential imperatives of financial soundness and stability and of consumer protection, this approach also underpins the competitive level playing field. It reflects the founding principles of the internal financial services market – a single license, mutual recognition, and home country control. It responds to the realities of a highly diverse European market, where institutions of different types, sizes and levels of complexity compete directly with one another in the provision of financial services. It should also contribute to enhanced risk management practices within the EU financial services sector as a whole.

27. ***The nature of the EU framework.*** The legislative nature of the EU framework compares with the Basel Accord which takes the form of an agreement amongst national banking supervisory authorities. This has an important impact on the question of flexibility. It is a central objective of the Commission Services that the new framework should be sufficiently flexible to allow for the update of technical aspects to reflect ongoing market, regulatory and supervisory innovation.

28. ***Small- and medium-sized enterprises (SMEs).*** SMEs represent a core component of the European economy. They play a crucial role in promoting the innovation, growth and employment which is essential to the economic success of the Union and to the welfare of its citizens. It is therefore a central requirement that the new capital adequacy framework does not result in disproportionate capital requirements in relation to financing of such entities. It

can be seen from the results of the QIS3 exercise discussed above, that this objective is achieved by the proposals as modified since the Basel and Commission Services second consultation papers.

29. How these key aspects of the EU context are addressed in the new framework is addressed in detail in subsequent sections of this note.

### **Smaller and less complex institutions**

30. A core aspect of the Commission Services work in the development of the new capital requirements regime is ensuring its suitability and appropriateness for application to smaller and less complex institutions in the EU. (See Structured Dialogue Cover Document pages 11-15.) This issue is one that permeates virtually all areas of work on the new draft framework.

31. Given the pervasive importance of this issue, it is not discussed under a single heading. Rather it is a key aspect throughout the discussions in this document. Readers are referred to the discussion in this section of the suitability of the new framework for general application including its impact on smaller banks as identified in QIS3; to Section 2 concerning the Structured Dialogue; to Section 5 on the Standardised Approach; to Section 6 on the IRB Approach; to Section 7 on SMEs; to Section 9 on credit risk mitigation; to Section 10 on real estate lending; to Section 13 on operational risk; to Section 14 on investment firms; to Section 15 on the supervisory review process; and to section 16 on market discipline.

### **Future process**

32. As mentioned above this consultation exercise forms a central component in the finalisation of the directive proposal which should be adopted by the Commission early in 2004.

33. In finalising the proposal the Commission Services will also have close regard to the final version of the new Basel Accord which should be agreed before the end of the year, and to the study of the consequences of the proposed new framework for the European economy which is being carried out in response to a request from the European Council.

34. The timetable remains very tight. However the Commission Services are confident of continued success in meeting the challenging timeframe necessary to allow the new legislation to be agreed and national implementation achieved in time for the global implementation date of the end of year 2006.

35. As mentioned previously, in the context of achieving this challenging timeframe, and more generally, the Commission Services very much welcome the strong interest taken by the European Parliament in the work in this area from an early date.<sup>5</sup> The work of the Commission Services has been significantly informed by the views expressed by Parliament to date. The Commission Services look forward to the publication of the own initiative report<sup>6</sup> which is currently in preparation and to ongoing dialogue with the

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<sup>5</sup> See, for example, European Parliament resolution on the evaluation of Directive 89/299/EEC on the own funds of banks (2000/2207(INI)) – text adopted 17 November 2000.

<sup>6</sup> See the *Draft report on capital adequacy of banks (Basel II)*, Committee on Economic and Monetary Affairs (Rapporteur: Alexander Radwan MEP), 11 June 2003. Note, this draft report

European Parliament which will be important to the successful completion and timely implementation of the new framework.

### **Introduction to the Working Document**

36. The Working Document which forms the second part of this Consultation Paper is based closely on the draft legislative proposal as so far developed for a new capital requirements regime for credit institutions and investment firms in the European Union.

#### ***A work in progress***

37. While the Working Document has been further developed in light of the comments received during the Structured Dialogue exercise and other considerations, it remains an ongoing work in progress. While all of the proposals contained in the document remain live and subject to change, in some areas consideration continues actively even while this Consultation Paper is published. (For example, in light of comments received in the Structured Dialogue, the Commission Services will seek to enhance further consistency and coherence aspects of the Working Document over the coming months.) Such areas are indicated in the following sections of this Explanatory Document and views are solicited.

#### ***A flexible framework***

38. The format of the Working Document follows that of the likely Directive proposal. The provisions are divided into two types. Firstly, that part of the Document consisting of articles. These should contain the principles and central rules governing the issue in question. And secondly, the annexes - which should contain the more detailed technical implementation and elaboration of the principles and rules contained in the articles.

39. Given the need to achieve flexibility and capacity for speedy legislative response to market and regulatory innovations as mentioned above, the Commission Services envisage that the provisions contained in the annexes should be subject to amendment by comitology procedure in the future. The articles will be able to be amended only by codecision.

40. It is the intention of the Commission Services that the draft directive proposal in its entirety (i.e. articles and annexes) should be submitted for adoption through the codecision legislative procedure.

41. In developing the draft proposed directive text, the Commission Services seek to incorporate in the articles the determining principles and governing rules for the new capital adequacy framework. It is important that these establish firmly the basis of and constraining requirements for the more detailed implementing and technical provisions contained in the annexes.

### ***Structure of the Working Document***

42. The Working Document is divided into six titles.

43. Title I sets out the definitional provisions for the proposed new regime, the general provisions establishing its core requirements, and the provisions prescribing scope of consolidation.

44. Title II contains the minimum capital requirements in relation to credit risk (including chapters on the Standardised Approach, the IRB Approach, credit risk mitigation, and asset securitisation) and operational risk. It also contains provisions relating to market risks, the core requirements in relation to which continue to be found in the Capital Adequacy Directive (CAD)<sup>7</sup> as amended.

45. Title III is concerned with institutions' risk identification, measurement and management and includes the draft proposed directive requirements in relation to capital adequacy over and beyond compliance with minimum capital requirements. The second part of this Title deals with the evaluation process to be undertaken by supervisory authorities and prescribes powers and obligations of authorities in this regard.

46. Title IV is concerned with disclosure requirements to harness the prudential effects of market discipline.

47. Title V deals with powers of execution; and Title VI contains transitional and final provisions.

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<sup>7</sup> 93/6/EEC

## **Section 2 – The Structured Dialogue**

48. As mentioned in the previous section, between November last year and February this year the Commission Services, with the assistance of supervisory authorities in Member States, carried out a structured dialogue exercise.

49. In this exercise the views of representative associations of the financial services industry, of small- and medium-sized enterprises' representatives, of supervisory authorities themselves, and of others, were sought. The aim was to obtain input which would enhance the quality of the proposals to be put out for full consultation in this third consultation exercise.

50. The Structured Dialogue was a very successful exercise which has made a significant contribution in the development of the new capital requirements directive. Over 100 sets of comments were received – either formally or informally. Most of these have now been published on the Commission's website.<sup>8</sup>

51. These comments have been analysed and considered by the Commission Services and the technical groups of the Banking Advisory Committee. In a number of areas, changes have been made to the draft proposals in light of the comments received. In other cases, having been considered, suggestions for change have not been accepted. And in again others issues have been raised which have prompted the Commission Services to seek further views in this Consultation Paper.

52. A key aspect of this Explanatory Document is to provide feedback on some of the central issues raised in comments received during the Structured Dialogue. For the most part this is done in the further sections of this document dealing with specific areas.

53. However, in addition to the comments relating to particular proposals or discreet issues which are considered in the later sections of this document, the Commission Services have identified a number of cross-cutting or horizontal issues which are of concern to respondents. A number of these are discussed below.

### **The Commission Services approach**

54. A large number of respondents commented favourably on the overall approach adopted by the Commission Services. There is continued strong support for the approach outlined above of consistency with the new Basel framework subject to appropriate differentiation where necessary to reflect specific features of the European context. There is also significant support for the Commission Services' position that the new framework should apply to institutions of all shapes and sizes in order to continue to ensure a level playing field within Europe.

55. A group of respondents which had concerns about the universal application of the new framework was that consisting of smaller investment firms and asset managers. This group expressed concerns around the

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<sup>8</sup> [http://europa.eu.int/comm/internal\\_market/en/finances/capitaladequacy/index.htm](http://europa.eu.int/comm/internal_market/en/finances/capitaladequacy/index.htm) A small number of those who provided comments asked that they should not be published.

insensitivity of the calibration of the Basic Indicator and Standardised Approaches to operational risk combined with the generally low risk profile of such entities and the resulting impact on their capital requirements. They requested modifications of the proposals in this regard. This issue is dealt with in detail at Section 14 below.

### **Flexibility of the new framework**

56. Respondents spoke strongly in favour of the need for flexibility of the new framework as proposed by the Commission Services. As it was put by one respondent, 'it is essential for industry and for depositors and borrowers that the regulatory framework is able to adjust to the increasing scale and pace of change in financial markets.'

57. As discussed in the previous section, the Commission Services share fully in this aim and are designing the draft directive proposal so as to achieve it. The new framework must however fully respect the legislative competences of the different European institutions. One aspect of this will be ensuring that the directive articles - within the terms of which the technical annexes are constructed, and may in the future be amended - are clear, robust and effectively constraining. The Commission Services continue to work on this aspect.

### **Cross-border issues – (1) The level playing field**

58. Many respondents expressed concern about the potential for divergences in implementation, interpretation and application of the new framework. Such divergence could give rise to competitive inequalities between institutions in different jurisdictions and to regulatory arbitrage. Amongst the aspects of the new framework identified as the source of such concerns were the key role of supervisory approval for institutions' use of the more risk-sensitive approaches to credit risk and operational risk, the central importance of supervisory review process in the new framework, and the large number of 'national options' contained in the proposals.

59. The Commission Services agree that this is a very important aspect. It is one moreover for which there is no simple solution. This is because at the heart of financial services prudential regulation there must remain significant reliance on supervisory judgement and discretion. The aim therefore must be to strike the appropriate balance between regulatory constraint and supervisory discretion.

60. The Commission Services consider that the draft framework as set out in the Working Document strikes a balance which is very close to being the correct one in this regard. Concerning the approval of institutions to use the more sophisticated approaches for example, the proposals seek to strike the appropriate balance between specified minimum requirements to be applied by all authorities on the one hand, and reasonable levels of prescriptiveness allowing for appropriate individuation on the other.

61. Similarly in relation to the Supervisory Review Process, Title III of the directive seeks to achieve a challenging balancing exercise. There is the need both for supervisory flexibility responsive to local circumstances and for a framework of effective legal obligations within which supervisors must act. On the one hand, supervisors must be free to adopt approaches which differ in

terms of intensity, nature and content depending, for example, on the size and level of complexity of the institution. On the other, they should exercise such discretion within the framework of an obligation to be satisfied as to the adequate own funds of institutions within their jurisdiction. Moreover, there should be an obligation upon supervisors to take appropriate intervention measures as necessary and, in particular circumstances to require institutions to hold a specified amount of own funds in addition to their Title II minimum requirements.

62. The Commission Services have sought therefore to capture in the draft directive proposal an appropriate balance between regulatory constraint and supervisory judgement and discretion. There remains however, as pointed out by respondents, significant scope for supervisory discretion under the new framework. This gives rise to the potential for divergences in the implementation and application of the new framework across jurisdictions.

63. For this reason, it is in the Commission Services' view very important to the success of the new framework that effective structures for the promotion of supervisory convergence be created. The Commission Services' believe that the creation of a new high level forum of European supervisors, a key task of which includes the promotion of supervisory convergence in the manner of application of the new framework, will represent a major step forward in the creation of the level playing field for European financial services institutions.

64. Some respondents suggest that supervisory convergence and consistency in the interpretation and application of the new framework could be promoted by the introduction of enhanced requirements concerning supervisory disclosure. Amongst the aspects which might be covered by such requirements would be the manner of exercise of national options in different jurisdictions and aggregated information concerning the application of the capital requirements framework.

65. The Commission Services see potential merit in such a suggestion. They consider that, as with disclosure requirements for institutions under Title IV of the directive, significant benefits could flow from enhanced transparency of supervisory approaches and decision-making. Amongst the aspects which might be made subject to such a requirement might be the following:

- written policies on the approval of institutions' use of more sophisticated approaches;
- the manner of exercise of national options made available under the directive;
- aggregate statistics on the approval of institutions for the use of different approaches; and
- aggregate statistics on the use of prudential measures by supervisory authorities.

66. Respondents views are requested on whether supervisory disclosure requirements such as these should be included in the directive proposal. And if so, what aspects should be covered by such requirements?

## **Cross-border issues – (2) Groups**

67. Respondents raised the issue of potential undue burdens deriving from the new framework in the context of groups of institutions operating in more than one jurisdiction. Such concerns arise from a number of aspects of the proposed new framework. These include

- possible different approaches to the approval of institutions for use of the more risk-sensitive approaches in different jurisdictions leading to the need for an IRB group, for example, to comply with multiple sets of IRB approval requirements;
- the potential burden on a group of the differential exercise by Member States of a wide range of national options; and
- the perceived potential burdens arising from the scope of application requirements specified in the Working Document.

68. In response to these comments, the Commission Services first of all note that the responsibility for the authorisation and supervision of institutions established in a particular jurisdiction remains with the competent authority for that jurisdiction.

69. Such entities are systemically integrated into the financial services sector and the corporate legal structure of the jurisdiction in question. This includes in relation to aspects such as financial stability, market confidence, and consumer protection, in respect of which the supervisory authorities for that jurisdiction are accountable. This is different from the situation in relation to branches of institutions established in different jurisdictions, where responsibility rests largely with the home state supervisor. Nonetheless, the Commission Services are committed to ensuring that prudential requirements imposed upon groups of institutions are not disproportionately burdensome.

70. In relation to the proposed requirements concerning scope of application of capital requirements in respect of group structures, the Commission remains convinced of the importance of a group-wide consolidated capital view of financial services groups and all of their entities, and of the application of requirements in such a way as to prevent double-gearing and down-streaming of debt. It is equally important that capital is appropriately distributed within the group so as to be adequate for individual institutions. In view of the concerns expressed above, the Commission is reviewing the proposals in relation to this matter to see whether these objectives may be effectively achieved by methods allowing for an alleviation of the compliance burden in certain circumstances – see further Section 4 below. Views on this issue will be welcomed.

71. Concerning potential burdens arising from differences of approach between different supervisory authorities, again to a significant extent any such additional burden will be seen to flow from the establishment of separate legal entities within the legal and financial systems of different jurisdictions. Nonetheless, within the constraints mentioned above, the Commission Services will be giving further consideration to the potential resulting burdens and how they might be alleviated.

72. In this regard consideration is being given in particular to how the requirements for supervisory cooperation might be enhanced. Views on this matter will be welcomed including views in relation to the concept of lead supervision responsibilities as they might be applied in this context.

73. The Financial Conglomerates Directive already requires one coordinating supervisor to be appointed for each conglomerate in the EU. This supervisor is a central point for gathering and disseminating prudential information for the group, for coordinating supervisory action, and for taking certain prudential decisions. Views will be welcomed on developing this approach in the context of the new capital requirements framework.

### **Cyclicality**

74. Various comments were received on cyclicality and stress-tests. Some felt that the right balance has been struck in the current proposal whereas others expressed continuing concerns about the cyclical effects of the new minimum capital requirements.

75. There is no general or simple answer to the question of cyclicality. The Commission Services believe that the proposals now developed represent an appropriate balance between the demands of risk sensitivity of regulatory capital requirements on the one hand and to potential cyclical effects on the other hand.

76. The closer alignment of regulatory capital with the risks to which institutions are exposed will bring significant benefits in terms of increased regulatory robustness, improved competitive equality, enhanced economic efficiency, etc. On the other hand a consequence of this improved risk sensitivity is that minimum regulatory capital requirements are likely to vary with the general business cycle.

77. In this regard it should of course be noted that minimum regulatory capital requirements do not necessarily equate with institutions' internal capital decisions and that such internal capital decisions play a significant role in determining banks' behaviour.

78. As stated in the Structured Dialogue Cover Document important modifications have been introduced into the proposals to address concerns about potential cyclical effects. These include the flattening of the risk weight curves in the IRB Approach so that in time of an economic downturn where average credit quality deteriorates, the increase of capital requirement is lower than would be the case with a steeper curve.

79. Another requirement which mitigates cyclical effects is that institutions must use a lengthy time horizon in assigning ratings and take into account adverse economic conditions.

80. Capital held over and above the minimum IRB capital charges will help to mitigate the need to raise additional capital or reduce asset levels in an economic downturn. To give supervisors a point of reference for assessing whether additional capital is necessary to address the risks of business cycle related-deteriorations in asset quality, institutions employing the IRB Approach under the new framework will be required to carry out cyclicality stress tests.

81. As stated in the Structured Dialogue Cover Document, the Commission Services believe moreover, that as well as having potentially pro-cyclical effects, the new framework could have important counter-cyclical properties. In particular, a key aspect of the new regime will be its encouragement of improved risk measurement and management standards amongst institutions. Such improvements, in the context of the risk to institutions arising from potential changes in the economic environment in which they operate, may be thought likely to lead to their being in a better position to withstand such cyclical changes than might otherwise be the case.

82. The Commission Services agrees with respondents that this is an important issue. It is something which should be kept under continuous review.

### **Complexity**

83. Some respondents remarked on the level of complexity of the Working Document. While the Commission Services will continue to work to improve the structure of the framework, they consider that the level of complexity is in reality considerably reduced by the fact that institutions will choose between the different options represented in the text. The more sophisticated an institution the more it will be required to engage with the greater complexities of the framework.

84. On the issue of prescriptiveness, see Section 6 below.

### **Consistency of accounting standards and prudential rules**

85. A number of responses identified the need for the achievement of maximum consistency between the proposed new prudential framework and international accounting standards.

86. The Commission Services recognise the importance of this question and continue to take appropriate action in this regard. Such action includes the establishment of a BAC sub-committee on accounting and auditing, participation in relevant accounting committees, and ongoing involvement in the dialogue in relation to the development of new accounting standards.

### **Timetable**

87. Respondents remarked on the challenging timetable that is to be complied with if the global implementation date for the introduction of the new regime at the end of 2006 is to be complied with. The importance for the European financial services sector of meeting this deadline was stressed. The Commission Services fully shares this view as to the importance to European competitiveness of timely implementation of the new framework. This is discussed in Section 1 above.

### **Section 3 – General provisions of the new framework**

88. Articles 2 to 5 contain the cornerstone provisions of the new framework. These articles remain work in progress.

89. Article 2 establishes the core requirements that underpin the new framework. These include the obligation on Member States to require that banks and investment firms hold adequate own funds at all times. This requirement of adequate capitalisation underpins both the Title II minimum capital requirements in respect of credit, market and operational risk and the Title III powers and obligations of competent authorities under the Supervisory Review Process. The overall structure of the directive therefore is such that compliance with the minimum own funds requirements prescribed under Title II is a necessary but not a sufficient condition for an institution to be considered to hold an adequate level of own funds having regard to its overall risk profile.

90. Sub-paragraphs (b) and (c) set out the general obligations on institutions in relation to maintaining a sound control environment and an adequate process to assess the adequacy of capital held, and in relation to disclosing material information.

91. The second part of Article 2 encapsulates the general obligations of competent authorities – that is review and evaluation, and intervention as appropriate.

92. The Commission Services believe that Article 2 provides a solid and balanced corner-stone upon which the new framework can be established.

93. Article 3 sets out the overall obligation on institutions in respect of minimum levels of capital relating to the risks covered by Title II of the Working Document. A 'building block' approach is adopted in this regard. Institutions are required to hold own funds which are at all times more than or equal to the sum of the requirements prescribed in relation to each of the risks identified in the article.

94. In the Working Document text published in November for the Structured Dialogue, Article 5 stated that in carrying out their capital adequacy assessment processes, institutions are prohibited from assessing to Title II risks less own funds than is prescribed under that Title. In other words, in determining their capital adequacy, institutions were prohibited from second guessing the Title II requirements so as to allocate Title II risk-related capital to Title III risks. This proscription applied also to supervisory authorities in carrying out their evaluation of institutions' capital adequacy assessment processes. The wording of Article 5 was stated to be at an early stage of development.

95. Since then, the question of the relationship between Title II and Title III capital requirements has been the subject of significant discussion. This discussion is ongoing. It is directly impacted by the developed proposal that the assessment process of individual institutions prescribed under Title III should be concerned with the concept of 'internal' or 'economic' capital rather than with the concept of 'regulatory capital' or 'own funds'.

96. In view of this ongoing discussion, the Commission Services retain an open position as to the final content of Article 5. It is intended that a final position should be arrived at over the coming months. For the moment the Structured Dialogue wording is retained as a placeholder.

97. The above-described provisions also connect directly with Article 128(4) of the Working Document which addresses the situation that arises if an institution breaches its capital requirements. This provision is based on the existing similar provisions in Directive 2000/12 and CAD and requires Member States to ensure that the institution in question takes appropriate steps to achieve compliance with the requirements as quickly as possible. The provision applies to requirements under Title II and to capital and other requirements imposed by supervisory authorities under Title III.

## **Section 4 - Scope of consolidation**

98. As mentioned in Section 2, proposals in respect of the scope of consolidation included in the November 2002 Working Document were discussed by a number of respondents concerned about new potential burdens. As stated, the Commission Services remain convinced of the importance of the application of consolidated and sub-consolidated requirements in such a way as to prevent double-gearing and down-streaming of debt. It is also of key importance that capital is appropriately distributed within the group so as to be adequate for individual institutions. The Commission considers that the current rules – in particular those allowing the rules to be waived in certain circumstances – may not sufficiently achieve these objectives in the context of a single European market.

99. In view of the comments received during the Structured Dialogue, the Commission Services are continuing to review the proposals in relation to this matter. Further views will be welcomed.

### **Group and individual capital requirements**

100. Capital requirements applied on a consolidated basis are central to ensuring the integrity of capital in the group as a whole. The proposed rules on this matter are in general terms the same as under the existing framework. Article 16 requires credit institutions and investment firms to comply with the capital requirements on an individual basis. This is intended to ensure that capital is readily available where it is needed for the protection of depositors and investors. In the cases where a group is sufficiently complex to contain one or more sub-groups, it can be important to ensure that minimum capital requirements are complied with at the sub-group level. This is particularly – but not exclusively – so in the case of international groups.

101. Accordingly Article 18 imposes sub-consolidated requirements on cross-border subgroups. The Working Document does not include mandatory sub-consolidation requirements for groups located in only one Member State. The need for sub-consolidation in such situations is left to the prudential assessment of supervisory authorities.

102. An alternative to the calculation of capital requirements on a sub-consolidated basis is provided. This is the calculation of individual capital requirements for the parent undertaking in the sub-group with the particularity that any holding in financial undertakings which would be otherwise be sub-consolidated are deducted in full from its capital.

103. One of the criticisms received during the Structured Dialogue was that while such requirements can be prudentially justified and proportionate when considered separately, they can in certain circumstances when combined lead to unduly increased burdens for groups of institutions. This raises the issue of the potential exemption from the requirement that capital requirements be applied at all levels in the group in a limited number of well-defined cases. The Commission Services are accordingly open to consideration of tightly defined circumstances in which the application of both (sub)consolidated and individual requirements might be judged not to be necessary.

### **Investment firms groups**

104. Under the current Capital Adequacy Directive<sup>9</sup> the requirement for groups of investment firms to meet minimum capital requirements on a consolidated basis may be waived by competent authorities where certain conditions are met. The Commission Services consider, as indicated in the Structured Dialogue documents of November 2002, that this exemption is in its scope and implications not prudentially justified. Accordingly Article 21 introduces proposed new rules limiting the availability of such a potential exemption to groups of low risk investment firms groups meeting the strict eligibility criteria set out in the Article.

105. Some respondents to the Structured Dialogue exercise expressed concerns as to unjustified potential new burdens arising from these proposed changes. The Commission Services are currently considering whether there are such unforeseen and potentially undue burdens arising from the closing of this prudential gap.

### **Asset management companies**

106. For consistency and in order to avoid regulatory arbitrage, asset management companies have been expressly included in the entities which must be included in consolidated and sub-consolidated requirements. This is consistent with the approach taken in the recently adopted Financial Conglomerates Directive<sup>10</sup> which puts such entities on the same footing as financial institutions for capital requirement purposes.

107. However, the definition of asset management company includes entities whose principle activity is discretionary and non-discretionary asset management on a client-by-client or collective basis.

108. This has been necessary to align consolidated and individual capital requirements related to the operational risk charge introduced for this type of asset management activity.

### **Interaction with the Financial Conglomerates directive**

109. The directive provisions on scope of consolidation have been revised to achieve appropriate consistency with the provisions of the Financial Conglomerates directive. The most important changes in this regard are in the relevant definitions contained in Article 1.

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<sup>9</sup> 93/6/EEC

<sup>10</sup> 2002/87/EC

## **Section 5 - Standardised Approach**

### **Introduction**

110. Articles 26 to 40 of the Working Document together with Annex C establish the Standardised Approach for the calculation of credit risk capital charges. This approach, while incorporating increased sensitivity and a wider recognition of credit risk mitigation techniques, is closely related to the approach under the current rules.

111. Accordingly, it represents an appropriate methodology for those institutions not seeking to adopt the more sophisticated internal ratings based methods for the calculation of credit risk capital charges. On the one hand, the proposals do not represent a significant increase in levels of complexity as compared with the current framework. On the other, they introduce a degree of risk sensitivity which represents a welcome improvement as compared with the existing rules.

### **Determination of risk weighted assets**

112. Article 26 deals with how to determine exposure values for asset and off-balance sheet items. This exposure value is then multiplied by the relevant risk weight in order to produce the risk weighted asset amount which is the basis for calculation of the capital charge under Article 3.

113. Article 27 sets out the list of classes to which assets and off-balance sheet items are attributed, with the risk weights to be applied set out in Article 28. These risk weights either depend on the credit quality of the borrower or are fixed weights attributed according to the nature of the item.

114. The application of risk weights to individual items based on the asset class and external credit assessments by recognised external credit assessment institutions (ECAIs) is prescribed in detail in Annex C-1.

115. As mentioned above, the Standardised Approach is modelled quite closely on the existing credit risk framework, with risk weights determined by the allocation of assets and off-balance sheet items to a limited number of risk buckets. The risk sensitivity of this approach has however been enhanced by an increase in the number of asset classes and risk buckets, the use of ECAIs credit assessments to assign risk weights where these are available, and an enhanced framework for the recognition of credit risk mitigation.

### **Unrated corporates**

116. Where an external credit assessment is not available then the risk weight (except in limited cases where payments are more than ninety days past due) is 100%. This means that for company borrowers - other than those falling within the retail asset class - which do not have an external rating, the capital charge will remain the same as under the current regime.

### **Retail**

117. It is proposed to introduce a 75% risk weight for retail loans. Loans to small businesses (including non-profit organisations), may be included in this category, subject to an aggregate exposure limit per beneficiary of €1 million. The Commission Services consider that this reduction in risk weight is justified by virtue of the nature of retail lending – where the fact of a large number of

relatively small loans gives rise to risk reduction. This was supported by respondents to the Structured Dialogue. Also in response to comments made during the Structured Dialogue the €1 million limit has now been drafted so that it may be updated to reflect the effects of inflation (see Article 27(2)).

118. The previously proposed limit that each retail exposure be less than 0.2% of the overall retail portfolio has been removed as unduly rigid. This reflects also the arguments of a number of respondents to the Structured Dialogue.

### **Real estate lending**

119. It is proposed that the risk weight for residential real estate loans fully and completely secured to the satisfaction of competent authorities be reduced from 50% to 35%.

120. It is also proposed that the risk weight for commercial real estate lending may be reduced from 100% to 50% at national discretion, and subject to a number of prescribed conditions.

121. Real estate lending under both the Standardised and IRB approaches is discussed in detail in Section 10 below.

### **Physical collateral**

122. A number of comments received during the Structured Dialogue argued that physical collateral should be recognised in the Standardised Approach. This matter is addressed in Section 9 below.

### **Past Due Items**

123. The treatment of items which are more than ninety days past due depends on the specific provisions made by the credit institution or investment firm. A 150% risk weight applies (except for RRE mortgages which receive a 100%) when specific provisions are less than 20% of the outstanding claim. The risk weight becomes 100% when specific provisions are beyond the threshold of 20% and, subject to the discretion of competent authorities, it may be reduced to 50% when specific provisions are no less than 50% of the outstanding claim.

124. The interaction between risk weights and specific provisions can be extended, subject to national discretion to non past due items otherwise receiving a 150% risk weight.

### **Collective investment undertakings (CIUs).**

125. The Commission Services have introduced a new treatment for CIUs booked in the trading book. The new proposals aim at increasing the risk sensitivity of the capital charges by allowing the institution to look through the CIU, and into the composition of the CIU's portfolio. As recommended also in comments received during the Structured Dialogue, the Commission is at present evaluating the merit of an equivalent or similar treatment in the banking book. Before any decision is taken, the materiality of the issue is being investigated.

### **External credit assessments**

126. Article 30 to 40 and Annex C-2 prescribe in detail the rules relating to the use of external credit assessments in the Standardised Approach. These relate to such matters as the criteria for the recognition of external credit assessment institutions (ECAIs) and their ratings and the manner of use of such ratings. The rules seek to promote consistency and integrity of use of such ratings by institutions.

127. A broad framework is prescribed for the attaching ('mapping') of risk weights to different credit ratings by competent authorities. Recognition and mapping of external credit ratings represents an important area for convergence and consistency.

128. Articles 39 and 40 allows for optional mutual recognition of ECAIs and mapping decisions by the competent authorities in different Member States – i.e. the competent authorities in one Member State have the option to adopt the recognition and mapping decisions of the competent authorities of other Member States.

## **Section 6 - Internal Ratings Based Approach**

129. The Internal Ratings Based (IRB) Approach is a significant step in regulatory capital reflecting more accurately institutions' actual exposure to credit risk. It aligns more closely techniques for calculating regulatory capital requirements with institutions' own methodologies for calculating internal capital needs.

130. In taking into account institutions' internal assessment of risk parameters for their regulatory capital calculation, the IRB Approach is substantially more risk sensitive than the Standardised Approach. Accordingly, it requires more developed credit risk management systems.

### **Risk factors**

131. A major principle in the IRB Approach is that all institutions have to internally estimate the probability of default (PD) of their borrowers.<sup>11</sup>

132. For the determination of the other risk parameters – loss given default (LGD) and exposure at default (EAD) - whether or not an institution uses its own estimates or standard estimates included in the directive depends upon whether it adopts the Advanced or the Foundation versions of the IRB Approach. LGD refers to the proportion of the exposure that will be lost if a default occurs. EAD is the exposure amount that is likely to be outstanding if a default occurs.

133. An additional factor which is taken into account in the calculation of capital requirements is the maturity of the exposure. Under the Advanced IRB Approach the explicit maturity of an exposure has to be used whereas under the Foundation IRB Approach an average maturity assumption of 2.5 years applies to all exposures.<sup>12</sup> However competent authorities may also require the use of the explicit maturity under the Foundation IRB Approach.

### **Risk weights**

134. Building on bank practice and different risk profiles, there are different treatments and risk weight formulas for different types of exposures. Therefore institutions have to categorise their exposures into a number of different asset classes. These include corporates, institutions, sovereigns, retail (with the three sub-asset classes, retail mortgages, qualifying revolving exposures and other retail exposures) and equity.

135. Risk weights are produced by risk weight formulas prescribed for the type of exposure in question. The outcome is based on the described inputs – PD, LGD, and maturity – plus a number of other aspects which are built into the formula. These include the assumed level of correlation between exposures of the type in question, a prescribed confidence level, etc. The EAD is multiplied by the resulting risk weight to produce the risk weighted amount for calculating the capital requirement under Article 3.

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<sup>11</sup> The probability of default refers to the likelihood of defaulting over a one year period. Institutions are required to use a longer time-horizon in assigning their ratings.

<sup>12</sup> An option is included in the Working Document allowing the use of the implicit assumption in the Advanced IRB Approach in respect of loans to groups below a certain size. The 2.5 years assumption can be reduced to 6 months in the case of repurchase or securities lending or borrowing transactions.

## **Corporates, institutions and sovereigns**

136. Empirical evidence suggests that the risk structure of exposures to corporates, institutions and sovereigns is similar. Therefore these exposures are treated equally under the IRB Approach, i.e. the same risk weight formula will be used for the calculation of capital requirements and the same minimum requirements will apply. The features of small and medium sized enterprises (SMEs) have been taken into account by specific treatments which are discussed in Section 7 below.

137. There is enhanced recognition of credit risk mitigation (CRM) techniques. Under the Advanced IRB Approach, where institutions rely on their own estimates of loss given default, there are fewer limitations on the recognition of collateral and guarantees. Under the Foundation IRB Approach, on the other hand, with its less sophisticated structure and generalised risk factor inputs, more specific rules have been provided for the recognition of CRM. These rules are contained in the CRM section of the directive and discussed in more detail in Section 9 below.

138. In the corporate portfolio specialised lending is distinguished from other forms of lending. For such exposures the main source of repayment is the cash flow generated by the financed asset. As such, these exposures are typically managed differently from other corporate exposures and institutions may not be able to estimate PDs in line with the minimum requirements. Therefore a simplified approach, referred to as the 'Slotting Criteria Approach' is made available. Where, however, institutions are able to estimate PDs according to the minimum requirements, the corporate risk weight formula is used. For high volatility commercial real estate, which is riskier than the other types of specialised lending a separate risk weight formula has to be used.

## **Retail**

139. Institutions' internal capital allocation – along with the maturity of the exposures and expected income – differs significantly across different types of retail exposures. As a consequence within the retail asset class three sub-asset classes have been identified: retail mortgages, qualifying revolving exposures and other retail exposures. For these sub-asset classes three separate risk weight formulas are provided.

140. A prerequisite for a retail treatment is that institutions have a large number of exposures. As a consequence data availability supports a requirement for the estimation of all three risk parameters. In contrast to the corporate rules, risk parameters are not required to be estimated for individual exposures, but instead for pools of similar exposures. Maturity effects for retail exposures are implicitly recognised in the risk weight formulas.

## **Equity exposures**

141. Equity exposures are included in a separate asset class because of their specific risk profile. There is a wide range of internal management practices for equity exposures, therefore three different approaches are made available. The simplest method is the Simple Risk Weight Approach where fixed risk weights are provided for public and private equity. Where institutions decide to use a more sophisticated approach they can either apply the Foundation IRB Approach for corporates, institutions and sovereigns (with 90% LGD and 5

year maturity assumptions) or use internal market risk models to determine the capital requirement. There are specific rules for the calculation of EAD in the case of equity exposures.

### **Feedback on structured dialogue comments**

142. The IRB Approach proposals were the subject of a significant number of comments during the Structured Dialogue. Respondents strongly welcomed the development of approaches based more closely on institutions' internal risk measurement methodologies. This is seen as a fundamental and welcome development in the way in which capital charges are calculated. Respondents also support the incentives to improved risk measurement and management inherent in the IRB Approach, which will contribute significantly to the improved soundness and efficiency of the European financial services industry.

143. Many respondents welcome in particular the development of the 'middle way' Foundation IRB Approach which provides the opportunity for a large number of smaller and less complex EU institutions to move to an approach of enhanced risk-sensitivity. These respondents are strongly in favour of the opportunity to move to the more advanced approaches on the basis of their ability to estimate certain but not all of the relevant risk parameters.

144. Respondents also welcomed the proposals which will permit the pooling of data amongst institutions for the purposes of estimating and validating the risk parameters. This is seen as a particularly important feature for smaller and less-complex institutions which individually would not have sufficient data to arrive at the necessary estimates.

### **Partial use and Roll out**

145. A particularly important set of proposals for smaller and less complex institutions are those relating to partial use of the IRB Approaches and those relating to roll-out. This is an area where the Commission Services Working Document diverges from the proposals of the Basel Committee. The Commission Services consider that this is an area where a more flexible approach is both justified and necessary in order take appropriate account of the situation of less complex institutions.

146. Some respondents argued against the Commission Services' proposals in this regard on the basis that there should be alignment with Basel (no partial use) or at least for further limitations.

147. The general principle for the application of the IRB Approach is that it has to be applied to all asset classes and over the whole group. This is to avoid cherry picking and regulatory capital arbitrage. However partial use has been made available, subject to supervisory approval, to give smaller institutions the possibility to use the IRB Approach when they are not in a position (or it would be unduly burdensome) to develop rating systems for sovereigns or institutions. To clarify the scope of availability of partial use, additional wording has been introduced into this provision.

148. A related issue to partial use is the application of the roll out rules. Some comments sought further flexibility with regard to application of IRB on a group level, in cases of restructuring, and in respect of the transitional period.

149. The Commission Services consider that the roll out rules (which apply for retail on a sub-asset class level) already provide good flexibility regarding business lines, asset classes, risk parameters and timeframe. This also includes cases where data for specific business areas is limited, mergers, acquisitions etc., and should satisfy most needs in this regard. To go beyond the current provisions would be to open the door to regulatory arbitrage.

150. Again, as for partial use, competent authorities have finally to approve institutions' roll out plans. The Commission Services believe that this approach provides the right balance between clear legal requirements and flexibility required by the heterogeneous European banking market.

### **The level of prescriptiveness versus the level of flexibility**

151. Comments were received on the question of the level of prescriptiveness in the Working Document. These encompassed such aspects as the contents of the minimum requirements for use of the different approaches, the definitions provided, monetary thresholds, etc.

152. To ensure a level playing field and avoid the potential competitive distortions about which concern was expressed by many respondents, it is essential to set out appropriately clear and comprehensive requirements. At the same time, as respondents argue, it is important to avoid over-prescriptiveness and undue complexity. Significant work has been done in streamlining the proposals for this purpose since the second consultative papers. The Commission Services believe the proposals now strike a very good balance between consistency of prudential requirements on the one hand and appropriate flexibility on the other. However work is ongoing in the light of specific comments and suggestions received. The Commission will continue to seek improvements in this regard.

153. In relation to monetary thresholds, the Commission Services recognise that over a longer time horizon there will need to be flexibility to adjust numeric thresholds. As discussed in the Structured Dialogue Cover Document and again in Section 1 of this document, the future flexibility of the new framework is a key component of the Commission Services draft proposals. The wording of Article 47(5) of the Working Document has been modified to ensure appropriate flexibility in respect of the specified threshold.

154. The definition of default is a key aspect of the IRB framework. Without appropriate harmonisation in this regard a central aspect of the framework would be mutable and open to play. Work continues to achieve as much consistency as appropriate with international accountancy standards. Nonetheless this is a core prudential concept and the Commission Services strongly support its substance and its appropriateness for inclusion in the proposed regulatory framework.

### **Conversion factors and trade finance**

155. In relation to credit conversion factors in the Foundation IRB Approach the QIS 3 figures have shown that CCFs for undrawn credit lines were broadly correct.

156. However strong arguments were made that the conversion factors in relation to trade finance were unduly high. The Commission Services agree

that the conversion factors for these exposures contained in the Structured Dialogue Working Document were slightly over-conservative in view of the nature of the risks. Consequently it is proposed to follow the Basel Committee in reducing them from 50% to 20%.

### **Data requirements**

157. Some respondents argued that the data requirement of 5 years for corporates, especially start-up companies, is too long. In this context it should be noted that the data requirements under the IRB Approach refer to the estimation of risk parameters by the institutions and are not requirements towards the borrowers. In other words, the required period of data requirements does not disadvantage new borrowers. Regarding coverage of data the roll out provisions provide sufficient flexibility to implement Foundation and Advanced IRB Approaches step by step without forcing institutions to satisfy all data requirements immediately.

## **Section 7 - Treatment of SMEs**

158. A key aspect of the work in developing the new framework is ensuring that the capital requirements in respect of lending to SMEs are proportionate to the risks involved and do not give rise to undue burdens for such entities. As discussed in the Structured Dialogue Cover Document there have been significant developments in the proposals in this regard since the second consultative paper.

### **Standardised Approach**

159. Under the Standardised Approach a risk weight of 75% for retail loans is proposed. Loans to small businesses will also benefit from this risk weight where the aggregate exposure per borrower is less than €1 million. For unrated borrowers not falling within the retail asset class, the risk weight remains the same as under the current regime – i.e. 100%. Furthermore, the risk weight for residential mortgage loans has been reduced to 35% and the possibility for a preferential treatment of loans secured by commercial real estate will be maintained.

160. The Commission Services agree with the comments made during the Structured Dialogue that numeric limits such as the €1 million limit should be able to be modified to reflect the effects of inflation. The wording of Articles 27(2) and 47(5) has been modified accordingly

### **IRB Approach**

161. Under the Foundation IRB Approach, exposures to SMEs falling within the corporate asset class will receive a reduction in capital requirements as compared with loans to larger corporates based on a firm size-related adjustment to the risk weights. This incremental discount factor will start when borrowers have total annual sales of less than €50 million and will increase in inverse proportion to the size of the firm. The largest discount - 20% - will be available for lending to borrowers with annual sales of €5 million or less. And the average discount will be approximately 10%. The firm size-adjustment will also be available for the equity asset class and allow a preferential treatment of equity exposures to SMEs.

162. SME loans below an exposure size of €1 million can be treated in the retail portfolio (subject to the 'use test' – i.e. the requirement that the lending institution treats the exposure in a manner comparable to other retail exposures). The capital requirement in the retail portfolio is generally lower than in the corporate portfolio.

163. Loans to corporates situated in the EU with a turnover as well as total assets for the consolidated group below €500 million can be excluded from the explicit maturity adjustment (to be replaced by an implicit maturity assumption of 2.5 years) under the IRB Advanced Approach where the competent authorities opt for such an approach for all institutions authorised by them.

164. Finally, a broad range of collateral will now be recognised under the IRB Approach. This includes physical collateral, residential real estate, and commercial real estate. For a full discussion of these aspects see sections 9 and 10.

165. The Commission Services believe that the proposed framework ensures a prudentially sound treatment of SME lending which is suitable to the situation of such borrowers.

166. The results of the third impact study (QIS3) confirm that the capital requirements for lending to SMEs under the new framework will be lower than under the current rules.

### **Feedback on structured dialogue comments**

#### **Standardised Approach – Definition of retail**

167. A number of respondents objected to the inclusion of the limit on retail exposures of 0.2% of the overall retail portfolio. This was argued to be too rigid and to be disadvantageous to smaller institutions. The Commission Services accept that this limit may be considered unduly prescriptive and inflexible. Accordingly it has now been deleted and replaced with a more general requirement for granularity within the portfolio.

#### **Foundation IRB Approach – Definition of retail**

168. A number of comments objected to the use test which requires that an SME exposure be originated and managed in the same way as other retail exposures in order to be included in the retail portfolio. Other comments argued against the €1 million threshold for the inclusion of exposures in retail.

169. The Commission Services regard the use test and the €1 million threshold as necessary and appropriate to distinguish between retail and other exposures. It is a key aspect of the lower risk nature of the retail portfolio that it consists of a large number of small diversified loans that are managed on a pooled basis. However the Commission Services will continue to review the proposed wording in light of the comments received and industry practices.

#### **Equity / Venture capital**

170. A number of comments received argue that the risk weights and floor charges for equity exposures are too high – in particular in respect of business start-ups.

171. The Commission Services recognise the importance of new enterprises for the ongoing vitality of the European economy. It is accordingly important that the new capital requirements rules are not disproportionate or unfair towards exposures to such entities.

172. On the other hand a prudential framework is not an appropriate mechanism to promote or subsidise particular sectors of the economy. The purpose of a capital requirements framework includes the stability of the financial system and the protection of savers through increased risk sensitivity. It is important that these objectives are not jeopardised by mis-stating the risk of certain exposures in an effort to benefit particular sectors.

173. The Commission Services consider that the proposed rules for the treatment of venture capital and equity investments are proportionate to the risks involved in such financing. Equity positions are the most subordinated positions an institution can have and therefore an assumption of 90% loss in the event of default is justified.

174. Some comments criticised the proposed floors for equity exposures. The Commission Services consider that these floors will have limited if any impact on the capital requirements for equity investments in start-up companies.

175. In relation to the arguments for a 'retail equity' treatment, the Commission Services do not consider that such a treatment would be prudentially justifiable. The core concept of the retail portfolio which justifies lower risk weights is, as mentioned above, that it consists of a large number of small exposures with low levels of correlation managed on pooled basis. In the Commission Services view, such portfolios are unlikely to be found in the context of equity exposures.

176. However, it is intended, as mentioned above, that the firm size adjustment should also be available for equity exposures. Consequently equity exposures to smaller enterprises will receive lower risk weights.

177. Further comments on this issue will be welcomed.

## **Section 8 - Covered bonds**

178. Covered bonds play a significant role in the European capital markets and in the funding of mortgage and sovereign lending in Europe. Under the current Directive they are risk-weighted at 10%, subject to the conditions laid down in Article 22(4) of the UCITS Directive.<sup>13</sup> The Commission Services consider that it is not appropriate to maintain this 'general' treatment as part of the proposed new framework in view in particular of its enhanced risk sensitivity.

179. Accordingly, the Commission Services have developed a proposal for the treatment of covered bonds under the Standardised and the Foundation IRB Approaches. This proposal takes into account the increased risk sensitivity of the new regime and recognises the specific features of covered bonds.

180. Under the Standardised Approach, the Commission Services have provided separate risk weights for covered bonds which reflect the enhanced security of these assets in comparison with unsecured bonds.

181. Under the Foundation IRB Approach institutions can take into account the higher level of security of these instruments by applying an LGD of 20% as compared with the LGD of 45% for unsecured bonds.

182. The Commission Services favour more harmonisation with respect to eligibility criteria for covered bonds. This is to further ensure a sound framework for the treatment of covered bonds and to render the lower risk weights prudentially justified. Accordingly, the Commission Services have prescribed a list of eligible assets which will apply in the Standardised and IRB Approaches.

### **Feedback on structured dialogue and working paper comments**

183. Many comments suggested that issue ratings should be used instead of issuer ratings in the Standardised Approach. Others argued for an alternative approach in the Foundation IRB Approach.

184. Concerning the question of issue versus issuer ratings as the basis for the Standardised Approach charges, at this stage in the evolution of EU capital requirements there is not available an issue ratings-based calibration of capital requirements for covered bonds which would be different to that for institutions. Accordingly, the Commission Services consider that the proposal represents an appropriate treatment combining prudential soundness with enhanced risk sensitivity which continues to reflect the high quality of such instruments.

185. Regarding the treatment under the Foundation IRB Approach, the Commission Services consider that the proposed approach is appropriate to reflect the credit risk of covered bonds in the context of the enhanced risk sensitivity of this approach. As described in Section 6 of this document, the credit risk of loan assets is measured by three parameters - probability of default (PD), loss given default (LGD), and maturity. A prudentially sound

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<sup>13</sup> Council Directive 85/611/EEC on the coordination of laws, regulations and administrative undertakings for collective investment in transferable securities, as amended.

methodology for the calculation of the extent to which PD is reduced where default depends upon the failure of two counterparties (double default) is not available. Accordingly such a methodology is not included in the new framework. For this reason the effect of the underlying exposures are regarded as being akin to funded credit protection with their risk reduction reflected in the LGD. An LGD of 20% is proposed to be made available for covered bonds.

186. Some comments referred to the proposed list of eligible assets and asked for amendments. The Commission Services have revisited this matter in the light of the comments received. The amended proposal should meet many of the concerns raised and ensure appropriate soundness and prudence in relation to the underlying assets.

## **Section 9 – Credit risk mitigation**

187. The proposed new framework for the recognition of credit risk mitigation represents a significant development as compared with the current rules.

188. The aim is to allow for an expanded range of credit protection to be taken into account for the purposes of reducing capital requirements. And where possible to allow for a more sophisticated calculation of the risk reduction achieved.

189. The rules for determining which forms of credit protection may be recognised, in what circumstances, and to what extent, take into account a number of key factors. In relation to collateral, these include certainty and timeliness of entitlement, liquidity, price availability and stability etc.

190. In relation to unfunded protection – guarantees and credit derivatives – significant factors include once again issues of certainty and timeliness, along with the creditworthiness and willingness to pay of the protection provider.

### **The structure of the directive**

191. Articles 66 to 70 contain the core governing principles for the recognition of credit risk mitigation under the new framework. They seek to ensure that the effects of credit risk mitigation are recognised only when those effects are sufficiently certain having regard to aspects such as those outlined above.

192. The detailed rules are contained in Annex E to the directive. The Commission Services have adopted a horizontal approach to the structuring of these articles. This means that the rules are structured according to key concepts that apply for the most part to all forms of credit risk mitigation. The key concepts are:

- Eligibility (Annex E-1)
- Minimum requirements (Annex E-2)
- Calculating the effects of CRM (Annex E-3)
- Maturity mismatches (Annex E-4)
- Combinations of CRM techniques (Annex E-5)
- Basket CRM techniques (Annex E-6)

193. Internal to each of the first four of these sections, there is a central division. This is between funded credit protection (such as collateral) and unfunded credit protection (such as guarantees and certain types of credit derivatives).

194. Finally there are further divisions based on whether a technique is used under the Standardised Approach or the Foundation IRB Approach and also, where relevant, based on the options chosen by an institution – for example whether it decides to use the Simple Method or the Comprehensive Method for financial collateral; or whether it decides to use ‘Supervisory’ or ‘Own Estimates’ volatility adjustments for calculating the amount of collateral to be recognised.

195. By adopting this horizontal approach, the Commission Services consider that the proposed provisions may be seen to be logically structured, robustly and transparently grounded in central principles set out in the articles, and capable of amendment within the constraints of these principles if necessary to reflect market or regulatory innovation over time.

196. The question of residual risk arising from the use of credit risk mitigation is addressed in Title III of the Working Document (see Annex I, section 4 and Annex J, section 1).

197. The draft directive proposals in relation to the treatment of real estate collateral in the Foundation IRB Approach have been incorporated into Annex E. Real estate collateral is however discussed separately in Section 10 of this Explanatory Document.

### **Structured Dialogue**

198. In relation to the CRM proposals, a range of comments were received during the Structured Dialogue. These were both constructive and helpful.

199. Three areas were identified by the Commission Services as requiring a full feedback as part of CP3. These were (a) the question of the recognition of collateral other than financial collateral; (b) the recognition of unrated and unlisted bank and investment firm bonds; and (c) the minimum requirements for guarantees.

### **Recognition of non-financial collateral**

200. A number of comments received during the Structured Dialogue called for enhanced recognition of non-financial collateral - including physical collateral, receivables and leasing.

201. Similar comments were received in response to the second consultative documents in 2001. The strong emphasis of these comments was on SME lending and the importance of physical and receivables collateral in this context. As discussed elsewhere there has been major revision of the proposals in respect of SME lending since CP2 including changes in relation to the recognition of collateral. The Commission Services consider that these modified proposals represent an appropriate and very proportionate capital treatment of lending to SMEs.

202. In relation to all forms of collateral, explicit recognition and treatment for the purposes of capital alleviation depend upon a number of factors. These include the level of confidence with which a value can be put on the collateral, the extent of availability of a market for the realisation of the collateral value, and the timeliness with which the value can be realised.

203. A further important factor in determining the recognition of different forms of collateral is the degree of risk sensitivity inherent in the capital requirements approach adopted – the greater the level of risk sensitivity, the better able it will be to handle different levels of certainty in the factors mentioned.

204. Under the existing capital framework, there is no explicit recognition of non-real estate physical collateral or of financial receivables. Under the new

framework it is proposed to provide explicit recognition for such forms of collateral under both the IRB Foundation and Advanced Approaches.

### ***IRB***

205. The effect of collateral as a risk-mitigant operates through the LGD risk parameter. This means that under the Advanced IRB Approach the effect of physical and other collateral may be reflected in the institution's own estimates of LGD.

206. Under the Foundation IRB Approach, LGDs are based on supervisory figures which seek to provide an appropriately generalised and prudential approximation of the likely loss in the event of the default of the borrower. Under the proposals set out in CP2 it was not intended to provide explicit separate recognition of the effect of physical collateral or receivables. In view of the comments received to CP2, the matter was reviewed and it was agreed to provide explicit recognition of such collateral.

207. It was agreed to reduce the assumed loss figure by 10% where there is an appropriate level of physical collateral – from a 50% assumed loss to 45%; and by 20% in the case of financial receivables - from 50% to 40%. Since CP2 the general unsecured LGD figure has been reduced from 50% to 45% - resulting in a further reduction in the physical collateral LGD to 40% and of the receivables LGD to 35%.

208. In view of the nature of these forms of collateral – and in particular in view of those aspects identified above: valuation, market liquidity, and likely time taken to realise the collateral – the Commission Services consider that such a reduction in the general LGD figure represents an appropriate and proportionate treatment of loans supported by such collateral, and one which does not overstep the bounds of prudential soundness.

### ***Standardised Approach***

209. In the context of the Standardised Approach, the Commission Services consider that it would not be prudentially justifiable to provide explicit recognition of these forms of collateral. Unlike the IRB approach, where the possible risk weights cover a significant range, the highest risk weight under the Standardised Approach is 150%. For the great majority of unsecured corporate loans where there is no external credit rating, the risk weight will be the same as under the current framework – i.e. 100%. Moreover loans to SMEs of below €1 million can receive a risk weight of 75%.

210. It is clear that such maximum risk weights can be justified only on the basis of their being appropriate in the context of average outcomes across a large and extremely diverse set of exposures. These risk weights, in other words, work on the basis that they will be applied to loans with a large range of risks of default and levels of loss. In only a relatively few cases will the 100% (or 75%) risk weight be appropriate to the risk of the actual exposure in question. However, on the whole and taken across the piece, such a risk weight is justifiable.

211. This means that the degree of sensitivity of the Standardised Approach risk weights to differentiation in the riskiness of individual loans is limited. In view of this and of the characteristics of physical collateral as a risk mitigant –

once again having regard to the aspects mentioned above – the Commission Services consider that it would not be appropriate to recognise non-financial collateral in the Standardised Approach.

### ***Leasing***

212. In relation to the recognition of leasing the Commission Services' propose, in parallel with the proposals of the Basel Committee, to recognise leasing arrangements in the same manner as the collateral of the type which is the subject of the leasing arrangement.

213. Where the requirements set out in the proposals are satisfied, the Commission Services' support the view that leasing exposures taken as a whole provide a level of risk reduction which deserves recognition in line with that for the type of collateral in question. In light of the arguments set out in the above paragraphs, the Commission Services do not consider that leasing arrangements deserve a more favourable treatment than that proposed.

214. Where leasing exposures fall within the retail definition in either the Standardised or IRB Approaches then they can benefit from the lower risk weights available for retail lending.

### **Unrated and unlisted bonds issued by banks or investment firms**

215. A number of respondents to the Structured Dialogue argued in favour of the recognition for credit risk mitigation purposes of unrated and unlisted bonds issued by banks or investment firms. It was argued that in some member states bonds issued by smaller institutions which do not have an external rating or a listing have traditionally been regarded as good security for certain types of loan. It is argued that recognition is justified on the basis of the traditional reliability of such securities for these purposes. The use of such securities in this way is argued to represent a specific feature of the EU context which justifies departure from the internationally agreed standards in this regard.

216. Those who oppose the recognition of such securities as credit protection on the other hand point to the fact that being neither rated nor listed, there is no sufficient guarantee of liquidity nor appropriate price formation mechanism available for such securities.

217. Further information gathering has indicated that the effectiveness of such securities for credit protection purposes depends upon repurchase by the issuing institution – and not on general market liquidity.

218. In view of the above, the Commission Services consider that a treatment should be made available based upon the willingness of the issuer of the securities to repurchase them on request and which takes account of the creditworthiness of such issuers.

219. Accordingly the Commission Services propose to permit the recognition under the heading of 'other funded protection' of instruments issued by third party institutions which will be repurchased by that institution on request (Annex E-1, paragraph 1.1.4.3).

220. In relation to the valuation and treatment of such securities for these purposes the Commission proposes that where they are taken as collateral

they shall be treated as a guarantee by the issuing institution (see Annex E-3, paragraph 3.1.6.3).

221. Where the instrument will be repurchased at its face value, it shall be valued at that amount. Where it will be repurchased at market price, it shall be valued in the same way as eligible debt securities issued by institutions which do not have an external credit rating.

### **Minimum requirements for guarantees**

222. The question of the proposed minimum requirements for guarantees was the subject of comments by respondents to the Structured Dialogue.

223. One of the issues that arose out of the Structured Dialogue related to the requirement that an eligible guarantee should cover all types of payment the underlying obligor is expected to make in respect of a claim. In particular, concerns were raised about the resulting exclusion of principal-only guarantees. The challenge in recognising such protection relates to providing an adequate methodology for calculating the risk cover in such circumstances. However the Commission Services are well-disposed towards the recognition of such guarantees. Views will be welcomed as to how this might be achieved.

224. Another issue raised in the Structured Dialogue related to the requirement for eligible guarantees to be direct and explicit to the original claim. The specific concern raised was that the requirement would preclude sovereign counter-guarantees which have particular importance in certain member states. In order to address these concerns the use of counter guarantees provided by sovereigns is now accepted as an eligible guarantee based on various conditions and the text has been amended accordingly (see Annex E-2, paragraph 2.2.1.3).

225. It is not proposed at this stage to extend this treatment to corporate counter-guarantees.

226. A further issue related to the situation where a protection provider guarantees (a portion of) the loss after the lending institution has realised other credit risk mitigation – e.g. collateral – securing the exposure. There are significant difficulties in permitting the recognition of such guarantees. These include the complexity of arriving at an accurate and robust assessment of the benefits of this type of protection, the speed with which such protection can be realised, and other practical implications such as the costs of realising the collateral, disputes as to the realisation process, etc. Further views on this question will be welcomed.

227. Finally, a number of respondents questioned the requirement for a guarantee to be entirely unconditional. The view was expressed that this requirement is inappropriately broad. Agreements may contain terms that would be considered conditions for these purposes but that do not affect the efficacy of the guarantee as a method of protection. In particular, these may be conditions that are within the direct control of the lending institution and hence don't compromise the protection provided. The text has therefore been amended to reflect the fact that guarantees containing this type of condition may be recognised for regulatory capital relief (see Annex E-2, paragraph 2.2.1.1(c)).

## **Other CRM issues**

228. Some respondents questioned the suitability in the context of securities financing transactions of the proposed requirement in Article 70 that institutions must demonstrate that they continue to undertake full credit risk assessment of the underlying exposure. The Commission Services have an understanding of the concerns raised here but at the same time have a strong prudential desire for an appropriate credit risk management requirement in relation to the underlying exposures where collateral is recognised. With a view to further consideration in relation to this question, input would be welcomed as to how such a desire could otherwise be met in the context of repurchase and securities borrowing/lending transactions subject to Master Netting Agreements.

229. Comments were also received concerning the prohibition of cross-product netting and the question of new volatility adjustments on exposures in the context of OTC derivatives. In light of these comments, the Working Document has been amended. It is not intended to include an explicit prohibition on cross-product netting; nor to introduce new volatility adjustments in respect of exposures arising from OTC derivatives.

## **Large exposures**

230. The Commission Services, with the assistance of the BAC, have reviewed the large exposures provisions of Directive 2000/12/EC with a view to introducing necessary consistency changes arising from the proposed new solvency regime as set out in the Working Document. As indicated in the Commission Services Second Consultative Document and in the Structured Dialogue Cover Document, a full review of the large exposures regime is not being carried out at this stage.

231. The consistency changes which it is intended to make are now included in the amended texts of Articles 48-50 of Directive 2000/12/EC which is set out in Part 2 of the Working Document.

232. Consideration has been given to the recognition of the new CRM framework for large exposures purposes. A key aspect in this regard is that while the proposed provisions in relation to the solvency regime are designed to provide appropriate coverage for credit risk on a continuing basis and in the context of assumptions and calculations applied at a portfolio or asset category level, those in relation to large exposures are designed to address stressed situations in the context of counterparty-specific large exposures.

233. The Commission Services consider that it is desirable to introduce as much continuity as is consistent with the above considerations between the credit risk mitigation framework applied to the solvency regime and that applied to the large exposures regime.

234. It is intended to permit competent authorities to allow institutions which opt to use the Comprehensive Method for Financial Collateral under the solvency framework, also to use this method in calculating their compliance with large exposures limits where funded protection is obtained. This is not a requirement but an additional option.

235. However there are prudential concerns relating to the proposal to permit the use of the Comprehensive Method arising from the different underlying assumptions of the solvency and the large exposures regimes.

236. Accordingly institutions using the Comprehensive Method will not be permitted to avail of the existing Article 48(3) exemption from particular reporting requirements.

237. There will also be Pillar 2 (Title III) requirements for institutions using this approach. For example, they will be required to carry out stress tests including in relation to the realisable value of collateral taken against large exposures (see Annex I, Section 3 and Annex J, Section 1(1)(j)).

238. For institutions using the Simple Method for financial collateral under the solvency regime, the current framework, including Article 49(7)(o) would in general terms continue to apply.

239. In relation to institutions adopting the IRB Advanced Approach, it is intended to permit them, subject to the approval of their competent authorities, to make use of their own estimates of the effects of collateral (subject to their demonstrating the suitability of those estimates).

240. Regarding unfunded credit protection, it is intended that guarantees and credit derivatives may be recognised in the same way that guarantees may be recognised under the current large exposures regime, subject to compliance with eligibility and other requirements prescribed under the new solvency framework.

## **Section 10 - Real estate lending**

241. This section sets out the Commission Services proposed approach to the treatment of loans secured by residential real estate (RRE) and commercial real estate (CRE) under the new capital adequacy regime. In the proposals set out in this document, the Commission Services have considered comments received during the Structured Dialogue and on the working paper on the treatment of real estate lending which was published in April. An outline of the comments received is provided below.

242. It should be noted that under the Standardised Approach, RRE and CRE lending are treated as separate asset classes; whereas in the IRB Approaches, RRE and CRE are types of collateral which can modify the loss given default (LGD) of the loan in question.

### **Eligibility criteria**

243. The Commission Services proposed approach is to have as consistent as possible a treatment for RRE and CRE across the different approaches having regard to the different risk sensitivities of these approaches. This should limit level-playing-field issues and gaming possibilities and provide incentives for institutions to move to the more risk sensitive approaches.

244. Accordingly, the same eligibility criteria for the recognition of real estate collateral will be applied in the Standardised and the Foundation IRB Approaches. There will be no such eligibility rules in the Advanced IRB Approach because such collateral related specifics will be reflected in the institution's own estimates of LGD which are relied on under that approach.

245. An important eligibility criterion is that the risk of the borrower should not materially depend upon the performance of the underlying property or project. However the Commission Services accept that this rule might be considered unduly restrictive in relation to some forms of lending in some member states where the real estate market in question has proved sound and secure over a long period of time. To take these cases into account, a provision based on national discretion has been made available for competent authorities to waive this requirement for RRE and/or CRE. The conditions for exercise of this waiver include the existence of evidence concerning the quality of the market in question including appropriately low loss rates – with prescribed maximum loss rates in the case of CRE.

### **Minimum requirements**

246. The Commission Services have developed minimum requirements to ensure reliable collateral management and prudent valuation of mortgage property. Such requirements are considered to be the minimum that any institution should comply with if it is engaged in mortgage lending and they are considered neither to represent an undue burden for Standardised Approach institutions nor to constrain the application of the Advanced IRB Approach. The minimum requirements are set out in Annex E-2, paragraph 2.1.4 of the Working Document.

### **Capital requirements**

247. The risk weights for real estate lending under the new framework will be as follows:

248. Under the Standardised Approach RRE exposures will receive a risk weight of 35%. CRE exposures will carry a risk weight of 100%, subject to the discretion of competent authorities to reduce it to 50%.

249. Under the Foundation IRB Approach the LGD for exposures secured by RRE and CRE can be reduced to 35%, depending on the loan-to-value ratio.

250. Furthermore, subject to discretion of competent authorities, a preferential treatment to exposures secured by RRE and CRE can be applied. This is subject to specific criteria – again with a requirement for evidence concerning the quality of the market in question including prescribed maximum loss rates.

251. Whereas this preferential treatment under the Basel rules is limited to CRE, the Commission Services have decided that it should be available for both CRE and RRE lending in order to achieve justified and appropriate consistency.

### **Feedback on structured dialogue and working paper comments**

252. The Comments received focused mainly on three areas: national discretions, risk weights and minimum requirements/eligibility criteria.

#### **National Discretion**

253. In relation to national discretion provisions, a distinction should be drawn between 'opt out' clauses and provisions which permit the recognition of specific market features going to the risk of the exposures in question. In the case of the latter type of provision, risk sensitivity is enhanced by its inclusion. As we have seen in the case of the national discretions relating to real estate lending, a key condition is the availability of evidence as to the quality and loss rates of the market in question. This is buttressed by provisions permitting other competent authorities to recognise the lower loss rates in the relevant markets in the calculation of capital requirements for institutions subject to their authority. This reduces level playing field concerns in this area.

#### **Risk weights**

254. The proposed standard LGDs for real estate collateral in the Foundation IRB Approach are generally regarded by respondents as too high. Considering that real estate markets in most European countries have been sound and prudent over a long period of time the Commission Services have provided a preferential treatment for RRE and CRE subject to prudential requirements and national decision as described above.

255. 'Cliff' effects between the Standardised and the IRB Approach have been materially reduced by lowering the risk weight for RRE in the Standardised Approach, setting LGD floors in the IRB Approach, and providing a preferential treatment under the Foundation IRB Approach.

#### **Minimum requirements/eligibility criteria**

256. Some comments were concerned about the eligibility criteria, which could exclude forms of lending which have proved sound and prudent over time such as buy-to-let lending and multifamily housing. This aspect is taken into account by providing a waiver for the criterion in question which is available for the Standardised and the Foundation IRB Approach.

257. Some comments asked for more flexibility regarding the minimum requirements and criticized the numeric limits for use of the waiver for CRE loans and for the availability of the preferential treatment in the Foundation IRB Approach as too rigid.

258. The minimum requirements are considered as core principles and should not be the subject of divergence from one jurisdiction to another in order to avoid weakening the framework or jeopardising the level playing field. For the less risk adequate Standardised Approach the valuation rules for CRE have been maintained as they currently stand and are therefore stricter than for the IRB Approach.

259. The numeric limits condition represents, in the view of the Commission Services, an appropriate balance between the need for a harmonised approach on the one hand and the desire to recognise such collateral in appropriate markets on the other.

260. Certain comments sought the substitution of 'owner' for 'borrower' in the definition of RRE. The Commission Services consider that prudential soundness does not support a change in this regard.

## **Section 11 – Asset securitisation**

### **General**

261. The draft proposed treatment of asset securitisation is dealt with in Articles 81– 87 and Annex F of the working document. The objective of the draft proposals is to provide an approach to the treatment of asset securitisation which is appropriately risk sensitive having regard to the approach in question – Standardised or IRB – and which is prudentially sound. The draft proposals are developed within the constraint that institutions' credit risk modelling is not at this time accepted to form the basis for the calculation of minimum capital requirements.

262. The proposals aim to provide an appropriate treatment both for originating (and sponsoring) institutions on the one hand – including rules that must be complied with if a reduction in capital requirements is to be achieved – and for investing institutions on the other.

263. Substantively, the draft proposals are intended to be consistent with the proposed new securitisation framework developed by the Basel Committee. The difference in nature between the Basel Accord and the EU framework however has impact in the area of securitisation. An important aspect of the draft EU proposals is the rendering into a legal rules context of the key concepts and principles of the proposed framework.

264. A number of key definitions are set out in Article 1 of the directive. A difficult issue has been defining the boundary between securitisation and other types of exposure. The definitions have been further developed since the Structured Dialogue to try and address this matter.

### **Recognition of risk transfer**

265. Article 82 and Annex F-2 and F-3 set out the requirements that must be met in order for an originating institution to achieve recognition of risk transfer (and thus reduction in its capital requirements). Article 82 contains the principle that there should be significant credit risk transfer. This concept is then filled out by the more detailed requirements in the annex. These provisions aim to ensure that the securitisation capital treatment is only applicable to originating institutions when they have really transferred credit risk. They seek to reduce the possibilities for regulatory arbitrage.

266. With regard to synthetic securitisations, it is proposed in line with Basel that Special Purpose Entities (SPEs) should not be recognised as eligible guarantors or providers of unfunded protection. However collateral provided by such entities will be recognised.

### **External credit assessments**

267. Article 83 and Annex F-4 contain the provisions relating to the recognition of external credit assessments for use in relation to securitisation capital requirements. These provisions also address the issue of mapping by supervisory authorities of external credit assessments into risk weight buckets.

268. The provisions here seek to ensure the suitability and reliability of external ratings used for this purpose. They also seek to prevent institutions

from using different agencies' ratings within the same transaction so as to gain an undue capital advantage. Rules are also included creating the framework within which competent authorities should carry out the mapping of external ratings to risk weight buckets.

### **Capital requirements**

269. Articles 84 to 87 set out the key principles upon which the capital treatment of positions in securitisations is based. The details of this treatment are set out in Annex F-5 for the Standardised Approach and in Annex F-6 for the IRB Approach.

270. Each of these Annexes deals with a number of aspects – the calculation of capital charges for general securitisation positions; exceptions to the general rules – for example in relation to certain types of liquidity facility; and additional capital requirements for originators of securitisations of revolving assets with early amortisation clauses.

271. In the Standardised Approach risk weights are based on external ratings. If there is no external rating then the position must be deducted from own funds unless it falls within one of the exceptions provided. The exceptions include the availability of a 'look through' approach for positions in the most senior tranche, and of a modified 'look through' approach for second loss positions in asset-backed commercial paper programmes. Liquidity facilities that meet a number of conditions ('eligible liquidity facilities') receive a treatment based on conversion factors lower than 100% and the highest risk weight of the underlying assets.

272. There are two methods for calculating capital charges under the IRB Approach – the Supervisory Formula Method (SFM) and the Ratings Based Method (RBM). Rules are included prescribing which of these methods are to be used in which circumstances (the 'hierarchy' rules).

273. The SFM takes as an input the capital charge on the securitised assets. A formula is prescribed for calculating how this charge should be distributed over the different positions in the securitisation. This is enhanced by certain additional requirements. For example there is a requirement under the SFM for the deduction of positions that will absorb losses up to the amount of the capital charge on the securitised assets had they not been securitised. This is designed to ensure that securitisation is not used to achieve unwarranted capital reductions. There is also a 'floor' capital charge on senior positions. This reflects the view that there is a minimum level of risk associated with all credit exposures.

274. Under the RBM capital charges are calculated by reference to external credit ratings. Other factors which are taken into account as impacting the risk of exposures are the 'granularity' of the securitised pool and the thickness of the tranche of the securitisation in question. Where certain conditions are met, capital charges for unrated positions may be inferred from external ratings on subordinated positions.

275. In both the Standardised Approach and the IRB Approach, originators of securitisations which contain an early amortisation clause are subject to a capital charge to cover the potential for the risk of the facilities to return to the institution. This capital charge is calculated based on a conversion factor

applied to the 'investors interest'. The conversion factor is determined by reference to the 'trigger' level of excess spread. In order to accommodate the possibility for future early amortisation triggers other than those based on excess spread level, the rules in question are contained in the annexes part of the Working Document so that they can be modified with relative speed if necessary.

276. Provisions are included to avoid the 'double counting' of risk and capital requirements in the context of overlapping liquidity facilities. Consideration is being given to the possibility of expanding these provisions to cover overlapping positions generally and to the desirability of incorporating similar provisions in the Standardised Approach.

### **Supervisory review process**

277. The Working Document includes draft supervisory review process provisions in relation to risk arising from securitisation. There are important aspects of securitisation activities that may not be adequately captured by the minimum requirements under Title II. Such aspects are required to be dealt with under Title III.

278. Article 128(5) contains a requirement for competent authorities to monitor the adequacy of the own funds held by institutions in respect of individual securitisation transactions.

279. Annex J, section 4 contains a non-exhaustive list of aspects to be taken into account by competent authorities in determining whether additional capital is required to be held by an institution in respect of a securitisation. There is also a requirement on authorities to monitor whether an institution has provided implicit support to a securitisation, together with a list of possible responses where implicit support is found to have been provided on more than one occasion. This complements the requirement in Article 87 to treat all the assets in a securitisation as if on balance sheet in any individual case of implicit recourse.

280. Annex J, section 1(6) and (7) require authorities to consider the adequacy of capital in relation to securitisation exposures as part of the evaluation process. They are also required to consider the effect of its securitisation activities on an institution's overall balance sheet.

281. Annex I, section 5 sets out institutions' obligation to hold additional own funds above the Pillar 1 minimum requirements having regard to the economic substance of the securitisation transaction in question. A non-exhaustive list of factors to be taken into account is set out. Additional requirements for originators of securitisations of revolving assets subject to early amortisation provisions are also prescribed.

## **Section 12 – Trading book**

282. The background to the proposals in relation to the draft proposals for trading book items is set out in the Cover Document to the Structured Dialogue published in November 2002. As stated there, it is in general terms not proposed to change the rules for the calculation of market risk charges. However a number of issues were raised for discussion. Feedback on the comments made during the Structured Dialogue and on subsequent developments is provided below.

### **Identification of trading book items**

283. As proposed by a number of respondents, the eligibility criteria for trading book capital treatment have been amended in line with the Basel proposal to include positions held in order to hedge other elements of the trading book.

### **Credit risk mitigation in the trading book**

284. Support was expressed for parallelism with Basel subject to the need to take account of EU specificities. The significant developments that have taken place in relation to this matter since the second consultative papers were welcomed. These included the reduction in holding periods, the recognition of netting agreements, the use of internal models for the calculation of volatility adjustments, etc. However this was subject to a number of continuing concerns and comments.

285. It was suggested that the rules relating to IRB did not adequately reflect the trading book context. As a result of the arguments made by industry it is now proposed to reduce the Foundation IRB Approach implicit maturity adjustment for repurchase and securities lending/borrowing transactions from 2.5 years to 6 months.

286. The Commission Services are also minded to accept the arguments to allow the recognition of valuation reserves in the same way as specific provisions – subject to the condition that the effect is the same and that there is no double counting of effects. Work is continuing on this.

287. In relation to comments received concerning the requirements for use of the IRB Approach, the Commission Services do not consider that the proposed minimum requirements or the flexibly drafted rules concerning roll-out will pose disproportionate challenges in the context of the trading book.

288. The Commission Services note the views of respondents concerning the desirability to recognise alternative forms of internal modelling of volatility adjustments both for repurchase and securities lending or borrowing transactions and for OTC derivatives. This is an area that has been earmarked for future work to assess the suitability and feasibility of such an approach.

289. In relation to comments made concerning the proposed requirement in Article 70 that institutions must demonstrate that they continue to undertake full credit risk assessment of the underlying exposure, please see the discussion in Section 9 of this document.

290. On the Commission Services' response to concerns expressed about the potential application of an exposure volatility adjustment in the context of OTC derivatives and about the inclusion of an explicit prohibition on cross-product netting, again readers are referred to Section 9 of this document.

291. A number of concerns were expressed about the interaction of the counterparty risk proposals and the large exposures requirements. The Commission Services now publish the draft text of their proposed amendments to the large exposures provisions to make available the more sophisticated CRM framework in this context (see Section 9 above). The Commission Services consider that the modified large exposures provisions should be proportionate and provide significant flexibility. However, it will welcome further comments on this question in light of the draft proposed text.

### **Treatment of collective investment undertakings (CIUs) in the trading book**

292. Since the issue of the Structured Dialogue Working Document, significant further progress has been made regarding the market risk treatment for CIUs booked in the trading book. The methodology aims at increasing the risk sensitivity of the capital charges by allowing the institution to look through the CIU into the composition of the CIU's portfolio to apply a market risk charge. This would be based on the information available either publicly or in the mandate. The new proposal – in line with the request of the industry - goes beyond the sole recognition of UCITS for the favourable treatment. It allows any CIU to become eligible for look-through provided that some general criteria are met. Three general eligibility criteria have been identified: a) authorisation for sale to the general public; b) disclosure regarding the portfolio of the CIU; and c) redemption/liquidity. The Commission Services consider that this approach is prudent enough to ensure that CIUs held in the trading book that are unauthorised, or opaque, or illiquid, can be excluded from a look-through approach and remain subject to a charge of 100%.

293. As regards the specific comments received during the Structured Dialogue concerning such aspects as decomposition and internal netting of CIU positions, correlation, and derivatives on CIUs, the Commission Services continues to consider these comments.

294. The Commission Services also continue to consider the most appropriate treatment of foreign exchange risk arising from positions in a CIU under a look through approach. At present options under consideration include the so called 'denomination method' - considering the denomination of the CIU itself as the basis of foreign exchange risk treatment - and the 'modified gold method'. This latter rather than just treating the CIU as a single investment from the risk exposure perspective examines the CIU's portfolio, and if it is denominated in currencies different from the investing institution's denomination applies a capital charge accordingly. Prudentially, the Commission Services are inclined towards this latter approach but will welcome further comments.

### **Definition of qualifying items**

295. In the Structured Dialogue Working Document the definition of qualifying items (Article 1 (103)) was based on the existing CAD approach, setting the boundary between qualifying and non-qualifying items based on the solvency ratio 20% risk weight bucket. It was also noted that the Basel approach – unchanged from the 1996 Market Risk Amendment – was different, based as it is on 'investment grade' items. Under the Standardised Approach investment grade items could attract, depending on the issuer, a risk weight higher than 20%; for instance, 50% or 100%.

296. In light of its consideration of the comments received and other aspects, the Commission Services have concluded that divergence from Basel would not be appropriate in this area. The specific risk treatment of trading book items has now been amended accordingly.

297. Some changes have been introduced in Table 1 in Annex G-4, concerning in particular debt securities issued by sovereigns, central banks, international organisations, etc.

298. The definition of other qualifying items has also been considerably amended. The new definition explicitly refers to investment grade items. The definition has also been moved to Annex G-4, so that it can be more easily updated in the future.

299. In relation to the aspect of unrated and unlisted bonds issued by banks and investment firms the Commission Services are interested in knowing the extent to which such items are held in institutions' trading books.

300. The Commission Services propose to extend the recognition of internal ratings to the definition of 'qualifying items' in the trading book.

### **Unsettled transactions**

301. According to Article 102 of the Working Document, institutions should be required to hold capital for settlement/counterparty risk for exposures due to unsettled transactions and free deliveries. This should be calculated based on the general rules for credit risk in the banking book (Standardised or Internal Ratings Based Approach). The current treatment (see Annex II CAD) is, under this approach, proposed to be repealed.

302. Industry views expressed during the Structured Dialogue expressed concerns about this proposal. One main argument has been that, under the current CAD, firms benefit from a 5 days 'grace period' after the settlement date during which they can resolve unsettled transactions without receiving a capital charge. Another argument has been that a credit risk approach to these transactions could lead to double counting of credit and operational risk. During the discussion an additional issue has emerged, regarding the treatment of 'settling transactions', i.e., all transactions (purchases and sales) between the trading date and the settlement date.

303. Because of the diverging views on the treatment of these exposures, and the credit risk characteristics of these kinds of transactions, the Commission Services have not finalised any firm proposal concerning these issues. Consideration is ongoing based on two broad alternatives:

304. Option 1. To confirm the proposed credit risk treatment in Article 102 for purchases and sales booked in the trading book, and specify that this

treatment should cover both settling transactions and failed settlements. If this approach is adopted, further guidance should be developed as regards the amount of the exposure and the period during which the institution can enjoy the short-term maturity adjustment.

305. Option 2. To return to the old CAD treatment but amend it to take account of deferred settlements (i.e., transactions that have an agreed deferred settlement); these transactions would need to be explicitly tackled from the deal date.

306. Further views will be welcomed on this question.

### **Credit derivatives in the trading book**

307. As regards the treatment of credit derivatives, amendments have been introduced to the draft text to take account of Basel developments, notably the introduction of add-on factors for counterparty risk of credit derivatives for the protection seller, under certain circumstances.

## **Section 13 - Operational risk**

308. The prudential framework for operational risk will consist of three elements.

309. Firstly, risk management standards, which are there to provide a first line of defence against operational risk, in particular with respect to low-frequency high-impact events. Every institution will be required to comply with the basic risk management standards laid down in Annex I of the working document. Additional risk management standards will apply to institutions using certain methodologies to calculate their capital requirement for operational risk.

310. Secondly, a capital buffer against adverse operational risk events. Every institution will be subject to a minimum capital requirement for operational risk, for which different methodologies will be available, ranging from a simple approach based on income to sophisticated approaches based on internal modelling. Institutions will have the possibility to use a combination of certain approaches. These approaches are presented in articles 108 to 111 and further developed in Annex H-2 to H-5 of the working document. Competent authorities will be able to impose additional capital requirements in the context of the supervisory review process.

311. Finally, disclosure of information on operational risk exposure and management. This forms part of the broader effort to enhance the information available to the public and to contribute to market discipline. The disclosure requirements will be proportionate to the risk profile of institutions and will be subject to the general materiality threshold.

312. This section focuses on the methodologies available to calculate the minimum regulatory capital requirement for operational risk and related conditions, and presents the main developments since the release of the Structured Dialogue documents in November 2002. In relation to the proposed application of the new operational risk charge to investment firms, see Section 14 below.

313. The risk management standards and additional capital requirements that may be imposed in the context of the supervisory review process are presented in Section 15 of this document. The disclosure requirements are outlined in Section 16.

### **A range of methodologies**

314. As discussed in the Structured Dialogue Cover Document published in November, the framework for operational risk has been designed to be applicable to a wide range of institutions.

315. Three different methodologies will be available for use by institutions in calculating their operational risk capital charge.

316. A simple approach based on a single aggregate income indicator: the Basic Indicator Approach (BIA). This approach will provide a capital buffer against operational risk, without requiring institutions to develop sophisticated information systems for their operational risk exposure. Institutions using the BIA will nevertheless be required to comply with a set of basic risk management standards applicable to every institution.

317. A more precise approach based on business lines: the Standardised Approach (STA). This approach aims to be more risk-sensitive, as the capital requirement for operational risk will be differentiated to reflect the relative riskiness of different business lines. The use of the STA will be conditional upon compliance with more developed risk management standards. In particular, institutions must be able to map their activities into different business lines, and must have a process to identify their exposure to operational risk. This approach is likely to be attractive to a large number of smaller / less complex institutions.

318. More sophisticated methodologies: the Advanced Measurement Approaches (AMAs). Under this category, institutions will have to be able to generate their own measure of operational risk, subject to more demanding risk management standards. AMAs are expected to be gradually adopted mainly by the large internationally active institutions; but could also prove well suited for smaller specialised institutions which have developed advanced risk monitoring systems for their main activities.

### **Calibration aspects - the development of an alternative Standardised Approach**

319. The calibration of the new operational risk charge has been a key aspect of the industry response to the Structured Dialogue exercise. The industry generally called for a further reduction in the new capital requirement for operational risk,<sup>14</sup> and for a revision of the calibration of the Standardised Approach in relation to the Basic Indicator Approach.

320. In parallel, the third Quantitative impact study (QIS3) has found that the calibration of the new framework – including the new explicit capital requirement for operational risk – broadly achieves the objective of maintaining similar overall levels of capital in the system. However, QIS3 has also shown a certain dispersion of the operational risk charge across institutions. This dispersion reflects differences in profitability and margins and is directly linked to the formula used for the operational risk charge in the simpler approaches, which is a linear function of income. This is argued to give rise to a 'double counting' between operational risk and other risks. In particular, lending to risky counterparties is perceived to give rise to both high credit risk charges (reflecting high probability of default) and high operational risk charge (reflecting higher margins).

321. The Basel Committee's response to this has been the development of an alternative Standardised Approach, where the operational risk charge for two business lines (commercial and retail banking) is based on a volume indicator (i.e. loans and advances). This alternative Standardised Approach offers different variants for banks unable to disaggregate their activities between the eight business lines of the Standardised Approach.<sup>15</sup>

322. The alternative approach is available on the basis of case-by-case supervisory discretion. Institutions applying to use the alternative approach

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<sup>14</sup> The target for the new capital requirement had already been reduced from 20% to 12% of the current capital requirement for credit risk and market risks.

<sup>15</sup> For further detail, please refer to footnote 91 of the Basel third consultative paper.

should satisfy their supervisor that it provides an improved basis for measuring their operational risk profile by avoiding double counting of risks.

323. The Commission Services see merit in the introduction of the alternative approach in the EU framework. However, to limit the risk of regulatory arbitrage and to avoid further complexity in the capital adequacy framework, the Commission Services proposes to introduce a set of clearly defined eligibility criteria for the availability of an alternative Standardised Approach, and to adopt only the main version of the alternative approach.

324. The Commission Services propose to make the alternative Standardised Approach conditional upon the following criteria:

- An activity-based criterion defined in quantitative terms: The institution is overwhelmingly active in retail and/or commercial banking activities, which should account for at least 90% of its income indicator.
- Evidence of double counting between credit risk and operational risk: The institution should be able to demonstrate to the competent authorities that a significant proportion of its retail and/or commercial banking activities comprise loans associated with a high probability of default, and that the alternative Standardised Approach provides an improved basis for assessing the operational risk.
- Risk management. The institution should be able to map its activities into the eight business lines and to meet the normal qualifying criteria for the Standardised Approach.

### **Combined use of different methodologies**

325. In the context of the Structured Dialogue, industry has called for flexibility in the use of different approaches, not only in a group context, but also at the individual level. The industry has suggested that institutions should be allowed to use a mix of different approaches for different business lines, geographical locations and legal entities. This flexibility would in particular be needed in view of the stringent qualifying criteria for the Advanced Measurement Approaches.

326. The Commission has been receptive to these comments. It is important, however, to strike a balance between the legitimate need for flexibility and the regulatory need to limit the risk of arbitrage and cherry-picking. In particular, the possibility to use the Basic Indicator Approach in combination with the Standardised Approach would create incentives to use the Basic Indicator Approach for business subject to a capital requirement higher than 15% under the Standardised Approach and vice-versa.<sup>16</sup> There might also be cherry-picking opportunities between the Advanced Measurement Approaches and the simpler approaches, whereby institutions would continue to use simple approaches for high risk parts of their business, which generate a higher operational risk charge under the Advanced Measurement Approaches according to the internal models developed by institutions themselves.

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<sup>16</sup> For example, at the level on an individual institution, a branch specialised in a business subject to a 12% factor under the Standardised approach would elect this approach, while another branch specialised in trading and sales (subject to a 18% factor under the Standardised approach) would stick to the Basic indicator approach (flat factor of 15%).

327. For these reasons, the Commission proposes the following rules for the combined use of different methodologies (see Annex H-5 of the working document):

- The combined use of the Basic Indicator Approach and the Standardised Approach would be authorised only under exceptional circumstances, such as the acquisition of new business areas, for which the application of the Standardised Approach may require a certain transition period. In such case, a time schedule for the roll out of the Standardised Approach should be agreed between the supervised institution and its supervisor(s).
- The combined use of an Advanced Measurement Approach and another methodology would be authorized, subject to certain conditions designed to ensure the credibility of this mixed use. In particular, all operational risk should be captured under a methodology acceptable for the relevant supervisor(s), and the institution should commit itself to rolling out the Advanced Measurement Approaches to a material part of its legal entities and business lines within a time schedule agreed with the relevant supervisor(s).

328. At this stage, the Commission Services have not attempted to quantify the notion of materiality nor to impose a specific deadline for the roll out of the Advanced Measurement Approaches. It is expected that the concrete implementation of such provisions will become more stringent over time, when internal models eligible for Advanced Measurement Approaches develop further and become more widespread.

329. The Commission Services also see merits in encouraging less complex institutions to gradually develop Advanced Measurement Approaches for part of their business. For these reasons, the proposed Basel requirement to roll out the Advanced Measurement Approaches to 'all material legal entities and business lines'<sup>17</sup> – which appears to have been formulated for large internationally active institutions expected to adopt the Advanced Measurement Approaches over time - has not been incorporated in the EU context of application to a wide range of institutions.

### **Insurance recognition**

330. The Structured Dialogue Cover Document examined the possibility of recognising insurance as a risk mitigant for operational risk across all methodologies.

331. The Cover Document highlighted the following areas of concern in granting capital alleviation:

- Reliability of the insurance cover. In particular, insurance may give rise to credit and legal risk.
- Feasibility of recognising insurance under the Basic Indicator Approach and the Standardised Approach, where the availability of a straightforward and simple capital calculation is a precondition.

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<sup>17</sup> See paragraph 640 of the Basel third consultative paper.

- Incentive structure of the capital adequacy framework. The respective calibration of the recognition of insurance across the different approaches should maintain incentives to develop advanced risk monitoring and management systems for operational risk.
- Transfer of risks between the banking and the insurance sector, and impact on the insurance industry.

332. The Structured Dialogue document sought input from the industry on the following two main elements:

- A set of eligibility criteria to ensure that only reliable insurance contracts might be rewarded in the form of capital alleviation.
- A formula for recognising insurance in a manner commensurate with the methodology chosen for operational risk.

333. The recognition of insurance as an operational risk mitigant has been re-examined in light of the Structured Dialogue and of the results of different quantitative studies undertaken in the Basel and the European context.<sup>18</sup>

334. The industry has been in principle supportive of the recognition of insurance, and has called for a capital alleviation to be available across all methodologies. The comments demonstrate the absence of support for an approach based on premia – which is seen as fraught with perverse incentives - and the preference for an approach based on the individual features of each individual contract (e.g. its limits and deductibles). However, the few developed contributions proposing specific methodologies based on individual features and combined with some qualitative assessment - received mainly from the insurance industry - exhibit a degree of complexity that belongs to the domain of Advanced Measurement Approaches and is not compatible with the Basic Indicator Approach or Standardised Approach.

335. Also, some comments suggest that insurance policies are still predominantly based on specific traditional operational risk events (e.g. damage to physical assets, computer failures, etc), and that more comprehensive insurance policies are just emerging. In addition, the Commission Services have received indications that the significant general increase of insurance premia following September 11 has made operational risk insurance less attractive.

336. In parallel, the quantitative studies show that while insurance plays a significant role in mitigating the adverse effect of certain categories of operational risk events (damage to physical assets is the most typical category in this respect), the overall contribution of insurance to the reduction of the broader operational risk profile is on average still limited. This means that the net overall impact of any capital alleviation would be – for most institutions - negligible. The studies also evidenced some difficulties for institutions in linking the recoveries received from insurance with specific operational risk events.

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<sup>18</sup> Basel loss data collection exercise (on actual operational risk losses); QIS3; European data collection exercise on insurance premia.

337. In light of these elements, the Commission Services believe that the recognition of insurance for capital adequacy purposes should – for the present time - be limited to Advanced Measurement Approaches, where appropriate methodologies can be developed to track the risk mitigating effect of insurance.

338. A set of qualitative and quantitative standards have been developed to address the supervisory concerns as regards the reliability and stability of insurance (see Annex H-4 Section 2). The Commission Services expect that these eligibility standards will foster a certain harmonisation of operational risk policies and the development of standard terms, which could improve the enforceability of insurance contracts across different jurisdictions, as has been the case in the field of credit risk. Subject to these criteria, the Commission Services propose to allow a maximum capital alleviation of 20% under the Advanced Measurement Approaches in line with the Basel proposals.

339. Taking a longer term perspective, the Commission Services believe that the potential recognition of insurance under simpler approaches should be conditional upon further development in insurance products, progress in the mapping and measurement process of insured operational risk events, and the availability of a straightforward formula. The Commission Services are of the view that these issues should be revisited over time.

#### **Other aspects**

340. In light of industry comments calling for further precision in the scope of operational risk and in the definition of the business lines and other considerations, the following elements have been inserted in the working document:

- An indicative general mapping of activities, with further guidance for the mapping of investment services into the eight business lines framework (see tables under Annex H-3 Section 2);
- A table of loss event types for the Advanced Measurement Approaches (see Annex H-8). This table may also provide a useful reference for the scope of operational risk, as defined in Article 106.

341. Comments are invited on these tables, and on the overarching principles for the business line mapping (Annex H-3 Section 2).

## **Section 14 - Investment firms**

342. As discussed in the Structured Dialogue Working Document, in the EU, the new capital regime will apply to both credit institutions and investment firms. Both types of institution operate and compete in many of the same markets and on the same product lines. And both benefit from the EU passport for the provision of investment services. The Commission Services believe that EU rules need to ensure equivalent treatment, be proportionate and take fully into account the diversity of financial institutions in the EU. This requires appropriate adaptation of the general rules.

343. With specific regard to investment firms the main issues include the proposed new capital charge to cover operational risk, the new rules on consolidation, and the new rules concerning the trading book.

344. The draft proposals on consolidation for investment firms generally are dealt with in Section 4 and those on the trading book in Section 12. This section focuses on the new proposed operational risk charge for investment firms.

### **Responses to the Structured Dialogue**

345. A significant group of respondents were broadly supportive of the Commission Services' general approach based on parallelism with Basel subject to the need to take account of EU specificities, flexibility of rules to take account of financial and regulatory innovation, and the importance of international consistency.

346. Others expressed strong concerns as to the application of proposals contained in the Structured Dialogue Working Document to certain types of investment firms including the asset management sector. Their view was that these rules - elaborated in Basel for the banking sector - do not take appropriate account of the lower risk profile of investment firms.

347. A substantial number of comments were also received on the operational risk framework itself as it applies to investment firms. These covered differences between credit institutions and investment firms, differences amongst investment firms, the use of gross income as a measure, the calibration of the framework, risk management standards, and the incentives for firms to move to more sophisticated approaches. The Commission Services have taken these comments into account in their work to develop appropriate proposals for the application of the operational risk capital requirements in the context of the investment firms sector discussed below.

### **Operational risk**

348. The starting point for the Commission Services is that investment firms operate in many of the same areas, and face many of the same risks, as credit institutions. It follows that a common capital framework is required. Investment services are subject to harmonised regulation based on the Investment Services Directive (ISD)<sup>19</sup> and the Capital Adequacy Directive

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<sup>19</sup> Directive 93/22/EEC. See also the Proposal for a new directive on investment services and regulated markets – COM(2002) 625 final of 19 November 2002 (2002/0269/COD).

(CAD). Both credit institutions and investment firms have to comply with rules covering not only capital requirements but also conduct of business, segregation of clients' assets, administrative and accounting procedures, internal controls, and so on.<sup>20</sup> Building on this, the Commission Services consider that the general approach to operational risk for investment firms and services in the EU should be as follows:

- there should be a capital charge covering operational risk arising from investment service activities for all European credit institutions and investment firms;
- the methodologies to calculate this charge should, subject to any necessary differentiation for the EU context, be consistent with those elaborated in the Basel proposals; and
- the business lines used to derive the capital charge should be adapted to take account of the specific situation in the EU.

349. For a discussion of the proposed operational risk framework generally, see the previous section.

350. In light of the comments received during the Structured Dialogue and further analysis, including in relation to impact aspects, the Commission Services are persuaded that further modification of the proposals are necessary in order to provide an appropriate operational risk treatment for investment firms authorised to carry out a limited range of activities.

### **Impact analysis**

351. In order to assess the impact of the different options, the Commission Services have coordinated a data-sharing exercise in cooperation with national authorities. Over a short period earlier this year data was collected in relation to a large number of investment firms. The analysis carried out<sup>21</sup> shows that the introduction of a new capital charge for operational risk for investment firms would have a material impact, generating a significant increase in capital requirements. This is as expected and reflects the fact that there is currently no explicit capital requirement for operational risk. For certain firms there would be a deficit of own funds and additional capital would be needed in order to meet the new requirement. There is significant variability of the results, even within the same category. The current backstop ratio, the EBR, would remain the most important charge for the majority of firms authorised to carry out the limited range of activities which are the subject of the 'potential way forward' discussed below.

### **Structured Dialogue proposals**

352. In the Structured Dialogue, it was proposed to apply the operational risk framework to investment firms subject to a number of modifications. These included a revised calibration for specified low-risk investment firms, i.e., those that (i) are only authorised to provide certain specific low risk investment services - notably, reception and transmission of orders, execution

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<sup>20</sup> See in particular Articles 10 and 11 of the ISD.

<sup>21</sup> The significant assistance of the Joint Research Centre at Ispra in carrying out this work is gratefully acknowledged.

of such orders on behalf of their clients, placing of issues with no firm commitment, and investment advice; and (ii) are not allowed to come into possession of money or instruments belonging to investors to which they provide investment services. The Structured Dialogue proposals also included a lower calibration of the operational risk charge - as compared with the charge proposed in Basel – for certain ISD business lines including asset management.

### **Potential way forward**

353. Arising out of the comments received in the Structured Dialogue, further dialogue with supervisors, and consideration of the impact data discussed above, the proposals contained in the Structured Dialogue may be considered not to have sufficiently achieved the objective of appropriate proportionality in this area. In particular, it is considered that, in the case of asset management firms, their limited activities and risk profile indicate the need for a modified approach.

354. Accordingly, the Commission Services have developed an alternative approach, in dialogue with supervisors, which it now puts forward for comment.

355. Under this possible approach, investment firms authorised to carry out a limited range of activities, would be permitted, subject to supervisory discretion, to continue to calculate their capital requirements as under the current rules, i.e., using the Expenditure Based Requirement (EBR) as a backstop minimum.<sup>22</sup>

356. It is considered that the firms falling within this category should include those limited licence investment firms identified for a preferential treatment in the Structured Dialogue, with the limited license enlarged to incorporate asset management services and without the restriction on coming into possession of client money or instruments.

357. At the consolidated level, the approach could be applied when the group did not contain either a credit institution, or an investment firm authorised to carry out activities outside the limited ones prescribed.

358. Developing an appropriate and proportional treatment for investment firms with limited activities, which reflects the risk profile of such firms while respecting the single market level playing field is one of the key outstanding objectives in the completion of the Commission's directive proposal. Accordingly, comments on the potential way forward outlined above will be warmly welcomed.

359. Under this approach, it would also be proposed that investment firms carrying out activities other than the limited range prescribed could, if using an Advanced Measurement Approach, be exempted from the requirement to comply with the EBR. This would be subject to supervisory discretion.

### **Treatment of firms under Article 11 of the proposed new Investment Services and Regulated Markets Directive.**

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<sup>22</sup> Prescribed in Annex IV of Directive 93/6/EEC.

360. Arising out of the responses to the Structured Dialogue and from discussions with supervisors, the Commission Services are also considering the treatment envisaged in Article 11 of the proposed new Investment Services and Regulated Markets Directive. Investment advisors and firms which may only receive and transmit orders from investors, and which may not at any time place themselves in debit with their clients, could under this proposal remain exempt from the scope of capital adequacy directives. They would be required to hold professional indemnity insurance or some other comparable coverage against liability arising from professional negligence. This treatment could be revisited later on, as more information becomes available regarding these firms.

### **Other investment firms**

361. For other investment firms, the Commission Services consider, that the modifications that have been introduced since the second consultative papers have contributed to significantly improved proposals – ones which are proportionate and appropriate to the risk profile of such institutions.

362. In particular, there has been the recalibration of the operational risk charge and the introduction of the Advanced Measurement Approaches under which sophisticated institutions will be able to generate their own measurement of operational risk. These changes will, in the Commission Services' view, result in capital requirements that are appropriate to the operational risks associated with the activities of such firms.

363. There have also been significant developments in the proposals relating to capital requirements arising from firms' trading activities. As well as reduced holding periods and the recognition of netting agreements, it is now proposed to recognise the use of internal models in calculating the capital charge arising from repurchase and securities lending or borrowing transactions. In addition amendments are proposed to be made to the IRB Approach to reflect the specific context of trading book transactions. For a fuller discussion of these aspects, see Section 12 above.

### **Risk management standards**

364. The Commission Services have explored the desirability of introducing specific risk management principles for investment firms, to complement the general regime. The application of the general standards on operational risk management, combined with the other organisational requirements envisaged in Article 12 of the new ISD - notably on segregation of client assets - already aim at ensuring adequate investor protection. As a consequence, no additional requirement should be necessary.

### **Supervisory review process and market discipline**

365. A tailored application of the principles on Supervisory Review to investment firms – based on their size, risk exposure and risk management features – is fully consistent with the proposals in Title III of the Working Document.

366. As to disclosure requirements, the materiality criterion and the recognition of disclosures made in compliance with accounting or other

requirements will provide, in the opinion of the Commission Services, an appropriately flexible general framework.

367. Readers are referred to Sections 15 and 16.

## **Section 15– Supervisory review process**

368. The supervisory review process (SRP) prescribed in Title III is an integral and critical part of the new framework. It is intended to complement the minimum regulatory capital requirements and the disclosures supportive of market discipline to achieve two equally important goals. On the one hand, it seeks to ensure a capital position in institutions which is consistent with their overall risk profile and strategy. And on the other, it requires review of institutions' processes and strategies by competent authorities, and the timely adoption of appropriate prudential measures – based on adequate legal powers – if weaknesses or deficiencies are detected.

369. The Commission Services proposed framework reflects the four principles of supervisory review stated by the Basel Committee:

- (1) a process for institutions to assess the adequacy of their capital;
- (2) supervisory review, evaluation and intervention as appropriate;
- (3) banks expected to operate above the minimum capital requirements with supervisors having the power to require them to hold additional capital;
- (4) early supervisory intervention.

370. Work is continuing on important questions such as the relationship between institutions' internal assessment of capital requirements and the supervisory evaluation process, and on the interaction between minimum capital requirements under Title II and obligations under the Title III (see also the discussion of Article 5 in Section 3 above). The draft provisions in Title III of the Working Document are accordingly subject to further development in this regard. Comments are sought from all interested parties on the various issues at stake in this area to support the preparation of the Commission's final proposal.

371. Draft Title III is divided in two chapters containing requirements concerning institutions and competent authorities respectively.

372. Article 116 incorporates the basic requirements concerning the assessment process to be implemented by all institutions to ensure that their capital is adequate to cover the risks inherent in their activities. Draft principles on the assessment process have been designed to ensure substantial freedom to institutions in their compliance with the rules.

373. A key element of this picture is the concept of 'internal capital'. Such capital is intended to be internally defined by the institutions themselves as part of their assessment process and in relation to their individual exposure to risk and approach to risk management. It may correspond to the definition of own funds/regulatory capital, if this is appropriate given an institution's internal organisation.

374. The essential components of the assessment process are indicated under Article 116(2). There must be policies and processes to identify, measure and relate capital to the risks inherent in the institution's activities. These risks include both those included and not included in the minimum requirement rules in Title II. Appropriate processes should also be developed

to obtain estimations of those risks which cannot be measured precisely. The core requirements contained in Article 116(2) are developed in more detail under the various sections of Annex I.

375. The key drivers of the institutions' internal assessment of capital adequacy are contained in Article 116(3). If the assessment process indicates that the internal capital held by an institution is not sufficient to cover its risk exposure it will be required to take the appropriate measures to address this.

376. Two overarching requirements on risk management and coverage are set forth under Article 117 to support the ongoing maintenance of capital adequacy in institutions. Firstly, institutions should establish strategies for the management of the risks they incur, including limits to risk taking. Secondly, institutions should lay down a strategy for maintaining their capital adequacy while their business plans are implemented.

377. Under Article 126(1), competent authorities are required to evaluate: (i) an institution's exposure to risks, (ii) the adequacy and reliability of its assessment process, (iii) adequacy of its own funds and internal capital, and (iv) its compliance with the Directive requirements, including the standards for the use of specific techniques and access to advanced calculation methodologies. Annex J Section 1.1, sets out a minimum list of factors to be addressed by supervisors under the evaluation process.

378. These rules will permit supervisors to calibrate the intensity of the evaluation process according to the size, complexity and systemic importance of each institution, while ensuring that all regulated institutions are systematically and consistently evaluated. Annex J Section 1.1 remains under development. Comments from interested parties will be welcomed.

379. Article 126(2) and (3) are intended to ensure a frequent performance of the evaluation process by the competent authorities, and a review of the results of the evaluation at least annually.

380. Under Article 127, competent authorities shall be granted adequate legal powers to require institutions to take a range of prudential measures necessary to correct or prevent the weaknesses or inadequacies mentioned above. Competent authorities shall be empowered to oblige any institution to hold own funds in excess of the minimum prescribed under Title II. To promote harmonisation of supervisory intervention, further supervisors' powers are listed under Annex J-2. The contents of that list remain under consideration. Article 128 sets out the rules governing supervisory intervention.

### **Feedback on Structured Dialogue**

381. In the Structured Dialogue, many respondents highlighted the fact that a common framework for the SRP should be achieved in the EU through the development of a minimum set of supervisory powers, a common framework of evaluation factors, and common requirements upon firms. Those respondents supported the stated objective of finding the right balance between harmonisation and scope for discretion to be exercised by firms and supervisors; they also supported the requirement upon all Member States to enable their competent authorities to carry out this role. In their views, however, a clear distinction should be drawn between supervisory discretion,

operated at the firm level, and national discretion, where the latter creates the framework within which competent authorities will take individual decisions.

382. Against this background, these respondents had concerns as to the equivalence of application of the SRP. They identified variation in the application and impact of SRP as the single most significant issue threatening the consistent application of the new Directive. They thought that more needed to be done at an EU level to encourage consistency of interpretation and application. They proposed the development of a framework and processes to enhance the prospects for supervisory convergence and co-operation and advocated the adoption of a policy of supervisory disclosure.

383. In the context of Title III, these comments relate to Articles 127-128 and Annex J, Section 1. As indicated above, these provisions remain under consideration. The intention is to achieve the appropriate balance between equivalent application of SRP on the one hand and the necessary scope for supervisory discretion on the other in addressing the situation of individual institutions. In this regard, see further the discussion under Section 2 above.

384. Most respondents also unequivocally supported the proposal in Article 129(3) that the result of the individual firm evaluation process – and any amount of own funds required above the minimum – should not be published. They observed that individual capital adequacy requirements are ultimately the result of a complex process which those outside the process would be unlikely to interpret effectively or accurately. If there were mandatory disclosure of this information the regulators would be inhibited to the extent that the application of SRP would become extremely sporadic. Given this support, the Commission Services have maintained that provision unchanged.

385. Finally, many respondents noted that draft rules on the level of application of SRP could be clarified, especially whether a consolidated group requirement would be the outcome of a separate assessment process or the sum of the parts. The Commission Services is giving ongoing consideration to this question.

## **Section 16 – Market discipline**

386. The draft text on market discipline (Title IV) has been developed by the Commission Services according to the foundational principles laid down and discussed in the First and Second Consultative Papers.

387. Transparent information by banks and investment firms continues to be seen as a prerequisite for the proper functioning of financial markets. To take rational decisions, market participants should receive data relevant for the assessment of the financial performance of institutions.

388. In turn, disclosure requirements exert a strong incentive on regulated entities to conduct their business in a safe, sound and efficient manner, as well as to maintain a level of capital adequate to their business and organisation.

389. The discipline exercised by market participants has thus a recognised potential to reinforce the supervisors' function to promote safety and soundness of financial institutions.

390. The Commission Services however are aware that – notwithstanding the benefits of disclosure outlined above – preparation and publication of information brings costs for institutions. An appropriate balance has therefore been sought in the design and intensity of disclosure requirements to avoid a disproportionate burden on institutions.

391. The key requirements in relation to market discipline are laid down in Article 136. Pursuant to paragraphs 1 and 2, competent authorities must require all entities – as defined under Article 137 – to disclose the information listed under Annex L-2, subject to the derogations set forth under Article 138. Entities will also be required to adopt a formal disclosure policy and to have internal policies to assess the appropriateness of the disclosures provided to the public. In this regard, procedures for the validation of the disclosures and frequency of their publication are indicated as two aspects to be attentively considered.

392. Under Article 136(3), those institutions which intend to receive recognition from their competent authorities to use certain instruments or methodologies – in relation to IRB approaches, credit risk mitigation and asset securitisation – are also required to provide the disclosures listed under Annex L-3.

393. Specific provisions have been introduced under Article 137 to appropriately determine the scope of application of disclosure requirements. As to groups, rules are aimed at obtaining disclosures on a consolidated basis from the parent undertaking. If however there are significant subsidiaries or sub-groups within a group, the parent undertaking is also required to provide certain items of information specifically indicated under Annexes L-2 and L-3 on an individual or a sub-consolidated basis. The objective of this rule is to have a comprehensive set of disclosures under the single responsibility of the group's parent undertaking.

394. Article 138 includes some of the key provisions intended to ensure a proportionate application of the disclosure requirements to institutions of any size and complexity. Pursuant to paragraph 1, entities are permitted not to

disclose certain information if this would not be material. Article 138(2) permits non-disclosure of items if the institution considers that they include proprietary or confidential information. This is subject to the restrictions laid down in paragraph 3.

395. Another crucial provision to achieve a proportionate application of disclosure requirements is set out under Article 139. Pursuant to paragraph 1, disclosures would have to be published once a year at a minimum, typically in connection with the financial statements. Given the wide scope of application of disclosure requirements, this frequency is appropriate for a large majority of EU institutions. Notwithstanding this assumption, under paragraph 2 and Article 136(2) all entities would be required to determine whether a higher frequency is necessary in the light of the criteria set out in Annex L-1, paragraph 4. These provisions have been conceived to stimulate large international institutions to publish some or all disclosures more frequently than annually, according to common practice on financial markets. Attention is specifically drawn to certain disclosures on own funds, capital requirements and solvency ratios which should be published on a quarterly basis according to the New Basel Accord (BS-CP3, par. 767).

396. A final pivotal provision to minimise the burden and cost of disclosures for institutions, while maintaining the obligation to publish all material information, is contained in Article 140. Under this article, entities should have the freedom in principle as to the choice of medium and location of disclosures, provided that some general criteria on concentration and traceability of disclosures are complied with (draft Annex L-1, paragraph 5). Under those restrictions, equivalent disclosures made pursuant to accounting, listing, or other requirements are eligible for compliance with obligations under Article 136.

397. Comments received in the Structured Dialogue on draft provisions of Title IV have been largely supportive of the Commission Services' proposals. As a consequence, the principles and criteria encapsulated in the draft legislation published in November 2002 have been maintained, but the articulation of rules across the articles has been modified to improve clarity.

398. Most comments supported minimum annual, rather than semi-annual, disclosure requirements, the eligibility of disclosures made in compliance with accounting requirements, and the discretion of institutions as to the medium and location of disclosures. Furthermore, the 'carve-out' regarding proprietary and confidential information has been considered as necessary in order to safeguard the competitive position of banks *vis-à-vis* non-banking competitors. The final outcome of the Commission's legislative proposals is therefore expected to enhance transparency without producing disproportionate burdens.

399. Some comments focused on the issue of medium and location of disclosures. It has been observed that it would be natural for information under Pillar 3 to be disclosed in conjunction with the institutions' annual reports. In this respect, the solution preferred by some commentators would be to have disclosure requirements incorporated in the accounting standards only.

400. Another comment argued that disclosures should be 'user friendly' - that their medium, location and format should be such that market participants can easily find the information and compare it with the corresponding information from other entities.

401. The proposed Article 140 is conducive to some required disclosures being made in the published accounts and others in a different context. The respondent recommends requiring institutions to file all the information required by the proposed Directive in a set format in a national (or EU) electronic database which anyone can access and from which they can download information – along the lines of the U.S. Securities and Exchange Commission's Electronic Data Gathering, Analysis and Retrieval system.

## ANNEX A

### **Conditions under which an institution's trading book business may be considered small for the purposes of Article 1(2).**

An institution's trading book business may be considered small for the purposes of Article 1(2) when the following conditions are satisfied:

- (i) the trading-book business of such institutions does not normally exceed 5% of their total business;
- (ii) their total trading book positions do not normally exceed EUR 15 million;
- (iii) the trading-book business of such institutions never exceeds 6% of their total business and their total trading-book positions never exceed EUR 20 million.

In order to calculate the proportion that trading-book business bears to total business as in paragraphs (i) and (iii), the competent authorities may refer either to the size of the combined on- and off-balance-sheet business, to the profit and loss account or to the own funds of the institutions in question, or to a combination of those measurements. When the size of on- and off-balance-sheet business is assessed, debt instruments shall be valued at their market prices or their principal values, equities at their market prices and derivatives according to the nominal or market values of the instruments underlying them. Long positions and short positions shall be summed regardless of their signs.

If an institution exceeds for more than a short period either or both of the limits imposed in paragraphs (i) and (ii), or to exceed either or both of the limits imposed in paragraph (iii), it shall be required to meet requirements determined in accordance with Article 3(1)(b) and (c) rather than those of Article 3(1)(a) in respect of its trading-book business and to notify the competent authority.

**[ANNEX B Blank]**

## ANNEX C-1

### **Regulatory capital treatment for standardised approach to credit risk**

#### **1. CLAIMS ON CENTRAL GOVERNMENTS AND CENTRAL BANKS**

##### **1.1 Treatment**

1.1.1 Without prejudice to the other provisions of the present section, claims on central governments and central banks shall receive a 100% risk weight.

1.1.2 Claims on central governments and central banks for which a credit assessment by an nominated ECAI is available shall be assigned a risk weight according to the following table

Credit quality step	1	2	3	4	5	6
Risk weight	0%	20%	50%	100%	100%	150%

in accordance with the mapping set out by the competent authorities for the credit assessments of eligible ECAIs to the steps in the credit quality assessment scale.

1.1.3 Claims on the European Central Bank shall be assigned a 0% risk weight.

##### **1.2 Claims in the national currency of the borrower**

1.2.1 Subject to the discretion of competent authorities, claims of institutions on their central government and central bank denominated and funded in the national currency may be assigned a risk weight which is lower than that which would be attributed according to the table of paragraph 1.1.2.

1.2.2 When this discretion is exercised by the competent authorities of one Member State, the competent authorities of the other Member States may also allow their institutions to apply the same risk weight to claims on that central government or central bank denominated and funded in that currency.

1.2.3 When the competent authorities of a third country jurisdiction which apply supervisory and regulatory arrangements at least equivalent to those applied in the EU assigns to claims of institutions on their central government and central bank denominated and funded in the national currency a risk weight which is lower than that which would be attributed according to the table of point 1.1.2, Member States may allow their institutions to risk weight such claims in the same manner.

##### **1.3 Claims assessed by Export Credit Agencies**

1.3.1 A credit assessment by an Export Credit Agency may be recognised only if:

- the Export Credit Agency publishes its credit assessments;
- the Export Credit Agency subscribes to the OECD agreed methodology;
- the credit assessment is associated with one of the seven minimum export insurance premiums (MEIP) that the OECD agreed methodology establishes.

1.3.2 Claims for which a credit assessment by an Export Credit Agency is recognised for risk weighting purposes shall be assigned a risk weight according to the following table:

MEIP	1	2	3	4	5	6	7
Risk weight	0%	20%	50%	100%	100%	100%	150%

## **2. CLAIMS ON REGIONAL GOVERNMENTS AND LOCAL AUTHORITIES**

### **2.1 Treatment**

2.1.1 Without prejudice to the other provisions of the present section, claims on regional governments and local authorities shall be risk weighted as claims on institutions as specified, at the discretion of the competent authorities, either in paragraph 6.3, or in paragraph 6.4. Exercise of this discretion by competent authorities is independent of the exercise of discretion by competent authorities as specified in paragraph 6.1.

2.1.2 When claims on regional governments and local authorities are risk weighted as claims on institutions as specified in paragraph 6.4, the preferential treatment for short-term claims specified in point 6.4.3 shall not be applied.

2.1.3 Subject to the discretion of competent authorities, claims on regional governments and local authorities may be treated as claims on the central government in whose jurisdiction they are established. Discretion may be applied where there is no difference in risk between claims on regional governments and local authorities and claims on their central government because of the specific revenue-raising powers of the formers, and the existence of specific institutional arrangements the effect of which is to reduce their risks of default.

2.1.4 The treatment as claims on their central government shall apply for both assets and off-balance-sheet items incurred on behalf of the regional governments and local authorities in question.

### **2.2 Notification to the Commission**

Member States shall notify the Commission if they believe that the treatment for claims on their regional governments and local authorities as claims on their central government is justified in accordance with the criteria specified in point 2.1.3. The Commission shall circulate that information.

### **2.3 Extension to other Member States**

When discretion to treat claims on regional governments and local authorities as claims on their central government is exercised by the competent authorities of one Member State, the competent authorities of the other Member States may allow their institutions to risk weight claims on such regional governments and local authorities in the same manner.

## **2.4 Extension to third country jurisdictions**

When competent authorities of a third country jurisdiction which apply supervisory and regulatory arrangements at least equivalent to those applied in the EU treat claims on regional governments and local authorities as claims on their central government, Member States may allow their institutions to risk weight claims on such regional governments and local authorities in the same manner.

## **3. CLAIMS ON ADMINISTRATIVE BODIES AND NON-COMMERCIAL UNDERTAKINGS**

### **3.1 Treatment of Public Sector Entities**

3.1.1 Without prejudice to the other provisions of the present section, claims on public sector entities shall receive a 100% risk weight.

3.1.2 Subject to national discretion of the competent authorities, claims on public sector entities may be treated as claims on institutions as specified either in paragraph 6.3 or 6.4. When the treatment specified in paragraph 6.4 has been selected, it is to be applied without the use of the preferential treatment for short-term claims as specified in point 6.4.3. Exercise of this discretion by competent authorities is independent of the exercise of discretion by competent authorities as specified in paragraph 6.1.

### **3.2 Notification to the Commission**

Member States shall notify the Commission if they treat claims on public sector entities as claims on institutions. The Commission shall circulate that information.

### **3.3 Extension to other Member States**

When discretion to treat claims on public sector entities as claims on institutions is exercised by the competent authorities of one Member State, the competent authorities of the other Member States may allow their institutions to risk weight claims on such public sector entities in the same manner.

### **3.4 Extension to third country jurisdictions**

When competent authorities of a third country jurisdiction which apply supervisory and regulatory arrangements at least equivalent to those applied in the EU treat claims on public sector entities as claims on institutions, Member States may allow their institutions to risk weight claims on such public sector entities in the same manner.

### **3.5 Churches and religious communities**

Claims on churches and religious communities constituted in the form of a legal person under public law, in so far as they raise taxes in accordance with legislation conferring on them the right to do so, shall be treated as claims on public sector entities.

## **4. CLAIMS ON MULTILATERAL DEVELOPMENT BANKS**

### **4.1 Scope**

For the purposes of the Title II, Chapter 1, Section 1 of this Directive, the Inter-American Investment Corporation and the European Investment Fund are considered to be a Multilateral Development Bank (MDB).

### **4.2 Treatment**

4.2.1. Without prejudice to the other provisions of this section, claims on multilateral development banks shall be treated in the same manner as claims on institutions in accordance with the provisions of paragraph 6.4. The provisions of paragraph 6.4 shall be applied without the use of the preferential treatment for short-term claims as specified in point 6.4.3.

4.2.2 The following multilateral development banks shall attract a 0% risk weight:

- the International Bank for Reconstruction and Development;
- the International Finance Corporation;
- the Inter-American Development Bank;
- the Asian Development Bank;
- the African Development Bank;
- the Council of Europe Development Bank
- the Nordic Investment Bank;
- the Caribbean Development Bank.
- the European Bank for Reconstruction and Development;
- the European Investment Bank .

4.2.3. Subject to their discretion, competent authorities may apply a 0% risk weight to claims on multilateral development banks that satisfy the following eligibility criteria:

- the MDB receives very high quality long-term issuer credit assessments;
- the shareholder structure of the MDB comprises a significant proportion of central governments with long-term issuer credit assessments that qualify for step 1 in the credit quality assessment scale. or the majority of the MDB's fund-raising are in the form of paid-in equity/capital and there is little or no leverage;
- the MDB benefits from a strong shareholder support demonstrated by:
  - the amount of paid-in capital contributed by the shareholders;
  - the amount of further capital the MDB has the right to call, if required, to repay its liabilities;

- continued capital contributions and new pledges from central government shareholders;
- the MDB has an adequate level of capital and liquidity;
  - the MDB has strict statutory lending requirements and conservative financial policies, which would include among other conditions: a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, individual exposure and credit category), large exposures approval by the board or a committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process, rigorous assessment of risk and provisioning to loan loss reserve.

4.2.4 Subject to their discretion, competent authorities may apply a risk weight of 20 % to the portion of unpaid capital subscribed to the European Investment Fund.

## 5. CLAIMS ON INTERNATIONAL ORGANISATIONS

Claims on the following international organisations shall be assigned a 0% risk weight:

- the European Community;
- the International Monetary Fund;
- the Bank for International Settlements.

## 6. CLAIMS ON INSTITUTIONS

### 6.1 Treatment

Competent authorities shall exercise their discretion regarding the treatment of all claims on institutions in accordance with one of the two methodologies described in paragraphs 6.3 and 6.4.

### 6.2 Risk-weight floor on claims on unrated institutions

No claims on an unrated institution shall receive a risk weight less than that applied to claims on its central government.

### 6.3 Central government risk weight based methodology

6.3.1. Claims on institutions shall be assigned a risk weight according to the following table

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	100%	150%

on the basis of the step in the credit quality assessment scale assigned to claims on their central government.

6.3.2. For claims on institutions incorporated in countries where the central government is unrated, the risk weight shall be not more than 100%.

## 6.4 Credit assessment based methodology

6.4.1. Claims on institutions for which a credit assessment by an nominated ECAI is available shall be assigned a risk weight according to the following table

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	50%	100%	100%	150%

in accordance with the mapping set out by the competent authorities for the credit assessments of the that nominated ECAI to the regulatory credit quality assessment scale.

6.4.2. Claims on unrated institutions shall be assigned a risk weight of 50%.

6.4.3. Subject to the discretion of the competent authorities, if claims on institutions have an original effective maturity of three months or less, those for which the risk weight would be assigned in accordance with point 6.4.1, shall receive a risk weight according to the following table:

Credit quality step	1	2	3	4	5	6
Risk weight	20%	20%	20%	50%	50%	150%

6.4.4. Claims on unrated institutions having an original effective maturity of three months or less shall be assigned a 20% risk weight.

## 6.5 Interaction with short term credit assessments

6.5.1 If the methodology specified in paragraph 6.4 is applied to claims on institutions, then the inter-action with specific short-term assessments shall be the following.

6.5.2 If there is no short-term claim assessment; the general preferential treatment for short-term claims, as specified in point 6.4.3 shall apply to all claims on institutions of up to three months initial maturity.

6.5.3 If there is a short-term assessment and such an assessment determines the application of a more favourable or identical risk weight than the use of the general preferential treatment for short-term claims, as specified in point 6.4.3, then the short-term assessment should be used for that specific claim only. Other short-term claims shall follow the general preferential treatment for short-term claims, as specified in point 6.4.3.

6.5.4 If there is a short-term assessment and such an assessment determines a less favourable risk weight than the use of the general preferential treatment for short-term claims, as specified in point 6.4.3, then the general preferential treatment for short-term claims shall not be used and all unrated short-term claims shall receive the same risk weight as that applied by the specific short-term assessment.

## 6.6 Claims in the national currency of the borrower

6.6.1. When competent authorities have adopted for claims on central governments and central banks the methodology described in paragraph 1.2, subject to their national discretion, claims on institutions may be assigned, under both methodologies described in

paragraphs 6.3 and 6.4, a risk weight that is one category less favourable than that assigned to claims on its central government.

6.6.2. No claims of an original effective maturity of 3 months or less denominated and funded in the national currency of the borrower shall be assigned a risk weight less than 20%.

### **6.7 Investments in regulatory capital instruments**

6.7.1 Investments in equity or regulatory capital instruments issued by institutions shall be risk weighted at 100%, unless deducted from the own funds.

## **7. CLAIMS ON CORPORATES**

### **7.1 Treatment**

7.1.1 Without prejudice to the other provisions of the present section, claims on corporates shall receive a 100% risk weight.

7.1.2 Claims for which a credit assessment by an nominated ECAI is available shall be assigned a risk weight according to the following table

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50	100%	100%	150%	150%

in accordance with the mapping set out by the competent authorities for the credit assessments of that nominated ECAI to the steps of the regulatory credit quality assessment scale.

7.1.3 When they judge it appropriate according to the overall default experience in their jurisdiction, competent authorities shall increase the risk weights applied on claims on corporates.

### **7.2 Risk-weight floor on unrated claims**

Claims on unrated corporates shall not receive a risk weight which is less than that applied to its central government.

## **8. REGULATORY RETAIL PORTFOLIO**

Without prejudice to the provisions contained in the final sentence of Article 27(2), and subject to the discretion of competent authorities, claims that comply with the criteria listed in Article 27(2) shall be assigned a risk weight of 75%.

## **9. CLAIMS FULLY SECURED ON REAL PROPERTY**

Without prejudice to other provisions of this section, claims fully secured on real property shall be assigned a risk weight of 100%.

## **9.1 Claims secured by mortgages on residential property**

9.1.1 Claims fully and completely secured, to the satisfaction of the competent authorities, by mortgages on residential property which is or shall be occupied or is let by the borrower shall be assigned a risk weight of 35%.

9.1.2 Claims fully and completely secured, to the satisfaction of the competent authorities, by 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 shall be occupied or is let by the borrower shall be assigned a risk weight of 35%.

9.1.3 In the exercise of their judgement, competent authorities shall be satisfied only if the following conditions are met:

- The value of the property does not materially depend upon the credit quality of the obligor. This requirement is not intended to preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower;
- 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;
- The institution meets the minimum requirements set out in Section III, 2.1.4.
- The value of the property exceeds by a substantial margin the claim

9.1.4 Competent authorities may dispense with the second condition contained in paragraph 9.1.3 for claims fully and completely secured by mortgages on residential property which is situated within their territory, if they have evidence that a well-developed and long-established residential real estate market is present in their territory with loss-rates which are sufficiently low to justify such treatment. Member States shall inform the Commission of the use they make of this paragraph.

9.1.5 When the discretion to dispense with the second condition contained in paragraph 9.1.4 is exercised by the competent authorities of one Member State, the competent authorities of the other Member States may allow their institutions to risk weight at 35% such claims fully and completely secured by mortgages on residential property.

## **9.2 Claims secured by mortgages on commercial real estate**

9.2.1 Subject to the discretion of competent authorities, claims fully and completely secured, to the satisfaction of the competent authorities, by mortgages on offices or other commercial premises situated within their territory may be assigned a risk weight of 50%.

9.2.2 Subject to the discretion of competent authorities, claims fully and completely secured, to the satisfaction of the competent authorities, by shares in Finnish housing companies, operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation, in respect of offices or other commercial premises may

be assigned a risk weight of 50%. Member States shall inform the Commission of the use they make of this paragraph.

9.2.3 Subject to the discretion of competent authorities, claims related to property leasing transactions concerning offices or other commercial premises situated in their territory and governed by statutory provisions whereby the lessor retains full ownership of the rented assets until the tenant exercises his option to purchase, may be assigned a risk weight of 50%. Member States shall inform the Commission of the use they make of this paragraph.

9.2.4 The application of the provision of paragraphs 9.2.1, 9.2.2 and 9.2.3 is subject to the following conditions:

- The value of the property must not materially depend upon the credit quality of the obligor. This requirement is not intended to preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower;
- The risk of the borrower must 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 must not materially depend on any cash flow generated by the underlying property serving as collateral;
- The institution meets the minimum requirements set out in Section III, 2.1.4.

9.2.5 The 50 % risk weighting shall apply to the part of the loan that does not exceed a limit calculated according to either (a) or (b):

a) 50 % of the market value of the property in question. The market value of the property must be calculated by two independent valuers making independent assessments at the time the loan is made. The loan must be based on the lower of the two valuations. The property shall be revalued at least once a year by one valuer. For loans not exceeding EUR 1 million and 5 % of the own funds of the credit institution, the property shall be revalued at least every three years by one valuer;

b) 50 % of the market value of the property or 60 % of the mortgage lending value, whichever is lower, in those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions. For the purposes of this paragraph, the mortgage lending value shall mean the value of the property as determined by a valuer making a prudent assessment of the future marketability of the property by 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. At least every three years or if the market falls by more than 10 % the mortgage lending value and in particular the underlying assumptions concerning the development of the relevant market, shall be reassessed.

9.2.6 A 100 % risk weighting applies to the part of the loan that exceeds the limits set out in paragraph 9.2.5.

9.2.6 Competent authorities may dispense with the second condition contained in paragraph 9.2.4 for claims fully and completely secured by mortgages on commercial property which is situated within their territory, if they have evidence that a well-developed and long-established commercial real estate market is present in their territory with loss-rates which do not exceed the following limits:

- a) up to 50 % of the market value (or where applicable and if lower 60 % of loan-to-value (LTV) based on mortgage-lending-value (MLV)) must not exceed 0.3 % of the outstanding loans in any given year;
- b) overall losses stemming from commercial real estate lending must not exceed 0.5 % of the outstanding loans in any given year.

If either of these tests is not satisfied in a given year, the eligibility to use this treatment shall cease and the second condition contained in paragraph 9.2.4 shall need to be satisfied again before it can be applied any more. Member States applying such a treatment must publicly disclose that these conditions are met.

9.2.7 When the discretion to dispense with the second condition contained in paragraph 9.2.4 is exercised by the competent authorities of one Member State, the competent authorities of the other Member States may allow their institutions to risk weight at 50% such claims fully and completely secured by mortgages on commercial property.

## **10. PAST DUE ITEMS**

10.1.1 Without any prejudice to the provisions contained in the following paragraph, the unsecured portion of any item that is past due for more than 90 days, net of specific provisions, shall be assigned a risk weight of:

- 150% if specific provisions are less than 20% of the outstanding claim;
- 100% if specific provisions are no less than 20% of the outstanding claim;
- 50%, subject to discretion of competent authorities, if specific provisions are no less than 50% of the outstanding claim.

For the purpose of defining the secured portion of the past due item, eligible collateral and guarantees shall be those eligible for credit risk mitigation purposes.

10.1.2 Claims indicated in points 9.1.1 and 9.1.2 shall be assigned a risk weight of 100% net of specific provisions if they are past due for more than 90 days. If specific provisions are no less than 50% of the outstanding claims, the risk weight applicable to the remainder of the claim may be reduced to 50% at national discretion.

## **11. REGULATORY HIGH RISK CATEGORIES**

Subject to the discretion of competent authorities, claims associated with particularly high risks such as investments in venture capital firms and private equity investments may be assigned a risk weight of 150%.

## **12. OTHER ITEMS**

### **12.1 Treatment**

12.1.1 Tangible "Assets" within the meaning of Article 4(10) of Directive 86/635/EEC shall be assigned a risk weight of 100%.

12.1.2 Prepayments and accrued income for which an institution is unable to determine the counterparty in accordance with Directive 86/635/EEC, shall be assigned a risk weight of 100%.

12.1.3 Cash items in the process of collection shall receive a 20% risk weight. Cash in hand and equivalent cash items shall receive a 0% risk weight;

12.1.4 Member States may apply a risk weight of 10% to claims on institutions specialising in the inter-bank and public-debt markets in their home Member States and subject to close supervision by the competent authorities where those asset items are fully and completely secured, to the satisfaction of the competent authorities of the home Member States, by a items assigned a 0% or a 20% risk weight and recognised by the latter as constituting adequate collateral. Member States shall notify the Commission if they apply a risk weight of 10% to claims on institutions specialising in the inter-bank and public-debt markets in their home Member States. The Commission shall circulate that information.

12.1.5 Holdings of equity and other participations except where deducted from own funds shall be assigned a risk weight of at least 100%.

12.1.6 Competent authorities may apply a risk weight of 0% to gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities.

12.1.7 Without any prejudice to the other provisions of this Directive and in particular to the part on Asset Securitisation, all other items except where deducted from own funds shall be assigned a risk weight of 100%.

### **13. COVERED BONDS**

Covered bonds shall be assigned a risk weight on the basis of the risk weight attributed to senior unsecured claims on the institution which issues them. The following correspondence between risk weights shall apply:

- if the claims on the institution receive a risk weight of 20%, the covered bond shall receive a risk weight of 10%;
- if the claims on the institution receive a risk weight of 50%, the covered bond shall receive a risk weight of 20%;
- if the claims on the institution receive a risk weight of 100%, the covered bond shall receive a risk weight of 50%;
- if the claims on the institution receive a risk weight of 150%, the covered bond shall receive a risk weight of 100%;

### **14. OFF-BALANCE SHEET ITEMS**

The risk weight to be applied in the case of off-balance sheet items shall be that to be applied to claims on the counter-party under the provisions of this Section.**15. SHORT-TERM CLAIMS**

Short-term claims for which a credit assessment by an nominated ECAI is available shall be assigned a risk weight according to the following table:

Credit Quality Step	1	2	3	4	5	6
Risk weight	20%	50%	100%	150%	150%	150%

in accordance with the mapping set out by the competent authorities for the credit assessments of eligible ECAIs to the steps in the credit quality assessment scale.

## **16. SPECIFIC PROVISIONS ON NON PAST DUE ITEMS**

Subject to national discretion, competent authorities may permit non past due items receiving a 150% risk weight according to the provisions of the previous sections and for which specific provisions have been established to be assigned a risk weight of:

- 100% if specific provisions are no less than 20% of the outstanding claim;
- 50%, if specific provisions are no less than 50% of the outstanding claim.

## ANNEX C-2

### **Recognition of external credit assessment institutions and mapping of their credit assessments**

#### **1. METHODOLOGY**

For the purposes of Article 37 of this Directive, the principles for the recognition of ECAIs regarding their methodology are specified in the following paragraphs of the present section.

##### **1.1 Objectivity**

Competent authorities shall verify that the methodology for assigning credit assessments is rigorous, systematic, continuous and subject to validation based on historical experience.

##### **1.2 Independence**

1.2.1 Competent authorities shall verify that the methodology is free from external political influences or constraints, and from economic pressures that may influence the credit assessment.

1.2.2 Independence of the ECAI's methodology shall be assessed by competent authorities according to factors such as those specified below:

- (i) ownership and organisation structure of the ECAI;
- (ii) financial resources of the ECAI;
- (iii) staffing and expertise of the ECAI;
- (iv) corporate governance of the ECAI.

##### **1.3 Ongoing review**

1.3.1 Competent authorities shall verify that ECAIs credit assessments is subject to ongoing review and shall be responsive to changes in the financial conditions.

1.3.2 In accordance and in view with point 1.3.1 of the present paragraph, competent authorities shall verify that ECAIs review their credit assessments after all significant events and at least annually.

1.3.3 Before any recognition, competent authorities shall verify that the assessment methodology for each market segment is established according to standards such as those set out below:

- the backtesting must be established for at least one year;
- the regularity of the review process by the ECAI must be monitored by the competent authorities;

- the competent authorities must be able to receive from the ECAI the extent of its contacts with the senior management of the entities which it rates.

1.3.4. Competent authorities shall take the necessary measures to be promptly informed by ECAIs of any material changes in the methodology they use for assigning credit assessments.

#### **1.4 Transparency and disclosure**

Competent authorities shall take the necessary measures to assure that the principles of the methodology employed by the ECAI for the formulation of its credit assessments are publicly available as to allow all potential users to decide whether they are derived in a reasonable way.

### **2. INDIVIDUAL CREDIT ASSESSMENTS**

For the purposes of Article 38 of this Directive, the principles for recognition of ECAIs regarding their individual credit assessments have to be intended as specified in the following paragraphs of this section.

#### **2.1 Credibility and market acceptance:**

2.1.1 Competent authorities shall verify that ECAIs individual credit assessments are recognised in the market as credible and reliable by the users of such credit assessments.

2.1.2 Credibility shall be assessed by competent authorities according to factors such as those specified below:

- market share of the ECAI;
- revenues generated by the ECAI, and more in general financial resources of the ECAI;
- whether there is any pricing on the basis of the rating.

#### **2.2 Transparency and Disclosure**

2.2.1 Competent authorities shall verify that individual credit assessments are accessible at equivalent terms at least to all parties having a legitimate interest in these individual credit assessments.

2.2.2 In particular, competent authorities shall verify that individual credit assessments are available to non-domestic parties on equivalent terms as to domestic parties having a legitimate interest in these individual credit assessments.

### **3. MAPPING**

3.1. In order to differentiate between the relative degrees of risk expressed by each credit assessment, competent authorities shall consider quantitative factors such as the long-term default rate associated with all items assigned the same credit assessment. For recently established ECAIs and for those that have compiled only a short record of default data, competent authorities shall ask the ECAI what it believes to be the long-term default rate associated with all items assigned the same credit assessment.

3.2. In order to differentiate between the relative degrees of risk expressed by each credit assessment, competent authorities shall consider qualitative factors such as the pool of issuers that the ECAI covers, the range of credit assessments that the ECAI assigns, each credit assessment meaning and the ECAI's definition of default.

3.3. Competent authorities shall compare default rates experienced for each credit assessment of a particular ECAI and compare them with a benchmark built on the basis of default rates experienced by other ECAIs on a population of issuers that the competent authorities believes to present an equivalent level of credit risk.

3.4. When competent authorities believe that the default rates experienced for the credit assessment of a particular ECAI are materially and systematically higher than the benchmark, competent authorities shall assign a higher risk step in the credit quality assessment scale to the ECAI credit assessment.

3.5. When competent authorities have increased the associated risk weight for a specific credit assessment of a particular ECAI, if the ECAI demonstrates that the default rates experienced for its credit assessment are no longer materially and systematically higher than the benchmark, competent authorities may decide to restore the original step in the credit quality assessment scale for the ECAI credit assessment.

### ANNEX C-3

#### **Determination of credit conversion factors for off-balance sheet items**

In the case of any off-balance-sheet item listed in Annex II of Directive 2000/12/EC, the result of the following procedure shall be considered its relevant value. The off-balance sheet item shall first be allocated to one of the risk groupings set out in Annex II of Directive 2000/12/EC. It shall then be considered as its relevant value the following percentage of its value: 100% if it is a full-risk item, 50% if it is a medium-risk item, 20% if it is a medium/low-risk item, 0% if it is a low-risk item.

In the case of any off-balance-sheet item listed in Annex IV of Directive 2000/12/EC, its relevant value shall be determined by means of one of the two methods set out in Annex III of Directive 2000/12/EC.

Notwithstanding the provisions of paragraph 4, contracts traded on recognised exchanges, and foreign-exchange contracts (except contracts concerning gold) with an original maturity of 14 calendar days or less are exempt from the application of the methods set out in Annex III of Directive 2000/12/EC, and shall be attributed a relevant value of zero.

Competent authorities may exempt from the application of the methods set out in Annex III of Directive 2000/12/EC and attribute a relevant value of zero to over-the-counter (OTC) contracts cleared by a clearing house where the latter acts as the legal counterparty and all participants fully collateralise on a daily basis the exposure they present to the clearing house, thereby providing a protection covering both the current exposure and the potential future exposure.

The posted collateral must:

- qualify for a 0% risk weight, or
- be cash deposits placed with the lending institution, or
- be certificates of deposit or similar instruments issued by and lodged with the latter.

The competent authorities must be satisfied that the risk of a build-up of the clearing house's exposures beyond the market value of posted collateral is eliminated.

Member States shall inform the Commission of the use they make of this option.

[Note. The treatment of OTC contracts cleared by clearing houses as prescribed on a transitional basis under Directive 2000/12/EC Article 43(2)(3) and the similar treatment prescribed under CAD Annex III, paragraph 5 will be considered in view of the scheduled expiry date.]

Commitments with an original maturity up to one year and commitments with an original maturity over one year shall receive, respectively a credit conversion factor (CCF) of 20%

and 50%. However, any commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, shall receive a 0% CCF.

A CCF of 100% shall be applied to the lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions.

For short-term self-liquidating trade letters of credit arising from the movement of goods, a 20% CCF shall be applied to both issuing and confirming banks.

Where there is an undertaking to provide a commitment, banks are to apply the lower of the two applicable CCFs.

## ANNEX D-1

### **Technical definitions**

1. A 'borrower grade' shall mean a category of credit worthiness to which borrowers are assigned on the basis of a specified and distinct set of rating criteria, from which estimates of PD are derived. The grade definition shall include both a description of the degree of default risk typical for borrowers assigned the grade and the criteria used to distinguish that level of credit risk.
2. A 'rating system' shall comprise all of the methods, processes, controls, and data collection and IT systems that support the assessment of credit risk, the assignment of internal risk ratings, and the quantification of default and loss estimates.
3. A roll-out plan shall include: (a) adoption of IRB across asset classes within the same business unit; b) adoption of IRB across business units in the same group; c) the move from the Foundation to the Advanced Approach for certain risk parameters and d) timeframe for the implementation. When an institution adopts an IRB Approach for an asset class within a particular business unit, it shall apply the IRB Approach to all exposures within that asset class in that unit.
4. A 'subordinated loan' shall mean a facility other than equity exposures and securitisation positions that is expressly subordinated to another facility.
5. 'SME use test' shall mean that an institution treats exposures in its internal risk management system consistently over time and in a similar manner to other retail exposures. Furthermore, it shall not be managed individually in a way comparable to corporate exposures, but rather as part of a portfolio segment or a pool of loans with similar risk characteristics for purposes of risk assessment and quantification. This does not preclude retail exposures from being treated individually at some stages of the risk management process. The fact that an exposure is rated individually does not by itself deny the eligibility as a retail exposure.
6. 'Re-ageing' shall mean returning a facility in arrears but not in default to performing status without collecting the total amount of principal, interest, and fees that are contractually due.
7. 'Seasoning' shall mean an expected change of risk parameters over the life of a credit exposure.
8. 'Future margin income' (FMI) shall mean the amount of income anticipated to be generated by the relevant exposures over the next twelve months that can reasonably be assumed to be available to cover potential credit losses on the exposures (i.e., after covering normal business expenses excluding default related expenses). FMI shall not include income anticipated from new accounts. Assumptions regarding changes in expected levels of balances (and therefore income) on existing accounts shall be in line with historical experience, considering also the potential impact of anticipated business conditions.
9. A 'qualifying revolving retail exposure', shall mean an exposure which meets all of the following criteria:

- a The exposures are revolving, unsecured, and uncommitted (both contractually and in practice). In this context revolving exposures are defined as those where customers outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to a limit established by the institution.
- b The exposures are to individuals.
- c The maximum exposure to a single individual in the sub-portfolio is €100,000 or less.
- d The institution demonstrates to its competent authority that unless for small and transient deviations FMI covers at least the sum of expected losses and two standard deviations of the annualised loss rate on the sub-portfolio. In the event of small and transient shortfall in meeting this criterion competent authorities may increase the EL component of capital requirements.
- e Data on loss rates and margin income for the sub-portfolio is collected and stored.
- f The competent authority concurs that treatment as a qualifying revolving retail exposure is consistent with the underlying risk characteristics of the sub-portfolio.

10. The following instruments shall also be categorised as an equity exposure:

- An instrument with the same structure as those permitted as original own funds for institutions.
- An instrument that embodies an obligation on the part of the issuer and meets any of the following conditions:
  - a. The issuer may defer indefinitely the settlement of the obligation;
  - b. the obligation requires (or permits at the issuer's discretion) settlement by issuance of a fixed number of the issuer's equity shares;
  - c. the obligation requires (or permits at the issuer's discretion) settlement by issuance of a variable number of the issuer's equity shares and (*ceteris paribus*) any change in the value of the obligation is attributable to, comparable to, and in the same direction as, the change in the value of a fixed number of the issuer's equity shares. For certain obligations that require or permit settlement by issuance of a variable number of the issuer's equity shares, the change in the monetary value of the obligation is equal to the change in the fair value of a fixed number of equity shares multiplied by a specified factor. Those obligations meet the conditions of this item if both the factor and the referenced number of shares are fixed; or,
  - d. the holder has the option to require that the obligation be settled in equity shares, unless either (i) in the case of a traded instrument, the institution has demonstrated to the competent authorities that the instrument trades more like the debt of the issuer than like its

equity, or (ii) in the case of non-traded instruments, the institution has demonstrated to the competent authorities that the instrument should be treated as a debt position. In cases (i) and (ii), the institution can decompose the risks for regulatory purposes, subject to approval of the competent authorities.

Debt obligations and other securities, partnerships, derivatives or other vehicles that convey the economic substance of equity ownership shall be categorised as an equity exposure. Equities that are recorded as a debt but arise from a debt/equity swap made as part of the orderly realisation or restructuring of the debt shall be categorised as an equity exposure. These instruments may not attract a lower capital charge than would apply if the exposures remained in the debt portfolio.

Equity investments that convey the economic substance of debt exposures shall be categorised as a debt position. Competent authorities may decide not to require that such liabilities be included where they are directly hedged by an equity exposure, such that the net position does not involve material risk.

11. 'Project finance' (PF) shall mean a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure.
12. 'Object finance' (OF) shall mean a method of funding the acquisition of physical assets where the repayment of the exposure is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender.
13. 'Commodities finance' (CF) shall mean structured short-term financing to finance reserves, inventories, or receivables of exchange-traded commodities, where the exposure will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the exposure.
14. 'Income-producing real estate' (IPRE) financing shall mean a method of funding real estate where the prospects for repayment and recovery on the exposure depend primarily on the cash flows generated by the asset.
15. 'High volatility Commercial Real Estate Lending' (HVCRE) shall mean financing commercial real estate that exhibits higher loss rate volatility (i.e. higher asset correlation) than other types of SL. HVCRE includes:
  - Commercial real estate exposures secured by properties of types that are categorised by the competent authorities as featuring higher volatilities in portfolio default rates;
  - Loans financing any of the land acquisition, development and construction (ADC) phases for properties of those types in such jurisdictions; and
  - Loans financing ADC of any other properties where the source of repayment at origination of the exposure is either the future uncertain sale

of the property or cash flows whose source of repayment is substantially uncertain, unless the borrower has substantial equity at risk. ADC loans exempted from treatment as HVCRE loans on the basis of certainty of repayment of borrower equity are, however, ineligible for the additional reductions for SL exposures described in Annex D-2, paragraph 3.

Where competent authorities categorise certain types of commercial real estate exposures as high-volatility CRE in their Member State, they shall make public such determinations. Competent authorities of other Member States shall ensure that such treatment is then applied equally to institutions under their supervision when making such high-volatility CRE loans in that Member State.

16. 'Corporate purchased receivables', to be eligible for the top-down approach shall satisfy the following conditions:
- The receivables are purchased from unrelated, third party sellers, and as such the institution has not originated the receivables either directly or indirectly.
  - The receivables shall be generated on an arm's-length basis between the seller and the obligor. (As such, intercompany accounts receivable and receivables subject to contra-accounts between firms that buy and sell to each other are ineligible).
  - The purchasing institution has a claim on all proceeds from the pool of receivables or a *pro-rata* interest in the proceeds.
  - The remaining maturity of the receivables is not greater than one year, unless they are fully secured by collateral that would be recognised under the IRB approach used for the institution's other corporate exposures.
  - National supervisors shall also establish concentration limits above which capital charges shall be calculated using the minimum requirements for the 'bottom-up' approach for corporate exposures.

## ANNEX D-2

### Calculation of risk weighted asset amounts

#### 1.1 Risk weighted asset amounts for exposures to corporates, institutions and sovereigns:

1. The risk weighted asset amounts for exposures to corporates, institutions and sovereigns shall be calculated according to the following formulas:

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

$$\text{Maturity PD factor (b)} = (0.08451 - 0.05898 \times \ln(\text{PD}))^2$$

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

$$\text{Risk-weighted assets (RWA)} = \text{K} \times 12,50 \times \text{EAD}$$

The input parameters PD, LGD, and M shall be determined as laid down in Annex D-3, EAD as laid down in Annex D-4.

$N(x)$  denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to  $x$ ).  $G(z)$  denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value  $x$  such that  $N(x) = z$ ).

For lending to companies where the annual sales for the consolidated group of which the firm is a part is less than €50 million institutions may use the following correlation formula for the calculation of risk weights for corporate exposures. In this formula  $S$  is expressed as total annual sales in millions of Euros with € million  $\leq S \leq$  €50 million. Reported sales of less than €5 million shall be treated as if they were equivalent to €5 million. For purchased receivables the turnover shall be the weighted average by individual exposures of the pool.

$$\text{Correlation (R)} = \frac{0.12 \times (1 - \text{EXP}(-50 \times \text{PD}))}{(1 - \text{EXP}(-50))} + 0.24 \times \frac{[1 - (1 - \text{EXP}(-50 \times \text{PD}))]}{(1 - \text{EXP}(-50))} - 0.04 \times (1 - (S - 5)/45)$$

Institutions shall substitute total assets of the consolidated group for total sales when total sales are not a meaningful indicator of firm size and total assets are a more meaningful indicator than total sales.

Institutions shall use the following correlation formula for the calculation of risk weights for HVCRE exposures:

$$\text{Correlation (R)} = \frac{0.12 \times (1 - \text{EXP}(-50 \times \text{PD}))}{(1 - \text{EXP}(-50))} + 0.30 \times \frac{[1 - (1 - \text{EXP}(-50 \times \text{PD}))]}{(1 - \text{EXP}(-50))}$$

2. The risk weighted asset amounts for Project Finance, Income-Producing Real Estate, Object Finance and Commodity Finance exposures where institutions use the Slotting Criteria Approach, shall be calculated according to the following formula:

$$\text{Risk-weighted assets (RWA)} = \text{RW} \times \text{EAD}$$

The risk weights (RW) shall be the following:

Original maturity	Strong	Good	Satisfactory	Weak	Default
Less than 2.5 years	50%	75%	150%	350%	625%
Equal or more than 2.5 years	75%	100%	150%	350%	625%

The input parameter EAD shall be determined as laid down in Annex D-4.

The competent authorities of the member states may authorise their institutions to generally assign preferential risk weights of 50% to “strong” SL exposures, and a 75% risk weight to “good” SL exposures, provided the institutions underwriting and other risk characteristics are substantially stronger than specified in the slotting criteria for the relevant supervisory risk category.

- The risk weighted asset amounts for High-volatility Commercial Real Estate Lending where institutions use the Slotting Criteria Approach, shall be calculated according to the following formula:

$$\text{Risk-weighted assets (RWA)} = \text{RW} \times \text{EAD}$$

The risk weights (RW) shall be the following:

Original maturity	Strong	Good	Satisfactory	Weak	Default
Less than 2.5 years	75%	100%	175%	350%	625%
Equal or more than 2.5 years	100%	125%	175%	350%	625%

The input parameter EAD shall be determined as laid down in Annex D-4.

The competent authorities of the member states may authorise their institutions to generally assign preferential risk weights of 75% to “strong” SL exposures, and a 100% risk weight to “good” SL exposures, provided the institutions underwriting and other risk characteristics are substantially stronger than specified in the slotting criteria for the relevant supervisory risk category.

## 1.2 Risk weighted asset amounts for retail exposures:

- The risk weighted asset amounts for residential mortgage exposures shall be calculated according to the following formulas:

$$\text{Correlation (R)} = 0.15$$

$$\text{Capital requirement (K)} = \text{LGD} \times \text{N}[(1 - \text{R})^{-0.5} \times \text{G}(\text{PD}) + (\text{R} / (1 - \text{R}))^{0.5} \times \text{G}(0.999)]$$

$$\text{Risk-weighted assets (RWA)} = \text{K} \times 12,50 \times \text{EAD}$$

The input parameters PD, and LGD shall be determined as laid down in Annex D-3, EAD as laid down in Annex D-4.

5. The risk weighted asset amounts for qualifying revolving retail exposures shall be calculated according to the following formulas:

$$\text{Correlation (R)} = \frac{0.02 \times (1 - \text{EXP}(-50 \times \text{PD}))}{(1 - \text{EXP}(-50))} + 0.11 \times \frac{[1 - (1 - \text{EXP}(-50 \times \text{PD}))]}{(1 - \text{EXP}(-50))}$$

$$\text{Capital requirement (K)} = \text{LGD} \times \text{N}[(1 - \text{R})^{-0.5} \times \text{G}(\text{PD}) + (\text{R} / (1 - \text{R}))^{0.5} \times \text{G}(0.999)] - \text{F} \times \text{PD} \times \text{LGD}$$

$$\text{Risk-weighted assets (RWA)} = \text{K} \times 12,50 \times \text{EAD}$$

The input parameters PD, and LGD shall be determined as laid down in Annex D-3, EAD as laid down in Annex D-4.

In this formula F is expressed as the percentage future margin income (FMI) is recognised by competent authorities with  $0\% \leq F \leq 75\%$ . Competent authorities may reduce the recognition of FMI in line with shortfalls in meeting the conditions laid down in Annex D-1, paragraph 9.

6. The risk weighted assets for other retail exposures shall be calculated according to the following formulas:

$$\text{Correlation (R)} = \frac{0.02 \times (1 - \text{EXP}(-35 \times \text{PD}))}{(1 - \text{EXP}(-35))} + 0.17 \times \frac{[1 - (1 - \text{EXP}(-35 \times \text{PD}))]}{(1 - \text{EXP}(-35))}$$

$$\text{Capital requirement (K)} = \text{LGD} \times \text{N}[(1 - \text{R})^{-0.5} \times \text{G}(\text{PD}) + (\text{R} / (1 - \text{R}))^{0.5} \times \text{G}(0.999)]$$

$$\text{Risk-weighted assets (RWA)} = \text{K} \times 12,50 \times \text{EAD}$$

The input parameters PD, and LGD shall be determined as laid down in Annex D-3, EAD as laid down in Annex D-4.

### **1.3 Risk weighted asset amounts for equity exposures:**

#### **1.3.1 Simple Risk Weight Approach**

7. The risk weighted asset amounts for equity exposures under the Simple Risk Weight Approach shall be calculated according to the following formula:

$$\text{Risk-weighted assets (RWA)} = \text{RW} \times \text{EAD}$$

The risk weights (RW) shall be the following:

RW = 300% for equity holdings that are publicly traded

RW = 400% for all other equity holdings.

Short cash positions and derivative instruments held in the banking book are permitted to offset long positions in the same individual stocks provided that these instruments have been explicitly designated as hedges of specific equity holdings and that provide a hedge for at least another year. Other short positions are to be treated as if they are long positions with the relevant risk weight applied to the absolute value of each position. In

the context of maturity mismatched positions, the methodology is that for corporate exposures.

8. Under the Simple Risk Weight Approach, institutions may recognise guarantees obtained on an equity position.

### **1.3.2 PD/LGD Approach**

9. The risk weighted asset amounts for equity exposures under the PD/LGD Approach shall be calculated according to the formulas in paragraph 1. If institutions do not have sufficient information to use the applicable definition of default in practice, a 1.5 scaling factor shall be applied to PD/LGD risk weights.
10. The following minimum risk weights shall apply:
  - 100% risk weight for public equities where the investment is part of a long-term customer relationship;
  - 100% risk weight for private equities where the returns on the investment are based on regular and periodic cash flows not derived from capital gains;
  - 200% risk weight for publicly traded equities holdings including other short positions as defined in paragraph 7;
  - 300% risk weight for all other equity holdings including other short positions as defined in paragraph 7;
11. The maximum risk weight for the PD/LGD approach for equity exposures is 1250%.
12. Hedging for PD/LGD equity exposures shall be subject to an LGD of 90% on the exposure to the provider of the hedge. For these purposes equity positions shall be treated as having a five-year maturity.

### **1.3.3 Internal Models Approach**

13. Institutions shall hold capital equal to the potential loss on the institution's equity holdings as derived using internal value-at-risk models subject to the 99th percentile, one-tailed confidence interval of the difference between quarterly returns and an appropriate risk-free rate computed over a long-term sample period. The capital charge shall be incorporated into an institution's risk-based capital ratio through the calculation of risk-weighted equivalent assets. Holdings shall be converted into risk-weighted equivalent assets by multiplying the derived capital charge by 12.5. Capital charges shall be no less than the capital charges that would be calculated under the Simple Risk Weight Approach using a 200% risk weight for publicly traded equity holdings and a 300% risk weight for all other equity holdings. These minimum capital charges shall be calculated a) at an individual exposure level and b) separately using the methodology of the Simple Risk Weight Approach.
14. Under the Internal Models Approach, institutions may recognise guarantees obtained on an equity position.

### **1.3.4 Standardised Approach**

15. Competent authorities of Member States may allow the attribution of risk weighted assets for the following equity exposures according to the rules laid down in Section I:

- Non material equity exposures of an institution. The equity exposures of an institution are considered material if their aggregate value, including holdings subject to exclusions and transitional provisions, exceeds, on average over the prior year, 10% of an institution's original own funds plus additional own funds. This materiality threshold is lowered to 5% of an institution's original own funds plus additional own funds if the equity portfolio consists of less than 10 individual holdings.
- Equity holdings in entities whose debt obligations qualify for a zero risk weight under the Standardised Approach for credit risk (including those publicly sponsored entities where a zero weight can be applied).
- Equity holdings made under legislated programmes to promote specified sectors of the economy that provide significant subsidies for the investment to the institution and involve some form of government oversight and restrictions on the equity investments. This exclusion is limited to an aggregate of 10% of original own funds plus additional own funds.

## ANNEX D-3

### **Input parameters into risk weight formulas**

#### **1. EXPOSURES TO CORPORATES, INSTITUTIONS AND SOVEREIGNS**

##### **1.1 PD**

1. The PD of an exposure shall be the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned and 0.03%. There is no floor for sovereign exposures. The PD of borrowers in default shall be 100%.
2. Under the Advanced approach unfunded credit protection may be recognised by adjusting PDs subject to the provisions of paragraph 7.
3. The EL of purchased corporate receivables treated on a pooled basis shall be the one-year EL of the pool. If an institution that is admitted to the Advanced Approach for corporate exposures can estimate the pool's exposure weighted average of PD or LGD the institution may use its PD estimates as inputs to the corporate risk weight function. Otherwise the institution shall use its estimate for default-risk EL as PD.
4. For dilution risk of purchased corporate receivables PD shall equal EL.

##### **1.2 LGD**

5. Supervisory LGD estimates under the Foundation Approach shall be the following:
  - Senior claims without eligible collateral shall be assigned a supervisory LGD estimate of 45%.
  - Subordinated claims without eligible collateral shall be assigned a supervisory LGD estimate of 75%.
  - Eligible funded and unfunded credit protection as specified in Section III may be recognised in the LGD as specified in Section III and subject to the minimum requirements specified in Section III.
  - Covered bonds as specified in Article 1, paragraph 26A may be assigned a supervisory LGD estimate of 20%.
6. Under the Advanced Approach for LGD subject to minimum requirements as specified in Annex D-5, Section 5 and approval of competent authorities, institutions may use their own internal estimates of LGDs. LGDs shall be measured as the loss given default as a percentage of the exposure at default.
7. Under the Advanced Approach unfunded credit protection can be recognised by the methods specified in section III or by adjusting PD or LGD estimates subject to minimum requirements as specified in Annex D-5, Section 5 and approval of

competent authorities. An institution shall not assign guaranteed exposures an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the guarantor. Neither criteria nor rating processes are permitted to consider possible favourable effects of imperfect expected correlation between default events for the borrower and guarantor for purposes of regulatory minimum capital requirements. The effect of double default shall not be recognised in such adjustments.

8. If an institution can estimate for corporate purchased receivables which are treated on a pooled basis the pools' exposure weighted average of PD or LGD subject to the minimum requirements laid down in Annex D-5, paragraphs 85-93, the institution may use its LGD estimates as inputs to the corporate risk weight function. Otherwise a supervisory LGD of 100% shall be applied.

### 1.3 Maturity

9. Institutions using the Foundation Approach shall assign to repo-style transactions a maturity adjustment (M) of 6 month and to all other exposures a maturity adjustment (M) of 2.5 years. Competent authorities may require all institutions in their jurisdiction to use M for each facility as defined under paragraph 10.
10. Institutions using the Advanced Approach shall recognise effective maturity for each facility by a maturity adjustment (M). Except as noted in paragraph 12, M is defined as the greater of one year and the remaining effective maturity in years as defined below. In all cases, M will be no greater than 5 years. M for an instrument subject to a cash flow schedule shall be calculated according to the following formula:

$$\text{Maturity adjustment (M)} = \text{MAX}\{1; \text{MIN}\{\sum_t t * CF_t / \sum_t CF_t ; 5\}\}$$

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

For any other instruments or when an institution is not in a position to calculate the effective maturity of the contracted payments as laid down in this paragraph, an institutions shall use a more conservative figure of M such as that it equals the maximum remaining time (in years) that the borrower is permitted to take to fully discharge its contractual obligation (principal, interest, and fees) under the terms of loan agreement. Normally, this will correspond to the nominal maturity of the instrument.

For derivatives subject to a master netting agreement, the weighted average maturity of the transactions should be used when applying the explicit maturity adjustment. Further, the notional amount of each transaction should be used for weighting the maturity.

For repo-style transactions subject to a master netting agreement, the weighted average maturity of the transactions should be used when applying the explicit maturity adjustment. A 5-day floor will apply to the average. Further, the notional amount of each transaction should be used for weighting the maturity.

11. The competent authorities of the member states may exempt exposures from corporates situated in the EU and having consolidated sales and consolidated assets of less than €500 million from the use of effective maturity as laid down in paragraph 10. If the exemption is applied, M assigned to all qualifying exposures shall be 2.5 years.
12. Where institutions are required to recognise effective maturity as laid down in paragraph 10, for certain short-term exposures with an original maturity below three month, as defined by each competent authority on a national basis the one-year floor shall be replaced by a one-day floor. Eligible transactions shall not be part of the institutions ongoing financing of the obligor. This treatment targets transactions that are not a part of the ongoing term financing of the obligor. These transactions include financial market transactions, and one-off short-term exposures that are transaction oriented.
13. On a national basis, competent authorities shall elaborate on short-term exposures that satisfy the criteria provided in the preceding paragraph. The examples include:
  - Repo-style transactions and short-term loans and deposits;
  - Exposures arising from securities lending transactions;
  - Short-term self-liquidating trade transactions. Import and export letters of credit and similar transactions could be accounted for at their actual remaining maturity;
  - Exposures arising from settling securities purchases and sales. This could also include overdrafts arising from failed securities settlements provided that such overdrafts do not continue more than a short, fixed number of business days;
  - Exposures arising from cash settlements by wire transfer, including overdrafts arising from failed transfers provided that such overdrafts do not continue more than a short, fixed number of business days; and
  - Exposures to institutions arising from foreign exchange settlements.
14. Under the Advanced Approach maturity mismatches shall be treated in the same way as provided for in Section III.
15. If an institution that is admitted to the Advanced Approach for corporate exposures can estimate the pools' exposure weighted average of PD or LGD for its purchased corporate receivables then for drawn amounts M shall equal the pool's exposure weighted average maturity (as defined under paragraph 10). This same value of M shall also be used for undrawn amounts under a committed purchase facility provided the facility contains effective covenants, early amortisation triggers, or other features that protect the purchasing institution against a significant deterioration in the quality of the future receivables it is required to purchase over the facility's term. Absent such effective protections, the M for undrawn amounts shall be calculated as the sum

of (a) the longest-dated potential receivable under the purchase agreement and (b) the remaining maturity of the purchase facility.

## **2. RETAIL EXPOSURES**

### **2.1 PD**

16. The PD of a pool shall be the greater of the one-year PD associated with the internal borrower grade to which the pool of retail exposure is assigned and 0.03%. The PD of borrowers or facilities in default shall be 100%.
17. Unfunded credit protection may be recognised by adjusting PDs subject to the provisions in paragraph 19.

### **2.2 LGD**

18. Institutions shall provide own internal estimates of LGDs subject to minimum requirements as specified in Annex D-5, Section 5 and approval of competent authorities. LGDs shall be measured as the loss given default as a percentage of the exposure at default.
19. Unfunded credit protection can be recognised by adjusting PD or LGD estimates subject to minimum requirements as specified in Annex D-5, paragraphs 76-82 and approval of competent authorities either in support of an individual obligation or a pool of exposures. An institution shall not assign guaranteed exposures an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the guarantor. Neither criteria nor rating processes are permitted to consider possible favourable effects of imperfect expected correlation between default events for the borrower and guarantor for purposes of regulatory minimum capital requirements. The effect of double default shall not be recognised in such adjustments.
20. The LGD for dilution risk of purchased retail receivables shall be 100%.

## **3. EQUITY EXPOSURES**

### **3.1 PD**

21. The PD of an exposure shall be the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned and 0.03%. The PD of borrowers in default shall be 100%.

### **3.2 LGD**

22. Equity exposures shall be assigned a 90 % LGD.

### **3.3 Maturity**

23. The maturity adjustment (M) assigned to all exposures shall be 5 years.

## ANNEX D-4

### **Exposure at Default**

#### **Corporates, Institutions, Sovereigns and Retail exposures all Approaches**

1. EAD of all exposures is measured as the amount legally owed to the institutions, i.e. gross of specific provisions or partial write-offs. This rule also applies to assets purchased at a price different than the amount legally owed. For purchased assets, the difference between the exposure and the net value recorded on the balance-sheet of institutions is denoted discount if the exposure is larger, and premium if the exposure is smaller.
2. Where institutions use Master netting agreements in relation to repurchase transactions/security lending or borrowing transactions EAD shall be calculated in accordance with Section III.
3. In the case of any off-balance-sheet item listed in Annex IV of Directive 2000/12/EC, EAD shall be determined by means of one of the two methods laid down in Annex III of Directive 2000/12/EC.
4. Notwithstanding the provisions of paragraph 3 , contracts traded on recognised exchanges, and foreign-exchange contracts (except contracts concerning gold) with an original maturity of 14 calendar days or less are exempt from the application of the methods set out in Annex III of Directive 2000/12/EC, and will be attributed an EAD of zero.
5. The competent authorities of Member States may exempt from the application of the methods set out in Annex III of Directive 2000/12/EC and attribute an EAD of zero to over-the-counter (OTC) contracts cleared by a clearing house where the latter acts as the legal counterparty and all participants fully collateralise on a daily basis the exposure they present to the clearing house, thereby providing a protection covering both the current exposure and the potential future exposure.

The posted collateral shall:

- Qualify for a 0% risk weight, or
- be cash deposits placed with the lending institution, or
- be certificates of deposit or similar instruments issued by and lodged with the latter.

The competent authority shall be satisfied that the risk of a build-up of the clearing house's exposures beyond the market value of posted collateral is eliminated.

Member States shall inform the Commission of the use they make of this option.

[Note. The treatment of OTC contracts cleared by clearing houses as prescribed on a transitional basis under Directive 2000/12/EC Article 43(2)(3) and the similar treatment prescribed under CAD Annex III, paragraph 5 will be considered in view of the scheduled expiry date.]

6. For undrawn purchased commitments of revolving purchased corporate receivables exposures EAD is calculated as the committed but undrawn line multiplied by a credit conversion factor (CCF) of 75%.
7. For other off-balance sheet items than mentioned above, EAD is calculated as the committed but undrawn amount multiplied by a credit conversion factor (CCF) as specified in paragraph 8-12 below.

#### **Corporates, Institutions and Sovereigns exposures, Foundation Approach**

8. For credit lines which are uncommitted, that are unconditionally cancellable, or that effectively provide for automatic cancellation, for example due to deterioration in a borrower's creditworthiness, at any time by the institution without prior notice, a CCF of 0 % applies. To apply a CCF of 0% institutions shall demonstrate to the competent authorities that they actively monitor the financial condition of the borrower, and their internal control systems are such that they could cancel the facility upon evidence of a deterioration in the credit quality of the borrower.
9. For short-term letters of credit arising from the movement of goods, a CCF of 20% applies for both the issuing and confirming institutions.
10. For other credit lines, NIFs, and RUFs, a CCF of 75% applies given that transaction specific factors play a key role in whether the facility is drawn.
11. Where a commitment is obtained on another off-balance sheet exposure, institutions under the foundation approach are to apply the lower of the applicable CCFs.
12. All other off-balance sheet items than mentioned above shall be allocated to one of the risk groups set out in Annex II of Directive 2000/12/EC. The CCFs shall be the following: 100% for full risk items, 50% for medium risk items, 20% for medium/low risk items and 0% for low risk items.

#### **Corporates, Institutions, Sovereign and Retail exposures, Advanced Approach**

13. For on-balance sheet netting of loans and deposits and for cases where currency or maturity mismatched on-balance sheet netting exists, institutions shall apply for the calculation of EAD the provisions specified in Section III.
14. Institutions which meet the minimum requirements for the use of own estimates of exposures as specified in Annex D-5, Section 5 shall be allowed to use their own internal estimates of CCFs across different product types, subject to approval of the competent authorities. Institutions shall reflect CCFs either in its LGD or EAD estimates.

## Equity

15. The EAD of an equity exposure shall be the value presented in the financial statements. Admissible equity exposure measures are the following:

- For investments held at fair value with changes in value flowing directly through income and into regulatory capital, exposure is equal to the fair value presented in the balance sheet.
- For investments held at fair value with changes in value not flowing through income but into a tax-adjusted separate component of equity, exposure is equal to the fair value presented in the balance sheet.
- For investments held at cost or at the lower of cost or market, exposure is equal to the cost or market value presented in the balance sheet.

Holdings in funds containing both equity investments in commercial entities and other non-equity types of investments can be either treated, in a consistent manner, as a single investment based on the majority of the fund's holdings or, where possible, as separate and distinct investments in the fund's component holdings based on a look-through approach.

## ANNEX D-5

### **Minimum Requirements for IRB Approach**

#### **1. RISK RATING SYSTEM DESIGN**

1. If an institution uses multiple rating systems, the rationale for assigning a borrower to a rating system shall be documented and applied in a manner that best reflects the level of risk of the borrower.

#### **1.1 Rating dimensions**

##### **Corporate, institution and sovereign exposures**

2. A rating system shall have two separate and distinct dimensions: a) the risk of borrower default, and b) transaction specific factors. The first dimension shall reflect exclusively the risk of borrower default. Separate exposures to the same borrower shall be assigned to the same borrower grade, irrespective of any differences in the nature of each specific transaction. Exceptions, where separate exposures are allowed to result in multiple grades for the same borrower are firstly, in the case of country transfer risk, where different facilities of the same borrower are denominated in local or foreign currency and secondly, when the treatment of associated guarantees to a facility may be reflected in an adjusted borrower grade.
3. An institution shall articulate in its credit policy the relationship between borrower grades in terms of the level of default risk each grade implies. Perceived and measured default risk shall increase as credit quality declines from one grade to the next. The policy shall articulate the default risk of each grade in terms of both a description of the probability of default risk typical for borrowers assigned the grade and the criteria used to distinguish that level of default risk.
4. The second dimension shall reflect transaction specific factors, such as collateral, seniority, product type, etc. For institutions applying the Foundation Approach, this requirement can be fulfilled by the existence of a facility dimension, which reflects both borrower and transaction specific factors.
5. For institution using own LGD estimates, facility ratings shall reflect exclusively LGD.
6. Institutions using the Slotting Criteria Approach for SL exposures are exempt from this two-dimensional requirement for these exposures.

#### **1.2 Retail exposures**

7. Rating systems for retail exposures shall reflect both borrower and transaction risk, and shall capture all relevant borrower and transaction characteristics. Institutions shall assign each exposure that falls within the definition of retail for IRB purposes into a particular pool. Institutions shall demonstrate that the process of assigning exposures to a pool provides for a meaningful differentiation of risk,

provides for a grouping of sufficiently homogenous exposures, and allows for accurate and consistent estimation of loss characteristics at pool level. Institutions shall consider the following risk drivers when assigning exposures to a pool:

- a. Default risk characteristics;
- b. Transaction risk characteristics, including product or collateral types or both. Institutions shall explicitly address cross-collateral provisions where present.
- c. Delinquency, unless the institution demonstrates to its competent authority that delinquency is not a material driver of risk for the exposure.

## **Rating structure**

### **Corporate, institution and sovereign exposures**

8. An institution shall have a minimum of 7 grades for non-defaulted borrowers and one for defaulted borrowers.
9. The distribution of exposures across borrower and facility grades shall be such as to avoid excessive concentrations of exposures in particular grades.
10. Institutions with loan portfolios concentrated in a particular market segment and range of default risk shall have enough grades within that range to avoid undue concentrations of borrowers in a particular grade. Significant concentrations within a single grade shall be supported by convincing empirical evidence that the grade covers a reasonably narrow PD band and that the default risk posed by all borrowers in the grade falls within that band.
11. Institutions using the Slotting Criteria Approach for SL sub asset classes shall have a minimum of 4 grades for non-defaulted borrowers and one for defaulted borrowers.

### **Retail exposures**

12. The level of risk differentiation for IRB purposes shall ensure that the number of exposures in a given pool is sufficient so as to allow for meaningful quantification and validation of the loss characteristics at the pool level. The distribution of exposures and borrowers across pools shall be such as to avoid excessive concentrations in pools.

### **1.3 Rating criteria**

13. An institution shall have specific rating definitions, processes and criteria for assigning exposures to grades within a rating system.
  - a. The grade descriptions and criteria shall be sufficiently detailed to allow those charged with assigning ratings to consistently assign the same grade to borrowers or facilities posing similar risk. This consistency shall exist across lines of business, departments and geographic locations. If rating criteria and procedures differ for different types of borrowers or facilities, the institution

shall monitor for possible inconsistency, and shall alter rating criteria to improve consistency when appropriate.

- b. Written rating definitions shall be clear and detailed enough to allow third parties to understand the assignments of ratings, such as internal audit or an equally independent function and competent authorities, to replicate rating assignments and evaluate the appropriateness of the assignments to a grade or pool.
  - c. The criteria shall also be consistent with the institution's internal lending standards and its policies for handling troubled borrowers and facilities.
14. Institutions shall take all relevant available information into account in assigning ratings to borrowers and facilities. Information shall be current. The less information an institution has, the more conservative shall be its assignments of exposures to borrower and facility grades or pools. If an institution uses an external rating as a primary factor determining an internal rating assignment, the institution shall ensure that it considers other relevant information.

#### **1.4. Assessment horizon**

15. Institution shall use a time horizon longer than one year in assigning ratings. A borrower rating shall represent the institution's assessment of the borrower's ability and willingness to contractually perform despite adverse economic conditions or the occurrence of unexpected events.
16. An institution shall satisfy this requirement by basing rating assignments on specific, appropriate stress scenarios or by appropriately taking into account borrower characteristics that are reflective of the borrower's vulnerability to adverse economic conditions or unexpected events, without explicitly specifying a stress scenario. The range of economic conditions that are considered when making assessments shall be consistent with current conditions and those that are likely to occur over a business cycle within the respective industry/geographic region.
17. An institution shall take a conservative view of projected information. Where limited data is available, an institution shall adopt a conservative bias to its analysis.

#### **1.5. Use of models**

18. If institutions use statistical models and other mechanical methods to assign borrower or facility ratings or in the estimation of PDs, LGDs, or EADs, than institution shall:
- a. The institution shall demonstrate to its competent authority that a model or procedure has good predictive power and that regulatory capital requirements shall not be distorted as a result of its use. The variables that are input to the model shall form a reasonable set of predictors. The model shall not have material biases.

- b. The institution shall have in place a process for vetting data inputs into a statistical default or loss prediction model which includes an assessment of the accuracy, completeness and appropriateness of the data.
- c. The institution shall demonstrate that the data used to build the model is representative of the population of the institution's actual borrowers or facilities.
- d. When combining model results with human judgement, the judgement shall take into account all relevant information not considered by the model. The institution shall have written guidance describing how human judgement and model results are to be combined.
- e. The institution shall have procedures for human review of model-based rating assignments. Such procedures shall focus on finding and limiting errors associated with model weaknesses.
- f. The institution shall have a regular cycle of model validation that includes monitoring of model performance and stability; review of model relationships; and testing of model outputs against outcomes.

#### **1.6. Documentation of rating system design**

- 19. Institutions shall document in writing their rating systems' design and operational details. The documentation shall evidence institutions' compliance with the minimum requirements in this Annex, and shall address topics such as portfolio differentiation, rating criteria, responsibilities of parties that rate borrowers and facilities, definition of what constitutes a rating exception, parties that have authority to approve exceptions, frequency of rating reviews, and management oversight of the rating process. An institution shall document the rationale for its choice of its internal rating criteria and shall be able to provide analyses demonstrating that rating criteria and procedures are likely to result in ratings that meaningfully differentiate risk. Rating criteria and procedures shall be periodically reviewed to determine whether they remain fully applicable to the current portfolio and to external conditions. In addition, an institution shall document a history of major changes in the risk rating process, and such documentation shall support identification of changes made to the risk rating process subsequent to the last review of the competent authorities. The organisation of rating assignment including the rating assignment process and the internal control structure shall also be documented.
- 20. Institutions shall document the specific definitions of default and loss used internally and demonstrate consistency with the definitions set out in Article 1, paragraph 46 and 47.
- 21. If the institution employs statistical models in the rating process, the institution shall document their methodologies. This material shall:
  - a. provide a detailed outline of the theory, assumptions and/or mathematical and empirical basis of the assignment of estimates to grades, individual obligors, exposures, or pools, and the data source(s) used to estimate the model;

- b. establish a rigorous statistical process (including out-of-time and out-of-sample performance tests) for validating the model; and
  - c. indicate any circumstances under which the model does not work effectively
22. Use of a model obtained from a third-party vendor that claims proprietary technology is not a justification for exemption from documentation or any other of the requirements for internal rating systems. The burden is on the institution to satisfy competent authorities.

## **RISK RATING SYSTEM OPERATIONS**

### **2.1 Coverage of ratings**

#### **Corporate, institutions and sovereign exposures**

23. Each borrower and each recognised guarantor shall be assigned a rating and each exposure shall be associated with a facility rating as part of the loan approval process. Institutions using the Slotting Criteria Approach for SL exposures shall assign exposures to their internal rating grades based on their own criteria, systems and processes, subject to compliance with the requisite minimum requirements.
24. Each separate legal entity to which the institution is exposed shall be separately rated. An institution shall demonstrate to its competent authority that it has acceptable policies regarding the treatment of individual entities in a connected group.

#### **Retail exposures**

25. Each retail exposure shall be assigned to a pool as a part of the loan approval process.

### **2.2 Integrity of rating process**

#### **Corporate, institution and sovereign exposures**

26. Rating assignments and periodic rating reviews shall be completed or approved by an independent party that does not directly stand to benefit from the extension of credit.
27. Institutions shall update borrower and facility ratings at least annually. High risk borrowers and problem exposures shall be subject to more frequent review. Institutions shall undertake a new rating if material information on the borrower or facility becomes available.
28. An institution shall have an effective process to obtain and update relevant information on borrower characteristics that affect PDs, and on facility characteristics that affect LGDs and EADs.

## **Retail exposures**

29. An institution shall review the loss characteristics and delinquency status of each identified risk pool on at least an annual basis. An institution shall also at least annually review in a representative sample the status of individual exposures within each pool as a means of ensuring that exposures continue to be assigned to the correct pool. This requirement may be satisfied by review of a representative sample of exposures in the pool.

## **2.3 Overrides**

30. For rating and pool assignments institutions shall clearly articulate the situations in which human judgement may override the inputs or outputs of the rating process. Institutions shall identify overrides and the personnel that are responsible for approving these overrides. Institutions shall analyse the performance of the exposures whose rating have been overridden. This analysis shall include assessment of the performance of exposures whose rating has been overridden by a particular person, accounting for all the responsible personnel.

## **2.4 Data maintenance**

### **Corporate, institution and sovereign exposures**

31. Institutions shall at a minimum collect and store:
  - a. Complete rating histories on borrowers and recognised guarantors,
  - b. The dates the ratings were assigned,
  - c. The key data and methodology used to derive the rating,
  - d. The person responsible for the rating assignment,
  - e. The identity of borrowers and exposures that defaulted,
  - f. The date and circumstances of such defaults,
  - g. Data on the PDs and realised default rates associated with rating grades and ratings migration.
32. Institutions applying the Advanced Approach shall at a minimum collect and store:
  - a. A complete history of data on the facility ratings and LGD and EAD estimates associated,
  - b. The dates the ratings were assigned and the estimates were done,
  - c. The key data and methodology used to derive the facility ratings and LGD and EAD estimates,

- d. The person who assigned the facility rating and the person who provided LGD and EAD estimates.
- e. Data on the estimated and realised LGDs and EADs associated with each defaulted facility.
- f. Data on the LGD of the facility before and after evaluation of the effects of a guarantee/ or credit derivative, for those institutions that reflect the credit risk mitigating effects of guarantees or credit derivatives through LGD.
- g. Data on the components of loss for each defaulted exposure.

### **Retail exposures**

- 33. Institutions shall at a minimum collect and store:
  - a. Data used in the process of allocating exposures to pools,
  - b. Data on the estimated PDs, LGDs and EADs associated with pools of exposures,
  - c. The identity of borrowers and exposures that defaulted,
  - d. For defaulted exposures, data on the pools to which the exposure was assigned over the year prior to default and the realised outcomes on LGD and EAD.

### **2.5 Stress tests used in assessment of capital adequacy**

- 34. An institution shall have in place sound stress testing processes for use in the assessment of capital adequacy. Stress testing shall involve identifying possible events or future changes in economic conditions that could have unfavourable effects on an institution's credit exposures and assessment of the institution's ability to withstand such changes.
- 35. An institution shall regularly perform a credit risk stress test to assess the effect of certain specific conditions on its total regulatory capital requirements for credit risk. The test to be employed would be one chosen by the institution, subject to supervisory review. The test to be employed shall be meaningful and reasonably conservative, considering at least the effect of mild recession scenarios. An institution shall assess migration in its ratings under the stress test scenarios. Stressed portfolios shall contain the vast majority of an institution's total exposure.

## **3 CORPORATE GOVERNANCE AND OVERSIGHT**

### **3.1. Corporate Governance**

- 36. All material aspects of the rating and estimation processes shall be approved by the institution's board of directors or a designated committee thereof and senior

management. These parties shall possess a general understanding of the institution's risk rating system and detailed comprehension of its associated management reports. Senior management shall provide notice to the board of directors or a designated committee thereof of material changes or exceptions from established policies that will materially impact the operations of the institution's rating system.

37. Senior management shall have a good understanding of the rating system's design and operation. Senior management shall ensure, on an ongoing basis that the rating system is operating properly. Senior management shall be regularly informed by the credit risk control units about the performance of the rating process, areas needing improvement, and the status of efforts to improve previously identified deficiencies.
38. Internal ratings-based analysis shall be an essential part of the management reporting to these parties. Reporting shall include at least risk profile by grade, migration across grades, estimation of the relevant parameters per grade, and comparison of realised default rates (and LGDs and EADs for institutions on Advanced Approaches) against expectations. Reporting frequencies shall depend on the significance and type of information and the level of the recipient.

### **3.2 Credit risk control**

39. The areas of responsibility for the credit risk control unit(s) shall include:
  - a. Testing and monitoring internal grades;
  - b. Production and analysis of summary reports from the institution's rating system;
  - c. Implementing procedures to verify that rating definitions are consistently applied across departments and geographic areas;
  - d. Reviewing and documenting any changes to the rating process, including the reasons for the changes;
  - e. Reviewing the rating criteria to evaluate if they remain predictive of risk. Changes to the rating process, criteria or individual rating parameters shall be documented and retained;
  - f. Active participation in the design or selection, implementation and validation of rating models;
  - g. Oversight and supervision of any models used in the rating process;
  - h. And ongoing review and alterations to any models used in the rating process.

### **3.3 Internal and external audit**

40. Internal audit shall review at least annually the institution's rating system and its operations, including the operations of the credit function and the estimation of PDs, LGDs and EADs and document its findings. Areas of review include

adherence to all applicable minimum requirements. Subject to approval of the competent authorities of the member states institutions may outsource the internal audit of the rating system and its operations to an independent external auditor or use an internal audit function shared with other institutions.

#### **4 USE OF INTERNAL RATINGS**

41. Institutions shall have a credible track record in the use of internal ratings information. An institution shall demonstrate that it has been using a rating system that was broadly in line with the minimum requirements articulated in this Directive for at least the three years prior to qualification. An institution applying the Advanced Approach shall demonstrate that it has been estimating and employing LGDs and EADs in a manner that is broadly consistent with the minimum requirements for use of own estimates of LGDs and EADs for at least the three years prior to qualification. Improvements to an institution's rating system shall not render an institution non-compliant with the three-year requirement.

#### **5 RISK QUANTIFICATION**

##### **5.1. Definition of default as set out in Article 1, paragraph 46**

42. For Retail and PSE exposures, the competent authorities of the Member States shall set the exact number of days past due that all institutions in its jurisdiction shall abide by under the definition of default set out in Article 1, paragraph 46, for lending to such counterparts situated within this Member State. The specific number shall fall within 90-180 days and may differ across product lines. This paragraph shall not prevent the competent authorities of a Member State which applies lower past due figures for such exposures in its territory, from allowing higher figures for lending to counterparts situated in the territories of other Member States that allow higher figures. The specific numbers shall fall between 90 days and the figures, the other Member States have set for lending to such counterparts within their respective territories. Member States shall inform the Commission of the use they make of this paragraph.
43. Institutions shall take as indications of unlikelihood to pay the following elements:
- The institution puts the credit obligation on non-accrued status.
  - The institution makes a charge-off or account-specific provision resulting from a significant perceived decline in credit quality subsequent to the institution taking on the exposure.
  - The institution sells the credit obligation at a material credit-related economic loss.
  - The institution consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees. This includes in the case of equity holdings assessed under a PD/LGD Approach, distressed restructuring of the equity itself.

- The institution has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the institution.
  - The obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the institution
44. Institutions that use external data that is not itself consistent with the definition of default, shall demonstrate to their competent authorities that appropriate adjustments have been made to achieve broad equivalence with the definition of default.
45. If the institution considers that a previously defaulted exposure is such that no trigger of default continues to apply, the institution shall rate the borrower and estimate LGD and EAD as they would for a non-defaulted facility. Should the definition of default subsequently be triggered, another default would be deemed to have occurred.

### **Re-ageing**

46. The institution shall have clearly articulated and documented policies in respect of the counting of days past due, in particular in respect of the re-ageing of the facilities and the granting of extensions, deferrals, renewals and rewrites to existing accounts. At a minimum, the re-ageing policy shall include: (a) approval authorities and reporting requirements; (b) minimum age of a facility before it is eligible for re-ageing; (c) delinquency levels of facilities that are eligible for re-ageing; (d) maximum number of re-ageings per facility; and (e) a reassessment of borrower's capacity to repay. These policies shall be applied consistently over time. If an institution treats a re-aged exposure in a similar fashion to other delinquent exposures, this exposure shall be recorded as in default for IRB purposes.

### **Treatment of overdrafts**

47. Authorised overdrafts shall be subject to a credit limit set by the institution and brought to the knowledge of the obligor. Any break of this limit shall be monitored; if the account were not brought under the limit after 90-180 days (subject to the applicable past-due trigger), it would be considered as defaulted. Non-authorised overdrafts shall be associated with a zero limit for IRB purposes. Days past due commence once any credit is granted to an unauthorised customer. If such credit were not repaid within the number of days given above, the exposure would be considered as defaulted. Institutions shall have internal policies for assessing the creditworthiness of customers who are offered overdraft accounts.

## **5.2 Overall requirements for estimation**

48. Internal estimates of the risk parameters, PD, LGD, EAD and EL shall incorporate the relevant and available data, information and methods. Internal estimates shall be derived using both historical experience and empirical

evidence, and not based purely judgmental considerations. Internal estimates shall be plausible and intuitive and shall be based on the material drivers of the respective risk parameters. The less data an institution has, the more conservative it shall be in its estimation. . The institution shall be able to provide a breakdown of its loss experience in terms of default frequency, LGD, EAD, or loss where EL estimates are used, by the factors it sees as the drivers of the respective risk parameters. The institution shall demonstrate that its estimates are representative of long run experience. Any changes in lending practice or the process for pursuing recoveries over the observation period shall be taken into account. An institution's estimates shall reflect the implications of technical advances and new data and other information, as it becomes available. Institutions shall review their estimates when new information comes to light but at least on an annual basis.

49. The population of exposures represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics shall be comparable with those of the institution's exposures and standards. The institution shall also demonstrate that the economic or market conditions that underlie the data is relevant to current and foreseeable conditions. The number of exposures in the sample and the data period used for quantification shall be sufficient to provide the institution with confidence in the accuracy and robustness of its estimates.
50. An institution shall add to its estimates a margin of conservatism that is related to the expected range of estimation errors. Where methods and data are less satisfactory and the expected range of errors is larger, the margin of conservatism shall be larger.
51. Competent authorities of Member States may allow the institutions some flexibility in the application of the required standards for data that are collected prior to the date of implementation of this Directive.
52. If an institution uses data that is pooled across institutions it shall demonstrate that:
  - a. The internal rating systems and criteria of other institutions in the pool are similar with its own;
  - b. The pool shall be representative for the portfolio for which the pooled data is used;
  - c. The pooled data is used consistently over time by the institution for its permanent estimates.
53. If an institution uses data that is pooled across institutions, it shall remain responsible for the integrity of its rating system. The institution shall demonstrate to the competent authority that it has sufficient in-house understanding of its internal rating system, including effective ability to monitor and audit the rating process.

### **5.2.1. Requirements specific to PD estimation**

#### **Corporate, institution and sovereign exposures**

54. Institutions shall use one, two or all three specific techniques set out below (internal default experience, mapping to external data, and statistical default models), as well as other information and techniques as appropriate to estimate the average PD for each rating grade. Institutions shall not use these techniques without supporting analysis. Institutions shall recognise the importance of judgmental considerations in combining results of techniques and in making adjustments for limitations of techniques and information.
- a. To the extent that an institution uses data on internal default experience for the estimation of PD it shall demonstrate in its analysis that the estimates are reflective of underwriting standards and of any differences in the rating system that generated the data and the current rating system. Where only limited data is available, or where underwriting standards or rating systems have changed, the institution shall add a greater margin of conservatism in its estimate of PD.
  - b. To the extent that an institution associates or maps its internal grades to the scale used by an ECAI or similar organisations and then attributes the default rate observed for the external organisation's grades to the institution's grades, mappings shall be based on a comparison of internal rating criteria to the criteria used by the external organisation and on a comparison of the internal and external ratings of any common borrowers. Biases or inconsistencies in the mapping approach or underlying data shall be avoided. The external organisation's criteria underlying the data used for quantification shall be oriented to default risk only and not reflect transaction characteristics. The institution's analysis shall include a comparison of the default definitions used, subject to the requirements in Article 1, paragraph 46 and paragraphs 42-47 of this Annex. The institution shall document the basis for the mapping.
  - c. To the extent that an institution uses statistical default prediction models it is allowed to estimate PDs as the simple average of default-probability estimates for individual borrowers in a given grade. The institution's use of default probability models for this purpose shall meet the standards specified in paragraph 18.
55. Irrespective of whether an institution is using external, internal, or pooled data sources, or a combination of the three, for its PD estimation, the length of the underlying historical observation period used shall be at least five years for at least one source. If the available observation period spans a longer period for any source, and this data are relevant, this longer period shall be used.

### **Retail exposures**

56. PD estimates may also be derived from realised losses and appropriate estimates of LGDs.
57. Institutions shall regard internal data for assigning exposures to pools as the primary source of information for estimating loss characteristics. Institutions are permitted to use external data (including pooled data) or statistical models for quantification provided a strong link can be demonstrated between (a) the institution's process of assigning exposures to a pool and the process used by the

external data source, and (b) between the institution's internal risk profile and the composition of the external data. Institutions shall use all relevant data sources as points of comparison.

58. If an institution derive long run average estimates of PD and LGD for retail from an estimate of total losses, and an appropriate estimate of PD or LGD the process for estimating total losses shall meet the overall standards for estimation of PD and LGD set out in this Annex, and the outcome shall be consistent with the concept of a default-weighted LGD as defined in paragraph 61.
59. Irrespective of whether institutions are using external, internal, pooled data sources, or a combination of the three, for their estimation of loss characteristics, the length of the underlying historical observation period used shall be at least five years. If the available observation spans a longer period for any source, and these data are relevant, this longer period shall be used. An institution need not give equal importance to historic data if it can convince its competent authority that more recent data is a better predictor of loss rates.
60. Institutions shall identify and analyse seasoning effects.

#### **5.2.2 Requirements specific to own-LGD estimates**

61. The LGD estimates shall be based on the average economic loss of all observed defaults within the data sources (referred to as the default weighted average) and shall not be the average of average annual loss rates. If LGDs by facility grade are expected to fluctuate over the economic cycle, the institution shall use LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. Estimates of LGD shall have a margin of conservatism appropriate to the likely range of errors in the estimate. For Retail exposures LGD estimates may be derived from realised losses and appropriate estimates of PDs.
62. An institution shall consider the extent of any dependence between the risk of the borrower with that of the collateral or collateral provider. Cases where there is a significant degree of dependence shall be addressed in a conservative manner.
63. Currency mismatches between the underlying obligation and the collateral shall be treated conservatively in the institution's assessment of LGD.
64. To the extent, that LGD estimates take into account the existence of collateral, LGD estimates shall not solely be based on the collateral's estimated market value. LGD estimates shall take into account the effect of the potential inability of institutions to expeditiously gain control of their collateral and liquidate it.
65. To the extent, that an institution does not meet the minimum requirements for collateral laid down in Section III any amount recovered from such collateral shall not be taken into account in its LGD estimates.
66. For the specific case of facilities already in default, the institution shall use its best estimate of expected loss for each facility given current economic circumstances and facility status.

67. To the extent that unpaid late fees have been capitalised in the institution's income statement, they shall be added to the institution's measure of exposure and loss.

#### **Corporate, institution and sovereign exposures, additional standards**

68. Estimates of LGD shall be based on data over a minimum of seven years for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period shall be used.

#### **Retail exposures, additional standards**

69. Estimates of LGD shall be based on data over a minimum of five years. An institution need not give equal importance to historic data if it can demonstrate to its competent authority that more recent data is a better predictor of loss rates.

#### **5.2.3. Requirements specific to own-EAD estimates**

70. Institutions shall have established procedures in place for the estimation of EAD for off-balance sheet items. These shall specify the estimates of EAD to be used for each facility type. Institutions estimates of EAD shall reflect the possibility of additional drawings by the borrower up to and after the time a default event is triggered. Where estimates of EAD differ by facility type, the delineation of these facilities shall be clear and unambiguous.
71. Institutions shall assign an estimate of EAD for each facility. It shall be an estimate of the long-run default-weighted average EAD for similar facilities and borrowers over a sufficiently long period of time, but with a margin of conservatism appropriate to the likely range of errors in the estimate. The EAD estimate shall incorporate a larger margin of conservatism where a stronger positive correlation can reasonably be expected between the default frequency and the magnitude of EAD. For exposures which EAD estimates are volatile over the economic cycle, the institution shall use EAD estimates that are appropriate for an economic downturn, if these are more conservative than the long-run average.
72. In arriving at estimates of EAD institutions shall consider their specific policies and strategies adopted in respect of account monitoring and payment processing. Institutions shall also consider its ability and willingness to prevent further drawings in circumstances short of payment default, such as covenant violations or other technical default events.
73. Institutions shall have adequate systems and procedures in place to monitor facility amounts, current outstandings against committed lines and changes in outstandings per borrower and per grade. The institution shall be able to monitor outstanding balances on a daily basis.

### **Corporate, institution, and sovereign exposures, additional standards**

74. Estimates of LGD shall be based on data over a minimum of seven years for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period shall be used.

### **Retail exposures, additional standards**

75. Estimates of EAD shall be based on data over a minimum of five years. An institution need not give equal importance to historic data if it can demonstrate to its competent authority that more recent data is a better predictor of drawdowns.

### **5.2.4. Minimum requirements for assessing effect of guarantees and credit derivatives**

#### **Corporate, institution and sovereign exposures where own estimates of LGD are used and retail exposures.**

76. The requirements in this sub-section do not apply for guarantees provided by institutions and sovereigns if the institution has received approval to apply the Standardised Approach permanently for exposures to institutions and sovereigns. Then the requirements in Section III will apply.

### **Operating requirements**

77. For retail exposures, where guarantees exist, either in support of an individual obligation or a pool of exposures, an institution may reflect the risk reducing effect either through its estimate of PD or LGD, provided this is done consistently.
78. All guarantors recognised for regulatory capital purposes shall be assigned a borrower rating at the outset and on an ongoing basis. An institution shall follow all minimum requirements for assigning borrower ratings set out in this Directive, including the regular monitoring of the guarantors condition and ability and willingness to honour its obligations. Consistent with the requirements in paragraphs 31-33, an institution shall retain all relevant information on the borrower absent the guarantee and the guarantor. For retail guarantees, these requirements also apply to the assignment of an exposure to a pool, and the estimation of PD.

### **Eligible guarantors and guarantees**

79. Institutions shall have clearly specified criteria for the types of guarantors it shall recognise for regulatory capital purposes.
80. The guarantee shall be evidenced in writing, non-cancellable on the part of the guarantor, in force until the debt is satisfied in full (to the extent of the amount and tenor of the guarantee) and legally enforceable against the guarantor in a jurisdiction where the guarantor has assets to attach and enforce a judgement. Guarantees prescribing conditions under which the guarantor may not be obliged to perform (conditional guarantees) may be recognised subject to approval of

competent authorities. Institution shall demonstrate that the assignment criteria adequately address any potential reduction in the risk mitigation effect.

### **Adjustment criteria**

81. An institution shall have clearly specified criteria for adjusting borrower grades or LGD estimates, and in the case of retail and eligible purchased receivables, the process of allocating exposures to pools, to reflect the impact of guarantees for regulatory capital purposes. These criteria shall be as detailed as the criteria for assigning exposures to grades consistent with paragraphs 13-14, and shall follow all minimum requirements for assigning borrower or facility ratings set out in this Directive.
82. The criteria shall be plausible and intuitive. They shall address the guarantor's ability and willingness to perform under the guarantee, the likely timing of any payments from the guarantor, the degree to which the guarantor's ability to perform under the guarantee is correlated with the borrower's ability to repay, and the extent to which residual risk to the borrower remains.

### **Credit derivatives**

83. The minimum requirements for guarantees in this section xx shall also apply also for single-name credit derivatives. The criteria used for assigning adjusted borrower grades or LGD estimates for exposures hedged with credit derivatives shall require that the asset on which the protection is based, the reference asset, is equal to the underlying asset, unless the conditions outlined in Section III are met. For retail and eligible purchased receivables, this para applies to the process of allocating exposures to pools.
84. The criteria shall address the payout structure of the credit derivative and conservatively assess the impact this has on the level and timing of recoveries. The institution shall consider the extent to which other forms of residual risk remain.

### **5.2.5 Requirements specific to estimating PD and LGD (or EL) for qualifying purchased receivables**

85. In addition to the minimum requirements in this section, the following minimum requirements shall apply for quantifying the risk of eligible purchased receivables:

#### **(i) Minimum requirements for estimating PD and LGD (or EL)**

86. Institutions applying the IRB treatment of dilution risk or the top-down treatment of default risk for eligible purchased receivables (i.e. follow the requirements on rating systems for retail exposures set out in this Directive) shall meet the following minimum requirements.
87. The purchasing institution shall group the eligible purchased receivables into sufficiently homogeneous risk buckets to achieve accurate and consistent estimates of PD and LGD, or EL, as regards default risk and EL as regards dilution risk. The grouping shall reflect the seller's underwriting practices and the

heterogeneity of its customers. Institutions shall comply with the standards for rating systems for retail exposures in this Directive. The estimates shall reflect all relevant information available to the purchasing institution regarding the quality of the underlying receivables, including data for similar pools provided by the seller, by the purchasing institution, or by external sources. The purchasing institution shall verify any data relied upon from the seller.

(ii) Minimum operational requirements

88. To qualify for the top-down treatment of default risk, the receivables pool and overall lending relationship shall be closely monitored and controlled. The institution shall meet the minimum requirements set out in paragraphs 89-93

**Legal certainty**

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

**Effectiveness of monitoring systems**

90. The institution shall monitor both the quality of the receivables and the financial condition of the seller and servicer. In particular:
- The institution shall assess the correlation among the quality of the receivables and the financial condition of both the seller and servicer, and have in place internal policies and procedures that provide adequate safeguards to protect against such contingencies, including the assignment of an internal risk rating for each seller and servicer.
  - The institution shall have clear and effective policies and procedures for determining seller and servicer eligibility. The institution or its agent shall conduct periodic reviews of sellers and servicers in order to verify the accuracy of reports from the seller or servicer, detect fraud or operational weaknesses, and verify the quality of the seller's credit policies and servicer's collection policies and procedures. The findings of these reviews shall be well documented.
  - The institution shall assess the characteristics of the receivables pool, including interdependencies between the performance of individual exposures in the pool; over-advances; history of the seller's arrears, bad debts, and bad debt allowances; payment terms, and potential contra accounts.
  - The institution shall have effective policies and procedures for monitoring on an aggregate basis single-obligor concentrations both within and across receivables pools. Significant exposures shall be individually reviewed.

- The institution shall receive timely and sufficiently detailed reports of receivables ageings and dilutions to ensure compliance with the institution's eligibility criteria and advancing policies governing purchased receivables, and provide an effective means with which to monitor and confirm the seller's terms of sale and dilution.

### **Effectiveness of work-out systems**

91. The institution shall have systems and procedures for detecting deteriorations in the seller's financial condition and receivables quality at an early stage, and for addressing emerging problems pro-actively. In particular,
- The institution shall have clear and effective policies, procedures, and information systems to monitor compliance with all contractual terms of the facility and the institution's internal policies governing advance rates and receivables eligibility. The institution's systems shall track covenant violations and waivers as well as exceptions to established policies and procedures. The institution shall have effective policies and procedures for detecting, approving, monitoring, and correcting over-advances. The institution shall have effective policies and procedures for dealing with financially weakened sellers or servicers and deteriorations in the quality of receivables pools. These policies shall include early termination triggers in revolving facilities and other covenant protections, a structured and disciplined approach to dealing with covenant violations, and clear and effective policies and procedures for initiating legal actions and dealing with problem receivables.

### **Effectiveness of systems for controlling collateral, credit availability, and cash**

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

### **Compliance with the institution's internal policies and procedures**

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

## **6 VALIDATION OF INTERNAL ESTIMATES**

94. Institutions shall have a robust system in place to validate the accuracy and consistency of rating systems, processes, the estimation of all relevant risk parameters. An institution shall demonstrate to its competent authority that the internal validation process enables it to assess the performance of internal rating and risk estimation systems consistently and meaningfully.
95. Institutions shall regularly compare realised default rates with estimated PDs for each grade and where realised default rates are outside the expected range for that grade institutions shall specifically analyse the reasons for the deviation. Institutions using the Advanced Approach shall complete such analysis for their estimates of LGDs and EADs. Such comparisons shall make use of historical data that are over as long a period as possible. The methods and data used in such comparisons by the institution shall be clearly documented by the institution. This analysis and documentation shall be updated at least annually.
96. Institutions shall also use other quantitative validation tools and comparisons with relevant external data sources. The analysis shall be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. Institutions' internal assessments of the performance of their own rating systems shall be based on as long a period as possible.
97. Changes in methods and data (sources and periods) shall be clearly and thoroughly documented.
98. Institutions shall have sound internal standards for situations where deviations in realised PDs, LGDs, EADs and total losses where EL is used from expectations become significant enough to call the validity of the estimates into question. These standards shall take account of business cycles and similar systematic variability in default experience. Where realised values continue to be higher than expected values, institutions shall revise estimates upward to reflect their default and loss experience.
99. Institutions on the Foundation Approach shall compare realised LGDs and EADs to the parameters set by the competent authorities.

## **7 REQUIREMENTS FOR THE RECOGNITION OF LEASING UNDER THE ADVANCED APPROACH**

100. Leases other than those that expose the institution to residual value risk (see next paragraph) will be accorded the same treatment as exposures collateralised by the same type of collateral.
101. Leases that expose the institution to residual value risk will be treated in the following manner. Residual value risk is the institution's exposure to potential loss due to the fair value of the equipment declining below its residual estimate at lease inception.
  - The discounted lease payment stream will receive a risk weight appropriate for the lessee's financial strength (PD) and supervisory or own-estimate of LGD, which ever is appropriate.

- The residual value will be risk weighted at 100%.

## **8 CALCULATION OF CAPITAL CHARGES FOR EQUITY EXPOSURES UNDER THE INTERNAL MODELS APPROACH**

### **8.1. Eligibility**

102. Competent authorities shall only allow an institution to use the internal models approach, if the institution meets the minimum requirements in this section xx.

### **8.2 Capital charge and risk quantification**

103. Institutions shall meet for the purpose of calculating minimum capital charges the following standards:
  - a. The estimate of potential loss shall be robust to adverse market movements relevant to the long-term risk profile of the institution's specific holdings. The data used to represent return distributions shall reflect the longest sample period for which data is available and meaningful in representing the risk profile of the institution's specific equity holdings. The data used shall be sufficient to provide conservative, statistically reliable and robust loss estimates that are not based purely on subjective or judgmental considerations. Institutions shall demonstrate to competent authorities that the shock employed provides a conservative estimate of potential losses over a relevant long-term market or business cycle. The institution shall combine empirical analysis of available data with adjustments based on a variety of factors in order to attain model outputs that achieve appropriate realism and conservatism. In constructing Value at Risk (VaR) models estimating potential quarterly losses, institutions may use quarterly data or convert shorter horizon period data to a quarterly equivalent using an analytically appropriate method supported by empirical evidence and through a well-developed and well-documented thought process and analysis. Such an approach shall be applied conservatively and consistently over time. Where only limited relevant data is available the institution shall add appropriate margins of conservatism in order to avoid over-optimism.
  - b. The models used shall be able to capture adequately all of the material risks embodied in equity returns including both the general market risk and specific risk exposure of the institution's equity portfolio. The internal models shall adequately explain historical price variation, captures both the magnitude and changes in the composition of potential concentrations, and is robust to adverse market environments. The population of risk exposures represented in the data used for estimation shall be closely matched to or at least comparable with those of the institution's equity exposures.
  - c. The internal model shall be appropriate for the risk profile and complexity of an institution's equity portfolio. Where an institution has material holdings with values that are highly non-linear in nature the internal models shall be designed to capture appropriately the risks associated with such instruments.

- d. Mapping of individual positions to proxies, market indices, and risk factors shall be plausible, intuitive, and conceptually sound.
- e. Institutions shall demonstrate through empirical analyses the appropriateness of risk factors, including their ability to cover both general and specific risk.
- f. The estimates of the return volatility of equity investments shall incorporate relevant and available data, information, and methods. Independently reviewed internal data or data from external sources (including pooled data) shall be used.
- g. A rigorous and comprehensive stress-testing programme shall be in place.

### **8.3 Risk management process and controls**

104. Institutions' overall risk management practices used to manage their banking book equity investments shall be consistent with the business practices recognised as sound by the competent authority. With regard to the development and use of internal models for capital purposes, institutions shall establish policies, procedures, and controls to ensure the integrity of the model and modelling process used to derive regulatory capital standards. These policies, procedures, and controls shall include the following:
- a. Full integration of the internal model into the overall management information systems of the institution and in the management of the banking book equity portfolio. Internal models shall be fully integrated into the institution's risk management infrastructure if they are particularly used in: 1) measuring and assessing equity portfolio performance (including the risk-adjusted performance); 2) allocating economic capital to equity holdings and evaluating overall capital adequacy and 3) the investment management process.
  - b. Established management systems, procedures, and control functions for ensuring the periodic and independent review of all elements of the internal modelling process, including approval of model revisions, vetting of model inputs, and review of model results, such as direct verification of risk computations. These reviews shall assess the accuracy, completeness, and appropriateness of model inputs and results and focus on both finding and limiting potential errors associated with known weaknesses and identifying unknown model weaknesses. Such reviews may be conducted by an internal independent unit, or by an independent external third party.
  - c. Adequate systems and procedures for monitoring investment limits and the risk exposures of equity investments.
  - d. The units responsible for the design and application of the model shall be functionally independent from the units responsible for managing individual investments.
  - e. Parties responsible for any aspect of the modelling process shall be adequately qualified. Management shall allocate sufficient skilled and competent resources to the modelling function.

#### 8.4 Validation and documentation

105. Institutions employing internal models for regulatory capital purposes shall have in place a robust system to validate the accuracy and consistency of the model and its inputs. They shall also fully document all material elements of their internal models and modelling process. The modelling process itself as well as the systems used to validate internal models including all supporting documentation, validation results, and the findings of internal and external reviews are subject to oversight and review by the institution's competent authority.
106. Validation – Institutions shall have a robust system in place to validate the accuracy and consistency of their internal models and modelling processes. An institution shall demonstrate to its competent authority that the internal validation process enables it to assess the performance of its internal model and processes consistently and meaningfully.
107. Institutions shall regularly compare actual return performance (computed using realised and unrealised gains and losses) with modelled estimates and be able to demonstrate that such returns are within the expected range for the portfolio and individual holdings. Such comparisons shall make use of historical data that is over as long a period as possible. The methods and data used in such comparisons shall be clearly documented by the institution. This analysis and documentation shall be updated at least annually.
108. Institutions shall make use of other quantitative validation tools and comparisons with external data sources. The analysis shall be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. Institutions' internal assessments of the performance of their own model shall be based on long data histories, covering a range of economic conditions, and ideally one or more complete business cycles.
109. Institutions shall demonstrate that quantitative validation methods and data are consistent through time. Changes in estimation methods and data (both data sources and periods covered) shall be clearly and thoroughly documented.
110. Since the evaluation of actual performance to expected performance over time provides a basis for institutions to refine and adjust internal models on an ongoing basis, institutions using internal models shall have established well-articulated model review standards. These standards are especially important for situations where actual results significantly deviate from expectations and where the validity of the internal model is called into question. These standards shall take account of business cycles and similar systematic variability in equity returns. All adjustments made to internal models in response to model reviews shall be well documented and consistent with the institution's model review standards.
111. To facilitate model validation through back-testing on an ongoing basis, institutions using the Internal Model Approach shall construct and maintain appropriate data bases on the actual quarterly performance of their equity investments as well on the estimates derived using their internal models. Institutions shall also back-test the volatility estimates used within their internal

models and the appropriateness of the proxies used in the model. Competent authorities may ask institutions to scale their quarterly forecasts to a different, in particular shorter, time horizon, store performance data for this time horizon and perform backtests on this basis.

112. Documentation – The burden is on the institution to satisfy its competent authority that a model has good predictive power and that regulatory capital requirements shall not be distorted as a result of its use. Accordingly, all critical elements of an internal model and the modelling process shall be fully and adequately documented. Institutions shall document in writing their internal model’s design and operational details. The documentation shall demonstrate institutions’ compliance with the minimum quantitative and qualitative standards, and shall address topics such as the application of the model to different segments of the portfolio, estimation methodologies, responsibilities of parties involved in the modelling, and the model approval and model review processes. In particular, the documentation shall address the following points:
- a) An institution shall document the rationale for its choice of its internal modelling methodology and shall be able to provide analyses demonstrating that the model and modelling procedures are likely to result in estimates that meaningfully identify the risk of the institution’s equity holdings. Internal models and procedures shall be periodically reviewed to determine whether they remain fully applicable to the current portfolio and to external conditions. In addition, an institution shall document a history of major changes in the model over time and changes made to the modelling process subsequent to the last review of the competent authorities. If changes have been made in response to the institution’s internal review standards, the institution shall document that these changes are consistent with its internal model review standards.
  - b) In documenting their internal models institutions shall:
    - provide a detailed outline of the theory, assumptions and/or mathematical and empirical basis of the parameters, variables, and data source(s) used to estimate the model;
    - establish a rigorous statistical process (including out-of-time and out-of-sample performance tests) for validating the selection of explanatory variables; and
    - indicate circumstances under which the model does not work effectively.
  - c) Where proxies and mapping are employed, institutions shall have performed and documented rigorous analysis demonstrating that all chosen proxies and mappings are sufficiently representative of the risk of the equity holdings to which they correspond. The documentation shall show the relevant factors used in mapping individual investments into proxies. In summary, institutions shall demonstrate that the proxies and mappings employed:
    - Are adequately comparable to the underlying holding or portfolio;
    - Are derived using historical economic and market conditions that are relevant to the underlying holdings or, where not, that an appropriate adjustment has been made; and,

- Are robust estimates of the potential risk of the underlying holding.

## **9 DISCLOSURE REQUIREMENTS**

113. In order to be eligible for the IRB Approach, institutions shall meet the disclosure requirements set out in Annex L 3

## ANNEX D-6

### **Recognition of provisions**

1. The amount equal to 12.5 times the sum of specific provisions and partial write-offs for each asset class may be used to charge against the EL portion of the risk weighted assets in that asset class. Discounts on purchased exposures shall be treated in the same manner as partial write-offs. Premiums on purchased exposures shall be multiplied by 12.5 and added to the EL portion of the risk-weighted assets.
2. For defaulted exposures, the amount equal to 12.5 times the sum of specific provisions and partial write-offs that exceeds the EL portion of risk weighted assets of individual exposures may be used to cover the EL portion of risk weighted assets of other defaulted exposures in the same asset class. In the case of retail exposures, this rule applies for each retail sub-asset class.
3. For non-defaulted assets, any amount of specific provisions and partial write-offs that exceed the EL capital charge for the underlying exposures shall not be used to cover any other capital charges.
4. The amount equal to 12.5 times the amount of portfolio-specific general provisions (such as country risk provisions or general provisions taken against credit risk in specific sectors) may be used to charge against the EL portion of the risk-weighted assets of the pool of exposures against which these provisions have been taken.
5. The amount equal to 12.5 times the amount of general loan loss provisions in excess of the amount included in additional own funds may be used to charge against the EL portion of risk-weighted assets to the extent that the EL capital charge, after offsetting specific provisions and portfolio-specific general provisions, exceeds the maximum amount of general loan loss provisions eligible for inclusion in additional own funds.
6. The EL portion of risk-weighted assets shall be the following:
  - For qualifying revolving retail exposures it shall be 12.5 times PD times LGD times EAD minus 12.5 times FMI as defined in Annex D-2, paragraph 5.
  - For SL exposures where institutions use the Slotting Criteria Approach and exposures are slotted into a non-default category, it shall be 15.625% of risk weighted assets.
  - For SL exposures where institutions use the Slotting Criteria Approach and exposures are slotted into the default category, it shall be 100% of risk weighted assets.
  - For equity exposures it shall be 0.

- For exposures to sovereigns, institutions, corporates, other retail exposures and retail mortgage exposures it shall be 12.5 times PD times LGD times EAD.
- For all other exposures it shall be 12.5 times PD times LGD times EAD.

**ANNEX D-7**

**Supervisory Slotting Criteria for Specialised Lending**

**Table 1 - Supervisory Rating Grades for Project Finance Exposures**

	Strong	Good	Satisfactory	Weak
<b>Financial strength</b>				
Market conditions	Few competing suppliers OR substantial and durable advantage in location, cost, or technology. Demand is strong and growing.	Few competing suppliers OR better than average location, cost, or technology but this situation may not last. Demand is strong and stable.	Project has no advantage in location, cost, or technology. Demand is adequate and stable.	Project has worse than average location, cost, or technology. Demand is weak and declining.
Financial ratios (e.g. <i>debt service coverage ratio (DSCR)</i> , <i>loan life coverage ratio (LLCR)</i> , <i>project life coverage ratio (PLCR)</i> , and <i>debt-to-equity ratio</i> .)	Strong financial ratios considering the level of project risk; very robust economic assumptions.	Strong to acceptable financial ratios considering the level of project risk; robust project economic assumptions.	Standard financial ratios considering the level of project risk.	Aggressive financial ratios considering the level of project risk.
Stress analysis	The project can meet its financial obligations under sustained, severely stressed economic or sectoral conditions.	The project can meet its financial obligations under normal stressed economic or sectoral conditions. The project is only likely to default under severe economic conditions.	The project is vulnerable to stresses that are not uncommon through an economic cycle, and may default in a normal downturn.	The project is likely to default unless conditions improve soon.
Reserve funds (debt service, O&M, renewal and replacement, unforeseen events, etc)	Longer than average coverage period, all reserve funds fully funded in cash or letters of credit from highly rated	Average coverage period, all reserve funds fully funded.	Average coverage period, all reserve funds fully funded.	Shorter than average coverage period, reserve funds funded from operating cash flows.

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institution.

	<b>Strong</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Weak</b>
<b>Political and legal environment</b>				
Political risk, including transfer risk, considering project type and mitigants	Very low exposure; strong mitigation instruments, if needed.	Low exposure; satisfactory mitigation instruments, if needed.	Moderate exposure; fair mitigation instruments.	High exposure; no or weak mitigation instruments
<b>Force majeure risk (war, civil unrest, etc),</b>	Low exposure.	Acceptable exposure	Standard protection	Significant risks, not fully mitigated
Government support and project's importance for the country over the long term	Project of strategic importance for the country (preferably export-oriented). Strong support from Government	Project considered important for the country. Good level of support from Government	Project may not be strategic but brings unquestionable benefits for the country. Support from Government may not be explicit.	Project not key to the country. No or weak support from Government
Stability of legal and regulatory environment (risk of change in law)	Favourable and stable regulatory environment over the long term	Favourable and stable regulatory environment over the medium term	Regulatory changes can be predicted with a fair level of certainty	Current or future regulatory issues may affect the project
Acquisition of all necessary supports and approvals such relief from local content laws	Strong	Satisfactory	Fair	Weak
Enforceability of contracts, collateral and security	Contracts, collateral and security are enforceable.	Contracts, collateral and security are enforceable.	Contracts, collateral and security are considered enforceable even if certain non-key issues may exist.	There are unresolved key issues in respect if actual enforcement of contracts, collateral and security.

	Strong	Good	Satisfactory	Weak
<b>Transaction characteristics</b>				
<i>Design and technology risk</i>	Fully proven technology and design	Fully proven technology and design	Proven technology and design – start-up issues are mitigated by a strong completion package	Unproven technology and design / Technology issues exist and/or complex design
<i>Construction risk</i>				
Permitting and siting	All permits have been obtained.	Some permits are still outstanding but their receipt is considered very likely.	Some permits are still outstanding but the permitting process is well defined and they are considered routine.	Key permits still need to be obtained and are not considered routine. Significant conditions may be attached.
Type of construction contract	Fixed-price date-certain turnkey construction EPC (engineering and procurement contract)	Fixed-price date-certain turnkey construction EPC	Fixed-price date-certain turnkey construction contract with one or several contractors	No or partial fixed-price turnkey contract and/or interfacing issues with multiple contractors
Completion guarantees	Substantial liquidated damages supported by financial substance <b>AND/OR</b> strong completion guarantee from sponsors with excellent financial standing	Significant liquidated damages supported by financial substance <b>AND/OR</b> completion guarantee from sponsors with good financial standing	Adequate liquidated damages supported by financial substance <b>AND/OR</b> completion guarantee from sponsors with good financial standing	Inadequate liquidated damages or not supported by financial substance or weak completion guarantees.
Track record and financial strength of contractor in constructing similar projects.	Strong	Good	Satisfactory	Weak

	Strong	Good	Satisfactory	Weak
<i>Operating risk</i>				
Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts.	Long-term O&M contract, and/or O&M reserve accounts.	Limited O&M contract or O&M reserve account.	No O&M contract: risk of high operational cost overruns beyond mitigants.
Operator's expertise, track record, and financial strength	Very strong, OR committed technical assistance of the sponsors	Strong	Acceptable	Limited/weak, or local operator dependent on local authorities
<i>Off-take risk</i>				
(a) If there is a take-or-pay or fixed-price off-take contract:	Excellent creditworthiness of off-taker; strong termination clauses; tenor of contract comfortably exceeds the maturity of the debt	Good creditworthiness of off-taker; strong termination clauses; tenor of contract exceeds the maturity of the debt	Acceptable financial standing of off-taker; normal termination clauses; tenor of contract generally matches the maturity of the debt	Weak off-taker; weak termination clauses; tenor of contract exceeds the maturity of the debt
(b) If there is no take-or-pay or fixed-price off-take contract:	Project produces essential services or a commodity sold widely on a world market; output can readily be absorbed at projected prices even at lower than historic market growth rates.	Project produces essential services or a commodity sold widely on a regional market that will absorb it at projected prices at historical growth rates.	Commodity is sold on a limited market that may absorb it only at higher than projected prices.	Project output is demanded by only one or a few buyers OR is not generally sold on an organized market.

	<b>Strong</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Weak</b>
<i>Supply risk</i>				
Price, volume and transportation risk of feed-stocks; supplier's track record and financial strength	Long-term supply contract with supplier of excellent financial standing.	Long-term supply contract with supplier of good financial standing.	Long-term supply contract with supplier of good financial standing – a degree of price risk may remain.	Short-term supply contract or long-term supply contract with financially weak supplier – a degree of price risk definitely remains.
Reserve risks (e.g. natural resource development)	Independently audited, proven and developed reserves well in excess of requirements over lifetime of the project	Independently audited, proven and developed reserves in excess of requirements over lifetime of the project	Proven reserves can supply the project adequately through the maturity of the debt.	Project relies to some extent on potential and undeveloped reserves.
<i>Financial structure</i>				
Duration of the credit compared to the duration of the project	Useful life of the project significantly exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project may not exceed tenor of the loan.
Amortisation schedule	Amortising debt	Amortising debt	Amortising debt repayments with limited bullet payment.	Bullet repayment or amortising debt repayments with high bullet repayment.

	<b>Strong</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Weak</b>
<b>Strength of Sponsor</b>				
Sponsor's track record, financial strength, and country/sector experience	Strong sponsor with excellent track record and high financial standing	Good sponsor with satisfactory track record and good financial standing	Adequate sponsor with adequate track record and good financial standing	Weak sponsor with no or questionable track record and/or financial weaknesses
Sponsor support, as evidenced by equity, ownership clause and incentive to inject additional cash if necessary	Strong. Project is highly strategic for the sponsor (core business – long-term strategy)	Good. Project is strategic for the sponsor (core business – long-term strategy)	Acceptable. Project is considered important for the sponsor (core business)	Limited. Project is not key to sponsor's long-term strategy or core business
<i>Security Package</i>				
Assignment of contracts and accounts	Fully comprehensive	Comprehensive	Acceptable	Weak
Pledge of assets, taking into account quality, value and liquidity of assets	First perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Acceptable security interest in all project assets, contracts, permits and accounts necessary to run the project	Little security or collateral for lenders; weak negative pledge clause
Lender's control over cash flow (e.g. cash sweeps, independent escrow accounts)	Strong	Satisfactory	Fair	Weak
Strength of the covenant package (mandatory prepayments, payment deferrals, payment cascade, dividend restrictions...)	Covenant package is strong for this type of project Project may issue no additional debt.	Covenant package is satisfactory for this type of project Project may issue extremely limited additional debt.	Covenant package is fair for this type of project Project may issue limited additional debt.	Covenant package is insufficient for this type of project Project may issue unlimited additional debt.

**Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures and  
High-Volatility Commercial Real Estate Exposures**

	Strong	Good	Satisfactory	Weak
<b>Financial strength</b>				
Market conditions	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is equal or lower than forecasted demand.	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is roughly equal to forecasted demand.	Market conditions are roughly in equilibrium. Competitive properties are coming on the market and others are in the planning stages. The project's design and capabilities may not be state of the art compared to new projects.	Market conditions are weak. It is uncertain when conditions will improve and return to equilibrium. The project is losing tenants at lease expiration. New lease terms are less favourable compared to those expiring.
Financial ratios and advance rate	The property's debt service coverage ratio (DSCR) is considered strong (DSCR is not relevant for the construction phase) and its loan to value ratio (LTV) is considered low given its property type. Where a secondary market exists, the transaction is underwritten to market standards.	The DSCR (not relevant for development real estate) and LTV are satisfactory. Where a secondary market exists, the transaction is underwritten to market standards.	The property's DSCR has deteriorated and its value has fallen, increasing its LTV.	The property's DSCR has deteriorated significantly and its LTV is well above underwriting standards for new loans.
Stress analysis	The property's resources, contingencies and liability structure allow it to meet its financial obligations during a period of severe financial stress (e.g. interest rates, economic growth).	The property can meet its financial obligations under a sustained period of financial stress (e.g. interest rates, economic growth). The property is only likely to default under severe economic conditions.	During an economic downturn, the property would suffer a decline in revenue that would limit its ability to fund capital expenditures and significantly increase the risk of default.	The property's financial condition is strained and is likely to default unless conditions improve in the near term.

	Strong	Good	Satisfactory	Weak
Cash-flow predictability				
(a) For complete and stabilised property.	The property's leases are long-term with creditworthy tenants and their maturity dates are scattered. The property has a track record of tenant retention upon lease expiration. Its vacancy rate is low. Expenses (maintenance, insurance, security, and property taxes) are predictable.	Most of the property's leases are long-term, with tenants that range in creditworthiness. The property experiences a normal level of tenant turnover upon lease expiration. Its vacancy rate is low. Expenses are predictable.	Most of the property's leases are medium rather than long-term with tenants that range in creditworthiness. The property experiences a moderate level of tenant turnover upon lease expiration. Its vacancy rate is moderate. Expenses are relatively predictable but vary in relation to revenue.	The property's leases are of various terms with tenants that range in creditworthiness. The property experiences a very high level of tenant turnover upon lease expiration. Its vacancy rate is high. Significant expenses are incurred preparing space for new tenants.
(b) For complete but not stabilised property	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Most Leasing activity is within projections; however, stabilisation will not occur for some time.	Market rents do not meet expectations. Despite achieving target occupancy rate, cash flow coverage is tight due to disappointing revenue.
(c) For construction phase	The property is entirely pre-leased through the tenor of the loan or pre-sold to an investment grade tenant or buyer, or the institution has a binding commitment for take-out financing from an investment grade lender.	The property is entirely pre-leased or pre-sold to a creditworthy tenant or buyer, or the institution has a binding commitment for permanent financing from a creditworthy lender	Leasing activity is within projections but the building may not be pre-leased and there may not exist a take-out financing. The institution may be the permanent lender	The property is deteriorating due to cost overruns, market deterioration, tenant cancellations or other factors. There may be a dispute with the party providing the permanent financing.
<i>Asset characteristics</i>				
Location	Property is located in highly desirable location that is convenient to services that tenants desire.	Property is located in desirable location that is convenient to services that tenants desire.	The property location lacks a competitive advantage.	The property's location, configuration, design and maintenance have contributed to the property's difficulties.

	<b>Strong</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Weak</b>
Design and condition	Property is favoured due to its design, configuration, and maintenance, and is highly competitive with new properties.	Property is appropriate in terms of its design, configuration and maintenance. The property's design and capabilities are competitive with new properties.	Property is adequate in terms of its configuration, design and maintenance.	Weaknesses exist in the property's configuration, design or maintenance.
Property is under construction	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified.	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified.	Construction budget is adequate and contractors are ordinarily qualified.	Project is over budget or unrealistic given its technical hazards. Contractors may be under qualified.
<b>Strength of Sponsor/Developer</b>				
Financial capacity and willingness to support the property.	The sponsor/developer made a substantial cash contribution to the construction or purchase of the property. The sponsor/developer has substantial resources and limited direct and contingent liabilities. The sponsor/developer's properties are diversified geographically and by property type.	The sponsor/developer made a material cash contribution to the construction or purchase of the property. The sponsor/developer's financial condition allows it to support the property in the event of a cash flow shortfall. The sponsor/developer's properties are located in several geographic regions.	The sponsor/developer's contribution may be in-material or non-cash. The sponsor/developer is average to below average in financial resources.	The sponsor/developer lacks capacity or willingness to support the property.
Reputation and track record with similar properties.	Experienced management and high sponsors' quality. Strong reputation and lengthy and successful record with similar properties.	Appropriate management and sponsors' quality. The sponsor or management has a successful record with similar properties.	Moderate management and sponsors' quality. Management or sponsor track record does not raise serious concerns.	Ineffective management and substandard sponsors' quality. Management and sponsor difficulties have contributed to difficulties in managing properties in the past.

	Strong	Good	Satisfactory	Weak
Relationships with relevant real estate actors	Strong relationships with leading actors such as leasing agents.	Proven relationships with leading actors such as leasing agents.	Adequate relationships with leasing agents and other parties providing important real estate services.	Poor relationships with leasing agents and/or other parties providing important real estate services.
<i>Security Package</i>				
Nature of Lien	Perfected first lien. <sup>1</sup>	Perfected first lien. <sup>3</sup>	Perfected first lien. <sup>3</sup>	Ability of lender to foreclose is constrained.
Assignment of rents (for projects leased to long-term tenants)	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to remit rents directly to the lender, such as a current rent roll and copies of the project's leases.	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases.	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases.	The lender has not obtained an assignment of the leases or has not maintained the information necessary to readily provide notice to the building's tenants.
Quality of the insurance coverage	Appropriate	Appropriate	Appropriate	Substandard

<sup>1</sup> Lenders in some markets extensively use loan structures that include junior liens. Junior liens may be indicative of this level of risk if the total LTV inclusive of all senior positions does not exceed a typical first loan LTV.

**Table 3 - Supervisory Rating Grades for Object Finance Exposures**

	Strong	Good	Satisfactory	Weak
<b>Financial strength</b>				
Market conditions	Demand is strong and growing, strong entry barriers, low sensitivity to changes in technology and economic outlook.	Demand is strong and stable. Some entry barriers, some sensitivity to changes in technology and economic outlook.	Demand is adequate and stable, limited entry barriers, significant sensitivity to changes in technology and economic outlook.	Demand is weak and declining, vulnerable to changes in technology and economic outlook, highly uncertain environment.
Financial ratios (debt service coverage ratio and loan-to-value ratio)	Strong financial ratios considering the type of asset. Very robust economic assumptions	Strong / acceptable financial ratios considering the type of asset. Robust project economic assumptions.	Standard financial ratios for the asset type.	Aggressive financial ratios considering the type of asset.
Stress analysis	Stable long-term revenues, capable of withstanding severely stressed conditions through an economic cycle.	Satisfactory short-term revenues. Loan can withstand some financial adversity. Default is only likely under severe economic conditions.	Uncertain short-term revenues. Cash flows are vulnerable to stresses that are not uncommon through an economic cycle. The loan may default in a normal downturn.	Revenues subject to strong uncertainties; even in normal economic conditions the asset may default, unless conditions improve.
Market liquidity	Market is structured on a worldwide basis; assets are highly liquid.	Market is worldwide or regional; assets are relatively liquid.	Market is regional with limited prospects in the short term, implying lower liquidity.	Local market and/or poor visibility. Low or no liquidity, particularly on niche markets.

	Strong	Good	Satisfactory	Weak
<b>Political and legal environment</b>				
Political risk, including transfer risk	Very low; strong mitigation instruments, if needed.	Low; satisfactory mitigation instruments, if needed.	Moderate; fair mitigation instruments.	High; no or weak mitigation instruments
<b>Legal and regulatory risks</b>	Jurisdiction is favourable to repossession and enforcement of contracts.	Jurisdiction is favourable to repossession and enforcement of contracts.	Jurisdiction is generally favourable to repossession and enforcement of contracts, even if repossession might be long and/or difficult.	Poor or unstable legal and regulatory environment. Jurisdiction may make repossession and enforcement of contracts lengthy or impossible.
<b>Transaction characteristics</b>				
Financial structure				
Financing term compared to the economic life of the asset	Full payout profile/minimum balloon. No grace period	Balloon more significant, but still at satisfactory levels.	Important balloon with potentially grace periods	Repayment in fine or high balloon
Operating risk				
<b>Permits / licensing</b>	All permits have been obtained; asset meets current and foreseeable safety regulations	All permits obtained or in the process of being obtained; asset meets current and foreseeable safety regulations	Most permits obtained or in process of being obtained, outstanding ones considered routine, asset meets current safety regulations	Problems in obtaining all required permits, part of the planned configuration and / or planned operations might need to be revised.
Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts (if needed)	Long-term O&M contract, and/or O&M reserve accounts (if needed)	Limited O&M contract or O&M reserve account (if needed)	No O&M contract: risk of high operational cost overruns beyond mitigants.

	Strong	Good	Satisfactory	Weak
Operator's financial strength, Track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability.	Satisfactory track record and re-marketing capability.	Weak or short track record and uncertain re-marketing capability.	No or unknown track record and inability to re-market the asset.
<b>Asset characteristics</b>				
Configuration, size, design and maintenance (i.e. age, size for a plane) compared to other assets on the same market	Strong advantage in design and maintenance. Configuration is standard such that the object meets a liquid market.	Above average design and maintenance. Standard configuration, maybe with very limited exceptions - such that the object meets a liquid market.	Average design and maintenance. Configuration is somewhat specific, and thus might cause a narrower market for the object	Below average design and maintenance. Asset is near the end of its economic life. Configuration is very specific; the market for the object is very narrow.
Resale value	Current resale value is well above debt value.	Resale value is moderately above debt value.	Resale value is slightly above debt value.	Resale value is below debt value.
Sensitivity of the asset value and liquidity to economic cycles	Asset value and liquidity are relatively insensitive to economic cycles.	Asset value and liquidity are sensitive to economic cycles.	Asset value and liquidity are quite sensitive to economic cycles.	Asset value and liquidity are highly sensitive to economic cycles.
<b>Strength of Sponsor</b>				
Operator's financial strength, Track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability.	Satisfactory track record and re-marketing capability.	Weak or short track record and uncertain re-marketing capability.	No or unknown track record and inability to re-market the asset.
Sponsors' track record and financial strength	Sponsors with excellent track record and high financial standing	<i>Sponsors with good track record and good financial standing</i>	Sponsors with adequate track record and good financial standing	Sponsors with no or questionable track record and/or financial weaknesses

	Strong	Good	Satisfactory	Weak
<b>Security Package</b>				
Asset control	Legal documentation provides the lender effective control (e.g. a first perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	The contract provides little security to the lender and leaves room to some risk of losing control on the asset.
Rights and means at the lender's disposal to monitor the location and condition of the asset (place-holder: expand?)	The lender is able to monitor the location and condition of the asset, at any time and place (regular reports, possibility to lead inspections)	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset are limited.
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies.	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies.	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies.	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies.
<b>Financial strength</b>				
Degree of over-collateralisation of trade	Strong	Good	Satisfactory	Weak

	Strong	Good	Satisfactory	Weak
<b>Political and legal environment</b>				
Country risk	No country risk	Limited exposure to country risk (in particular, offshore location of reserves in an emerging country)	Exposure to country risk (in particular, offshore location of reserves in an emerging country)	Strong exposure to country risk (in particular, inland reserves in an emerging country)
<b>Mitigation of country risks</b>	Very strong mitigation: Strong offshore mechanisms Strategic commodity 1 <sup>st</sup> class buyer	Strong mitigation: Offshore mechanisms Strategic commodity Strong buyer	Acceptable mitigation: Offshore mechanisms Less strategic commodity Acceptable buyer	Only partial mitigation: No offshore mechanisms Non-strategic commodity Weak buyer
<i>Asset characteristics</i>				
Liquidity and susceptibility to damage	Commodity is quoted and can be hedged through futures or OTC instruments. Commodity is not susceptible to damage.	Commodity is quoted and can be hedged through OTC instruments. Commodity is not susceptible to damage.	Commodity is not quoted but is liquid. There is uncertainty about the possibility of hedging. Commodity is not susceptible to damage	Commodity is not quoted. Liquidity is limited given the size and depth of the market. No appropriate hedging instruments. Commodity is susceptible to damage.

	Strong	Good	Satisfactory	Weak
<i>Strength of Sponsor</i>				
Financial strength of trader	Very strong, relative to trading philosophy and risks.	Strong	Adequate	Weak
Track record, including ability to manage the logistic process.	Extensive experience with the type of transaction in question. Strong record of operating success and cost efficiency.	Sufficient experience with the type of transaction in question. Above average record of operating success and cost efficiency.	Limited experience with the type of transaction in question. Average record of operating success and cost efficiency.	Limited or uncertain track record in general. Volatile costs and profits.
Trading controls and hedging policies	Strong standards for counterparty selection, hedging, and monitoring.	Adequate standards for counterparty selection, hedging, and monitoring.	Past deals have experienced no or minor problems.	Trader has experienced significant losses on past deals.
Quality of financial disclosure	Excellent	Good	Satisfactory	Financial disclosure contains some uncertainties or is insufficient.
<i>Security Package</i>				
Asset control	First perfected security interest provides the lender legal control of the assets at any time if needed.	First perfected security interest provides the lender legal control of the assets at any time if needed.	At some point in the process, there is a rupture in the control of the assets by the lender. The rupture is mitigated by knowledge of the trade process or a third party undertaking as the case may be.	Contract leaves room for some risk of losing control over the assets. Recovery could be jeopardized.

	Strong	Good	Satisfactory	Weak
Rights and means at the lender's disposal to monitor the location and condition of the asset (place-holder: expand?)	The lender is able to monitor the location and condition of the asset, at any time and place (regular reports, possibility to lead inspections)	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender's ability to monitor the location and condition of the asset is limited.
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies.	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies.	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies.	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies.

**Table 4 - Supervisory Rating Grades for Commodities Finance Exposures**

	Strong	Good	Satisfactory
<b>Financial strength</b>			
Degree of over-collateralisation of trade	Strong	Good	Satisfactory
<b>Political and legal environment</b>			
<b>Country risk</b>	No country risk	Limited exposure to country risk (in particular, offshore location of reserves in an emerging country)	Exposure to country risk (in particular, offshore location of reserves in an emerging country)
Mitigation of country risks	Very strong mitigation: Strong offshore mechanisms Strategic commodity 1 <sup>st</sup> class buyer	Strong mitigation: Offshore mechanisms Strategic commodity Strong buyer	Acceptable mitigation: Offshore mechanisms Less strategic commodity Acceptable buyer
<i>Asset characteristics</i>			
Liquidity and susceptibility to damage	Commodity is quoted and can be hedged through futures or OTC instruments. Commodity is not susceptible to damage.	Commodity is quoted and can be hedged through OTC instruments. Commodity is not susceptible to damage.	Commodity is not quoted but is liquid. There is uncertainty about the possibility of hedging. Commodity is not susceptible to damage.

	Strong	Good	Satisfactory
<i>Strength of Sponsor</i>			
Financial strength of trader	Very strong, relative to trading philosophy and risks.	Strong	Adequate
Track record, including ability to manage the logistic process.	Extensive experience with the type of transaction in question. Strong record of operating success and cost efficiency.	Sufficient experience with the type of transaction in question. Above average record of operating success and cost efficiency.	Limited experience with the type of transaction in question. Average record of operating success and cost efficiency.
Trading controls and hedging policies	Strong standards for counterparty selection, hedging, and monitoring.	Adequate standards for counterparty selection, hedging, and monitoring.	Past deals have experienced no problems.
Quality of financial disclosure	Excellent	Good	Satisfactory
<i>Security Package</i>			
Asset control	First perfected security interest provides the lender legal control of the assets at any time if needed.	First perfected security interest provides the lender legal control of the assets at any time if needed.	At some point in the process, there is a period where the assets are in the control of the trader. This risk is mitigated by the requirement that the trade be confirmed by a third party under a standard trade confirmation. In the case may be

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## **ANNEX E-1**

### **Eligibility**

This section sets out the assets and third party entities that may be recognised as eligible sources of funded and unfunded credit protection respectively for the purposes of granting capital relief.

#### **1.1. Funded credit protection**

##### **1.1.1. On-balance sheet netting**

Subject to paragraph 1.1.2. below, where the credit risk mitigation technique relies on the on-balance sheet netting of mutual claims between the institution and its counterparty, eligibility is limited to reciprocal cash balances between the institution and the counterparty.

Only loans and deposits of the lending institution may receive regulatory capital relief as a result of an on-balance sheet netting agreement.

##### **1.1.2. Master netting agreements covering repurchase transactions / securities or commodities lending or borrowing transactions**

For institutions adopting the Financial Collateral Comprehensive Method, the effects of bilateral netting contracts covering only repurchase transactions and/or securities or commodities lending or borrowing transactions with a counterparty may be recognised. To be recognised the collateral taken and securities or commodities borrowed within such agreements must comply with the eligibility requirements in respect of collateral set out below.

The effects of such agreements shall not be recognised where transactions covered by the agreement include both transactions whereby securities or guaranteed rights relating to title to securities are transferred and transactions whereby commodities or guaranteed rights relating to commodities are transferred.

##### **1.1.3. Collateral**

Where the credit risk mitigation technique used relies on the right of the institution to liquidate or retain assets, eligibility depends upon whether capital is calculated under the Standardised Approach or the IRB Foundation Approach. Eligibility further depends upon whether, in calculating the reduction in capital requirements as a result of the use of financial collateral, the Financial Collateral Simple Method is used or the Financial Collateral Comprehensive Method as set out in section E-3 of this Annex. In relation to repurchase transactions / securities or commodities lending or borrowing transactions, eligibility also depends upon whether the transaction is booked in the Banking Book or the Trading Book.

###### ***1.1.3.1. Eligibility under all Approaches to collateral***

Eligible Collateral is as follows:

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

- (b) Debt securities issued by central governments or central banks which securities have a credit assessment by a recognised ECAI or ECA which credit assessment is mapped by the competent authority into credit quality step 4 or above under the relevant methodology for the risk weighting of claims on sovereigns or central banks under the Title II, Chapter 1, Section I of this Directive;

For these purposes, ‘debt securities issued by central governments or central banks shall be deemed to include –

- debt securities issued by regional governments or local authorities claims on which are treated as claims on the sovereign in whose jurisdiction they are established under Annex C-1, section 2;
- debt securities issued by multilateral development banks to which a 0% risk weight is applied under or by virtue of Annex C-1, section 4;
- debt securities issued by international organisations which are assigned a 0% risk weight under Annex C-1, section 5.

- (c) Debt securities issued by institutions which securities have a credit assessment by a recognised ECAI which is mapped by the competent authority into credit quality step 3 or above under the Credit Assessment Based Methodology for the risk weighting of claims on institutions under Title II, Chapter 1, Section 1 of this Directive.

For these purposes, ‘debt securities issued by institutions’ include

- debt securities issued by regional governments or local authorities other than those claims on which are treated as claims on the sovereign in whose jurisdiction they are established under Annex C-1, section 2;
- debt securities issued by public sector entities, claims on which are treated as claims on institutions under Annex C-1, section 3;
- debt securities issued by multilateral development banks other than those to which a 0% risk weight is applied under or by virtue of Annex C-1, section 4;

- (d) Debt securities issued by other entities which securities have a credit assessment by a recognised ECAI which is mapped by the competent authority into credit quality step 3 or above under the methodology for the risk weighting of claims on corporates under Title II, Chapter 1, Section I of this Directive.

- (e) Short term debt securities with a credit assessment by a recognised external credit assessment institution which is mapped by the competent authority into credit quality step 3 or above under the methodology for the risk weighting of short term claims under Title II, Chapter 1, Section I of this Directive.

- (f) Equities that are included in a main index; and

- (g) Gold

- (h) Debt securities issued by institutions which securities do not have a credit assessment by a recognised external credit assessment institution are eligible for recognition if they fulfil each of the following criteria:

- (i) they are listed on a recognised exchange;
- (ii) they qualify as senior debt;
- (iii) 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 a recognised external credit assessment institution which is mapped by the competent authority into credit quality step 3 or above under the Credit Assessment Based Methodology for the risk weighting of claims on institutions under Title II, Chapter 1, Section I of this Directive or into credit quality step 3 or above under the methodology for the risk weighting of short term claims under Title II, Chapter 1, Section I of this Directive;
- (iv) the lending institution has no information to suggest that the issue would justify a credit assessment below one which would be mapped into credit quality step 3 under the Credit Assessment Based Methodology for the risk weighting of claims on institutions under Title II, Chapter 1, Section I of this Directive or into credit quality step 3 under the methodology for the risk weighting of short term claims under Title II, Chapter 1, Section I of this Directive; and
- (v) the competent authority is sufficiently confident about the market liquidity of the instrument.

Undertakings for Collective Investment in Transferable Securities (UCITS) and mutual fund units are eligible for recognition under the following conditions:

- (i) they have a daily public price quote; and
- (ii) the UCITS/mutual funds must be limited to investing in other instruments that are eligible for recognition in the Financial Collateral Simple Method.

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

No debt security which is required to be assigned a risk weight of 150% under section 10 of Annex C-1 shall be eligible for recognition.

In relation to paragraphs (b), (c), (d) and (e) above, where two external credit assessments of recognised ECAIs would apply to securities, the less favourable assessment shall be deemed to apply. In cases where more than two external credit assessments of recognised ECAIs would apply, the two most favourable assessments shall be deemed to apply. If the two most favourable assessments are different, the less favourable of the two shall be deemed to apply.

***1.1.3.2. Additional eligibility under the Financial Collateral Comprehensive Method whether used in the Standardised Approach or the IRB Foundation Approach***

In addition to the collateral set out above, in the Financial Collateral Comprehensive Method when applied under the Standardised Approach or the IRB Foundation Approach, the following collateral is eligible:

Equities not included in a main index but traded on a recognised exchange.

UCITS and mutual fund units that

- (a) have a daily price quote; and
- (b) are units in UCITS or mutual funds that are limited to investing in other instruments that are eligible for recognition in the Financial Collateral Comprehensive Method.

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

***1.1.3.3. Additional eligibility for repurchase transactions / securities or commodities lending or borrowing transactions under the Financial Collateral Comprehensive Method whether used in the Standardised Approach or the IRB Foundation Approach***

For repurchase transactions / securities or commodities lending or borrowing transactions booked in the Trading Book, all financial instruments and commodities that are eligible to be included in the Trading Book will be regarded as eligible collateral.

***1.1.3.4. Additional eligibility under the IRB Foundation Approach***

- (a) *Real estate collateral*

(I)

Residential real estate which is or will be occupied or let by the borrower and commercial real estate i.e. offices and other commercial premises are eligible for recognition under the conditions in (II) below:

(II)

1. The value of the property does not materially depend upon the credit quality of the obligor. This requirement is not intended to preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower.
2. 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.

Institutions may also recognise 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 borrower, as residential real estate collateral, provided that the conditions laid down in this Section are fulfilled.

The competent authorities of the member states may also authorise their institutions to recognise 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 the conditions laid down in this paragraph are fulfilled. Member States shall inform the Commission of the use they make of this paragraph.

The competent authorities of the member states may waive the requirement for their institutions to comply with the condition 2 above for exposures secured by residential real

estate property situated within the territory of those Member States that use this waiver, if the competent authorities of the Member States have evidence that this is a well-developed and long-established market with loss-rates which are sufficiently low to justify such treatment. This shall not prevent the competent authorities of a Member State, which does not use this waiver from recognising it for RRE property within the territories of those member states that use the waiver. Member States shall inform the Commission of the use they make of this waiver.

The competent authorities of the member states may waive the requirement for their institutions to comply with the condition 2 above for CRE collateral situated within the territory of those Member States that use this waiver, if the competent authorities of the Member States have evidence that this is a well-developed and long-established market and loss-rates stemming from CRE lending do not exceed the following limits:

- a) up to 50 % of the market value (or where applicable and if lower 60 % of loan-to-value (LTV) based on mortgage-lending-value (MLV)) must not exceed 0.3 % of the outstanding CRE loans in any given year.
- b) overall losses stemming from CRE lending must not exceed 0.5 % of the outstanding loans in any given year.

If either of these tests is not satisfied in a given year, the eligibility to use this treatment will cease and the original eligibility criteria would need to be satisfied again before it could be applied in the future. Countries applying such a treatment must publicly disclose that these conditions are met. This shall not prevent the competent authorities of a Member State, which does not use this waiver, from recognising it for CRE collateral within the territories of those member states that use the waiver. Member States shall inform the Commission of the use they make of this waiver.

*(b) Receivables*

The following financial assets of the borrower:

Claims with an original maturity of less than or equal to one year where repayment will occur through the commercial or financial flows related to the underlying assets of the borrower. This includes both self-liquidating debt arising from the sale of goods or services linked to a commercial transaction and general amounts owed by buyers, suppliers, renters, national and local governmental authorities, or other non-affiliated parties not related to the sale of goods or services linked to a commercial transaction. Eligible receivables do not include those associated with securitisations, sub-participations or credit derivatives.

*(c) Other physical collateral*

Competent authorities may recognise the credit risk mitigating effect of other types of physical collateral if satisfied as to the following in respect of the type of physical collateral in question:

- the existence of liquid markets for disposal of collateral in an expeditious and economically efficient manner;
- the existence of well-established, publicly available market prices for the collateral. The 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*

Subject to meeting the requirements set out at section E-2, paragraph 2.1.7, leasing will be accorded the same treatment as loans collateralised by the same type of collateral.

**1.1.4. Other funded credit protection**

***1.1.4.1. Cash on deposit with, or cash assimilated instruments held by, a third party bank.***

Cash on deposit with, or cash assimilated instruments held by, a third party institution pledged to the lending institution may be recognised as eligible credit protection.

***1.1.4.2. Life insurance policies pledged to the lending institution***

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

***1.1.4.3. Institution instruments repurchased on request***

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

## **1.2. Unfunded Credit Protection**

### **1.2.1. Eligibility of protection providers under all Approaches**

Subject to paragraph 1.2.2.3 below third parties eligible to provide credit protection by way of guarantee or credit derivative are as set out below. This applies under the Standardised and IRB Foundation Approaches.

- (a) Central governments and central banks;
- (b) regional governments or local authorities;
- (c) multi-lateral development banks;
- (d) international organisations which receive a 0% risk weight under section 5 of Annex C-1.
- (e) public sector entities claims on which are treated by the competent authorities as claims on institutions under section 3 of Annex C-1
- (f) Institutions; and
- (g) Other corporate entities, including parent, subsidiary and affiliate corporate entities, that have a credit assessment by a recognised ECAI which is mapped by the competent authority into credit quality step 2 or above under the methodology for the risk weighting of claims on corporates under the Standardised Approach and, in the case of institutions using the IRB Approach, unrated corporate entities which are internally rated and associated with a PD equivalent to credit quality step 2 or above under the Standardised Approach.

### **1.2.2. Types of credit derivatives**

**1.2.2.1.** The following types of credit derivatives are eligible for recognition subject to the qualifications set out below.

- (i) Credit default swaps that provide credit protection equivalent to guarantees
- (ii) Total return swaps that provide credit protection equivalent to guarantees
- (iii) Credit linked notes to the extent of their cash funding

**1.2.2.2.** Where an institution buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record 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 will not be recognised.

**1.2.2.3.** In relation to credit linked notes, there are no eligibility requirements as to the persons providing the protection.

**1.2.2.4.** The following definitions shall apply:

‘Credit default swap’ means a contract according to which one party to the contract undertakes to make a payment to the other party to the contract on the occurrence of a specified event or events relating to the creditworthiness of a third party. The making of such payment does not in itself give rise to a legal entitlement in the protection provider against the third party.

‘Total return swap’ means a contract according to which one party to the contract undertakes to make payments to the other party to the contract of all cashflows arising from a specified asset (or assets) plus any increase in the market value of the asset (or assets) since the last payment date or the commencement date of the contract, whichever is the most recent, and according to which the recipient of these amounts undertakes to pay to the first party an interest rate related flow plus any decrease in the market value of the asset (or assets) since the last payment date or the commencement date, whichever is the most recent.

‘Credit linked note’ means a cash funded debt instrument which is redeemable by the issuer in accordance with the terms of the instrument, or the terms of redemption of which are altered, on the occurrence of a specified event or events related to the creditworthiness of a third party.

## ANNEX E-2

### **Minimum Requirements**

This section sets out the minimum requirements that must be fulfilled before regulatory capital relief will be granted on the basis of credit risk mitigation.

Where an institution seeks regulatory capital relief on the basis of its credit risk mitigation practices, the institution must satisfy its supervisor that it has adequate risk management processes to control those risks to which the institution may be exposed as a result of carrying out credit risk mitigation practices.

#### **2.1. Funded credit protection**

##### **2.1.1. On-balance sheet netting (other than master netting agreements covering repurchase transactions / securities or commodities lending or borrowing transactions)**

The following requirements apply under the Standardised and IRB Foundation Approaches.

To be recognised, such netting agreements

1. must have a well-founded legal basis and be legally enforceable under applicable law, including in the event of the bankruptcy of a counterparty
2. give the non-defaulting party the unfettered, legally enforceable right to immediately close-out all transactions under the agreement upon the event of default, including in the event of the bankruptcy of the counterparty
3. the institution must be able at any time to determine those assets and liabilities with the same counterparty that are subject to the netting agreement
4. the institution must monitor and control its roll-off risks;
5. the institution must monitor and control the relevant exposures on a net basis.

##### **2.1.2. Master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions**

To be recognised, such netting agreements must:

1. have a well founded legal basis and be legally enforceable under applicable law, including in the event of the bankruptcy or insolvency of a counterparty
2. 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
3. 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.

In addition the minimum requirements for the recognition of financial collateral set out in paragraphs 2.1.3 below must be fulfilled.

Netting across positions in the banking book and trading book will only be recognised when the netted transactions fulfill the following conditions:

- all transactions are marked to market daily
- the collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

### **2.1.3. Financial collateral**

#### ***2.1.3.1. Minimum requirements for the recognition of financial collateral under all Approaches and Methods***

Before capital relief will be granted under this approach the following conditions must 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 collateral provider, or any related group entity are not eligible.

##### *b) Legal certainty*

Institutions must fulfill any contractual and statutory requirements in respect of the enforceability of the collateral arrangements under the law applicable to the bank's interest in the collateral.

Institutions must have appropriate legal opinions confirming the enforceability of the collateral arrangements in all relevant jurisdictions. Institutions must further ensure that the analysis in these opinions remains current.

Institutions' procedures must ensure that any legal conditions required for declaring the default of the customer and liquidating the collateral are observed.

##### *c) Operational requirements*

The collateral arrangements must be properly documented, with a clear and robust procedure for the timely liquidation of collateral.

Institutions must employ robust procedures and processes to control risks arising from the use of collateral, including in particular strategy, consideration of the underlying credit, valuation, policies and procedures, systems, control of roll-off risks, and management of concentration risk arising from the institution's use of collateral and its interaction with the institution's overall credit risk profile.

Institutions must calculate the market value of the collateral, and revalue it accordingly, with a minimum frequency of once every six months.

Where the collateral is held by a third party, institutions must take reasonable steps to ensure that the third party segregates the collateral from its own assets.

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

In addition to the requirements set out above the following requirement applies under the Financial Collateral Simple Method

The collateral must be pledged for the life of the exposure.

**2.1.4. *Minimum requirements for the recognition of real estate collateral under the IRB Foundation Approach.***

In order to receive recognition for real estate collateral an institution must meet the following standards:

a) Legal certainty

Any collateral pledged shall be legally enforceable under all applicable laws and statutes, and pledges over collateral shall be properly filed on a timely basis. Pledges over collateral shall reflect a perfected lien (i.e. all legal requirements for establishing the pledge shall be fulfilled). The collateral agreement and the legal process underpinning it shall enable the institution to realise the collateral value within a reasonable timeframe.

b) Collateral valuation principles

The property shall be valued at or less than the current market value under which it could be sold under private contract between a willing seller and an arm's-length buyer on the date of valuation. The value of the collateral shall be based on the value of the property and the nature and extent of the pledge of the property taking into account the existence of prior claims.

c) Monitoring of property values

The institution shall monitor the value of the collateral and property 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. Statistical methods may be used to monitor the value of the property and to identify property that needs revaluation. The property shall be evaluated by a qualified professional when information indicates that the value of the property may have declined materially relative to general market prices.

d) Documentation

The types of CRE and RRE collateral accepted by the institution and its lending policies (advance rates) when this type of collateral is taken shall be clearly documented.

e) Insurance

The institution shall have procedures to monitor that the property taken as collateral is adequately insured against damage.

**2.1.5. Minimum requirements for the recognition of receivables as collateral under the IRB Foundation Approach**

**2.1.5.1. *Legal certainty***

- The legal mechanism by which collateral is given must be robust and ensure that the lender has clear rights over the proceeds from the collateral.
- Institutions must take all steps necessary to fulfil local requirements in respect of the enforceability of security interest. There should 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.
- Institutions must obtain legal opinions confirming the enforceability of the collateral arrangements in all relevant jurisdictions.
- The collateral arrangements must be properly documented, with a clear and robust procedure for the timely collection of collateral. Institutions procedures should ensure that any legal conditions required for declaring the default of the customer and timely collection of collateral are observed. In the event of the borrower's financial distress or default, the institution should have legal authority to sell or assign the receivables to other parties without consent of the receivables obligors.

**2.1.5.2. *Risk management***

- The institution must have a sound process for determining the credit risk in the receivables. Such a process should 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 institution relies on the borrower to ascertain the credit risk of the customers, the institution must review the borrower's credit practice to ascertain its soundness and credibility.
- 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 institution's total exposures beyond that controlled by the institution's general methodology.
- The institution must maintain a continuous monitoring process that is appropriate for the specific exposures (either immediate or contingent) attributable to the collateral to be utilised as a risk mitigant. This process may include, as appropriate and relevant, ageing reports (listing receivables by customer name, balance outstanding and current payment status), control of trade documents, borrowing base certificates, frequent audits of collateral, confirmation of accounts, control of the proceeds of accounts paid, analyses of dilution (credits given by the borrower to the issuer, as for returns of the product, forgiveness of obligations and bad debts) and regular financial analysis of both the borrower and the issuers of the receivables, especially in the case when a small number of large-sized receivables are taken as collateral. Observance of the

institution's overall concentration limits should be monitored. Additionally, compliance with loan covenants, environmental restrictions, and other legal requirements should be reviewed on a regular basis.

- The receivables pledged by a borrower should be diversified and not be unduly correlated with the borrower. Where there is material positive correlation, the attendant risks should be taken into account in the setting of margins for the collateral pool as a whole.
- Receivables from affiliates of the borrower (including subsidiaries and employees) will not be recognised as risk mitigants.
- The institution should have a documented process for collecting receivable payments in distressed situations. The requisite facilities for collection should be in place, even when the institution normally looks to the borrower for collections.

#### **2.1.6. Minimum requirements for the recognition of other physical collateral under the IRB Foundation Approach**

In order for an institution to receive recognition for additional physical collateral, it must meet all the standards in paragraph 2.1.4, subject to the following modifications.

- First Claim: With the sole exception of permissible prior claims specified in paragraph 2.1.4 [not yet included], only first liens on, or charges over, collateral are permissible. As such, the institution must have priority over all other lenders to the realised proceeds of the collateral.
- The loan agreement must include detailed descriptions of the collateral plus detailed specifications of the manner and frequency of revaluation.
- The types of physical collateral accepted by the institution and policies and practices in respect of the appropriate amount of each type of collateral relative to the exposure amount must be clearly documented in internal credit policies and procedures and available for examination and/or audit review.
- Institution credit policies with regard to the transaction structure must 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 of the value of the collateral.)
- Both initial valuation and revaluation must take fully into account any deterioration and/or obsolescence of the collateral. Particular attention must be paid in valuation / revaluation to the effects of the passage of time on fashion- or date-sensitive collateral.
- In cases of inventories (e.g., raw materials, work-in-process, finished goods, dealers' inventories of autos) and equipment, the periodic revaluation process must include physical inspection of the collateral.

#### **2.1.7. Minimum requirements for the recognition of leasing under the IRB Foundation Approach**

(a) The minimum requirements for the collateral type must be met (CRE/RRE or other physical collateral). In addition, the institution must also meet the following standards:

- Robust risk management on the part of the lessor with respect to the location of the asset, the use to which it is put, its age, and planned obsolescence;
- 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
- The difference between the rate of depreciation of the physical asset and the rate of amortisation of the lease payments must not be so large as overstate the credit risk mitigation attributed to the leased assets.

(b) Leases that expose the bank to residual value risk will be treated in the following manner. Residual value risk is the bank's exposure to potential loss due to the fair value of the equipment declining below its residual estimate at lease inception.

- The discounted lease payment stream will receive a risk weight appropriate for the lessee's financial strength (PD) and supervisory or own-estimate of LGD, which ever is appropriate.
- The residual value will be risk weighted at 100%.

#### **2.1.8. Minimum requirements for the recognition of other funded credit protection**

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

Such funded protection shall be eligible for the treatment set out at section E-3, para 3.1.6.1 below where:

- The borrower's claim against the third party institution is openly pledged or assigned to the lending institution;
- The third party institution is notified of the pledge or assignment;
- As a result of the notification, the third party institution is able to make payments solely to the lending institution or to other parties with the lending institution's consent.
- The pledge or assignment is unconditional and irrevocable.

##### ***2.1.8.2. Life insurance policies pledged to the lending institution.***

Life insurance policies pledged to the lending institution may be recognised as eligible credit protection where the following requirements are satisfied:

- the company providing the life insurance is eligible as an unfunded protection provider under the terms of this Directive;
- the life insurance policy is openly pledged or assigned to the lending institution;
- the company providing the life insurance is notified of the pledge or assignment and as a result may not cancel the contract or pay amounts payable under the contract without the consent of the lending institution;

- the policy must have a declared surrender value which is a non-reducible amount;
- the lending institution must have the right to cancel the policy and receive the surrender value in a timely way in the event of the default of the borrower;
- the lending institution is informed of any non-payments under the policy by the policy-holder;
- the life insurance policy must be pledged for the maturity of the loan; and
- the pledge must be legally enforceable in all relevant jurisdictions.

## **2.2. Unfunded credit protection**

The following requirements apply in the Standardised Approach and the IRB Foundation Approach.

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

2.2.1.1. Subject to paragraph 2.2.1.3, a guarantee or credit derivative attracting regulatory capital relief must fulfil each of the following conditions:

- (a) It must represent a direct claim on the protection provider.
- (b) The extent of the credit protection is clearly defined and incontrovertible.
- (c) A credit protection contract giving rise to regulatory capital relief must 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 credit cover;
  - (ii) would increase the effective cost of cover as a result of deteriorating credit quality in 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 agreed ex ante to be reduced ex post by the protection provider.
- (d) It must be legally enforceable in all relevant jurisdictions.

#### 2.2.1.2. Operational requirements

The institution must satisfy its supervisor that it has systems in place to manage the concentration of risk arising from the institution's use of guarantees or credit derivatives. The 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.

#### 2.2.1.3. Sovereign counter-guarantees

Where an exposure is protected by a guarantee which is counter-guaranteed by a sovereign], the exposure may be treated as protected by a sovereign guarantee provided the following conditions are satisfied:

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

(ii) both the original guarantee and the counter-guarantee meet the requirements for guarantees prescribed at paragraphs 2.2.1.1, 2.2.12, and 2.2.2, except that the counter-guarantee need not be direct and explicit to the original claim; and

(iii) the competent 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 sovereign guarantee.

### **2.2.2. Requirements for guarantees**

In order for a guarantee to give rise to regulatory capital relief, the following conditions must be satisfied:

- (a) On the qualifying default/non-payment of the counterparty, the lending institution must have the right to pursue, in a timely manner, the guarantor for monies outstanding under the loan, rather than having to pursue the obligor to recover its exposure. The act of the guarantor making a payment under the guarantee confers on the guarantor the right to pursue the obligor for monies outstanding under the loan.
- (b) The guarantee must be an explicitly documented obligation assumed by the guarantor
- (c) The guarantee must cover all types of payments the underlying obligor is expected to make in respect of the claim.

### **2.2.3. Requirements for credit derivatives**

In order for a credit derivative to give rise to regulatory capital relief, the following conditions must be satisfied:

- (a) The credit events specified under the credit derivative must at a minimum include:
  - failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is close in line or shorter than the grace period in the underlying obligation).
  - 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; and
  - restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account).

[Note. Work is continuing on the question of the requirement for the inclusion of restructuring as a credit event.]
- (b) The credit derivative shall not terminate 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.

- (c) Credit derivatives allowing for cash settlement are recognised for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation.
- (e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
- (f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event;
- (g) 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) is permissible only if (1) the reference obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e., the same legal entity) and there are in place legally enforceable cross-default or cross-acceleration clauses.
- (h) A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible only if (1) the latter obligation ranks pari passu with or is junior to the underlying obligation, and (2) both obligations share the same obligor (i.e. the same legal entity) and there are in place legally enforceable cross-default or cross-acceleration clauses.

## ANNEX E- 3

### **Calculating the effects of credit risk mitigation**

For the purposes of calculating the effects of credit risk mitigation, investments in credit linked notes issued by the lending institution are to be treated as cash collateral.

#### **3.1. Funded Credit Protection**

##### **3.1.1. On-balance sheet netting (other than master netting agreements covering repurchase transactions / securities or commodities lending or borrowing transactions)**

For the purposes of calculating their effect for capital requirements loans and deposits with the lending institution subject to on-balance sheet netting are to be treated as cash collateral.

##### **3.1.2. Master netting agreements covering repurchase transactions / securities or commodities lending or borrowing transactions**

###### **3.1.2.1. Calculation of the fully-adjusted exposure value**

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

Subject to (b) below, in calculating the fully adjusted amount of the net exposure (E\*) resulting from the application of an eligible master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions, the volatility adjustments to be applied will be calculated either using the Supervisory volatility adjustments approach or the Own Estimates volatility adjustments approach as prescribed in paragraphs 3.1.3.2 (b) for the Financial Collateral Comprehensive Method. The same conditions and requirements for the use of the Own Estimates approach shall apply as apply under the Financial Collateral Comprehensive Method.

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

For these purposes, 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.

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 or sold 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 or purchased under the agreement added to the amount of cash in that currency borrowed or received by way of purchase price under the agreement.

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.

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.

The fully adjusted exposure (E\*) for institutions using the Supervisory volatility adjustments or the Own Estimates volatility adjustments approaches shall be calculated according to the following formula:

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

Where

E is the value (or in the case of cash, amount) of each separate exposure under the agreement

C is the value of the securities received or purchased or the cash received as collateral or otherwise in respect of each such exposure.

$\sum(E)$  is the sum of all Es (as defined above) under the agreement

$\sum(C)$  is the sum of all Cs (as defined above) under the agreement

$E_{\text{fx}}$  is the net position (positive or negative) in a given currency other than the settlement currency of the agreement as calculated under the rule prescribed above.

$H_{\text{sec}}$  is the volatility adjustment appropriate to a particular type of security

$H_{\text{fx}}$  is the foreign exchange volatility adjustment.

E\* is the fully adjusted exposure amount (taking into account the effect of the master netting agreement and volatility adjustments)

(b) *Using the Internal Models approach*

As an alternative to using the Supervisory volatility adjustments approach or the Own Estimates volatility adjustments approach in calculating the fully adjusted amount of the net exposure (E\*) resulting from the application of an eligible master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions, institutions may be permitted to use an Internal Models approach to the calculation of volatility adjustments 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 ( $\sum E - \sum C$ ).

An institution may choose to use an Internal Models approach to the calculation of volatility adjustments independently of the choice it has made between the Standardised Approach and the IRB Foundation Approach to credit risk. However, if an 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 subject to the conditions prescribed below for the use of such approaches under the Financial Collateral Comprehensive Method.

The Internal Models approach is available to banks that have received supervisory recognition for an internal market risk model under Directive 93/6/EEC as amended. Banks which have not received supervisory recognition for use of models under that Directive, can separately apply for supervisory recognition to use their internal models for calculation of the potential change in value of the unsecured exposure amount for repo-style transactions. Internal models will only be accepted when a bank can prove the quality of its model to the supervisor through the backtesting of its output using one year of data.

(The quantitative and qualitative criteria to be elaborated for the recognition of internal market risk models for repo-style transactions is in principle the same as under Directive 93/6/EEC. With regard to the liquidation period, the minimum will be 5-business days, rather than the 10-business days under that Directive.)

A bank using an internal model will be required to backtest its output using a sample of 20 counterparties, identified on an annual basis. These counterparties should include the 10 largest as determined by the bank according to its own exposure measurement approach and 10 others selected at random. For each day and for each counterparty, the bank should compare the actual change in the counterparty's exposure over a 1-day horizon with the exposure value after risk mitigation (E\*) using the internal models approach calculated as of the previous close of business. An exception occurs for each observation in which the actual change in exposure exceeds the internal model estimate. Depending on the number of exceptions in the observations for the 20 counterparties over the most recent 250 days (encompassing 5000 observations), the output of the internal model will be scaled up using a multiplier as provided in the table below.

<b>Zone</b>	<b>Number of exceptions</b>	<b>Multiplier</b>
Green Zone	0	none (= 1)
	20	none (= 1)
	40	none (= 1)
	60	none (= 1)
	80	none (= 1)
Yellow Zone	100	2.0
	120	2.2
	140	2.4
	160	2.6
	180	2.8
Red Zone	200 or more	3.0

The fully adjusted exposure (E\*) for institutions using the Internal Models approach shall be calculated according to the following formula:

$$E^* = \max \{0, [(\sum E - \sum C) + (\text{output from internal risk models} \times \text{multiplier as appropriate})]\}$$

Where

E is the current market value (or in the case of cash, amount) of each separate exposure under the agreement

C is the current market value of the securities received or purchased or the cash received as collateral or otherwise in respect of each such exposure.

$\sum(E)$  is the sum of all Es (as defined above) under the agreement

$\sum(C)$  is the sum of all Cs (as defined above) under the agreement

E\* is the fully adjusted exposure amount (taking into account the effect of the master netting agreement and volatility)

In calculating capital requirements using internal models, banks will use the previous business day's model output.

### ***3.1.2.2. Calculating risk weighted assets for master netting agreements covering repurchase transactions / securities or commodities lending or borrowing transactions***

#### Standardised Approach

The adjusted exposure (E\*) will be multiplied by the risk weight of the counterparty to obtain the risk weighted asset amount for the collateralised transaction.

#### IRB Foundation Approach

The exposure at default value (EAD) will be equal to E\*.

### **3.1.3. Financial collateral**

#### ***3.1.3.1. Financial Collateral Simple Method***

The Financial Collateral Simple Method will be available only to institutions using the Standardised Approach and only in relation to exposure types for which they adopt the Standardised Approach.

##### *(a) Valuation*

For the purposes of credit risk mitigation capital relief under the Simple Method, recognised financial collateral is assigned a value equal to its market value (as determined in accordance with paragraph 2.1.3.1(c) above).

##### *(b) Calculating risk weighted assets*

In the Financial Collateral Simple Method, those portions of claims collateralised by the market value of recognised collateral receive the risk weight that would apply if the lender had a direct exposure to the collateral instrument. The risk weight on the collateralised portion will be subject to a floor of 20% except under the conditions specified in the next two paragraphs. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty or borrower. A capital requirement will be applied to banks on either side of the collateralised transaction: for example, both repos and reverse repos will be subject to capital requirements.

### Repurchase transactions / securities lending or borrowing transactions subject to daily mark-to-market and daily remargining

Exposures arising from transactions which fulfil the criteria enumerated in paragraph 3.1.3.2(b)(iv) will receive a risk weight of 0%. If the counterparty to the transactions is not a core market participant the exposure will receive a risk weight of 10%.

### OTC derivative transactions subject to daily mark-to-market

Exposures arising from OTC derivative transactions subject to daily mark-to-market, collateralised by cash or cash-assimilated instruments and where there is no currency mismatch will receive a 0% risk weight. Such transactions collateralised by debt securities issued by central governments or central banks qualifying for a 0% risk weight under the Standardised Approach will receive a 10% risk weight.

For the purposes of this paragraph ‘debt securities issued by central governments or central banks shall be deemed to include –

- debt securities issued by regional governments or local authorities claims on which are treated as claims on the sovereign in whose jurisdiction they are established under Annex C-1, section 2;
- debt securities issued by multilateral development banks to which a 0% risk weight is applied under or by virtue of Annex C-1, section 4;
- debt securities issued by international organisations which are assigned a 0% risk weight under Annex C-1, section 5.

### Other transactions

The 20% floor for the risk weight on a collateralised transaction will not be applied and a 0% risk weight can be provided where the exposure and the collateral are denominated in the same currency, and either:

- the collateral is cash on deposit or a cash assimilated instrument and is securing an exposure in the same currency; or
- the collateral is in the form of debt securities issued by central governments or central banks eligible for a 0% risk weight, 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 –

- debt securities issued by regional governments or local authorities claims on which are treated as claims on the sovereign in whose jurisdiction they are established under Annex C-1, section 2;
- debt securities issued by multilateral development banks to which a 0% risk weight is applied under or by virtue of Annex C-1, section 4;
- debt securities issued by international organisations which are assigned a 0% risk weight under Annex C-1, section 5.

### **3.1.3.2. Financial Collateral Comprehensive Method**

In valuing financial collateral for the purposes of credit risk mitigation capital relief under the Comprehensive Method, ‘volatility adjustments’ (denoted ‘H’) will be applied to the market value of collateral, as set out in paragraphs (b) below, in order to protect against price volatility in the manner indicated below.

In addition, where an institution's exposure takes the form of securities sold, posted or lent, the value of the exposure will be increased by the volatility adjustment appropriate to such securities as set out in paragraphs (b) below.

Subject to the treatment prescribed below for currency mismatches in the case of OTC derivatives transactions, where collateral is denominated in a currency that differs from that in which the underlying exposure is denominated, an adjustment reflecting the currency volatility should be added to the volatility adjustment appropriate to the collateral as set out in paragraphs (b) below.

In the case of OTC derivatives transactions covered by netting agreements, a volatility adjustment for a currency mismatch should 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 will be applied.

For the purposes of this section:

A secured lending transaction means any transaction giving rise to an exposure secured by collateral which does not include a provision conferring upon the lending institution the right to receive margin frequently.

A capital market-driven transaction means any transaction giving rise to an exposure secured by collateral which includes a provision conferring upon the lending institution the right to receive margin frequently.

*(a) Calculating adjusted values*

The volatility-adjusted value of the collateral to be taken into account is calculated as follows in the case of all transactions except repurchase transactions / securities lending or borrowing transactions subject to recognised master netting agreements:

$$C_{VA} = C \times (1 - H_c - H_{fx})$$

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

$$E_{VA} = E \times (1 + H_e)$$

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

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

Where

E is the current notional amount of the exposure (and in the case of OTC derivative transactions E is its relevant value as determined in accordance with Article 27(4) of this chapter)

$E_{VA}$  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 Annex E-4.

$H_e$  is the volatility adjustment appropriate to the exposure (E), as prescribed in paragraphs (b) below

$H_c$  is the volatility adjustment appropriate for the collateral, as prescribed in paragraphs (b) below

$H_{fx}$  is the volatility adjustment appropriate for currency mismatch, as prescribed in paragraphs (b) below

$E^*$  is the fully adjusted exposure amount (taking into account volatility and the risk-mitigating effects of the collateral).

*(b) Calculation of volatility adjustments to be applied*

Volatility adjustments may be calculated in two ways: the Supervisory volatility adjustments approach, and an ‘Own Estimates’ approach.

An institution may choose to use the Supervisory volatility adjustments approach or the Own Estimates volatility adjustment approach independently of the choice it has made between the standardised approach and the IRB foundation approach to credit risk. However, if institutions seek to use the Own Estimates volatility adjustments approach, they must do so for the full range of instrument types for which they would be eligible to use Own Estimates, excluding immaterial portfolios where they may use the standard Supervisory volatility adjustments.

Where the collateral is a basket of assets, the volatility adjustment on the basket will be  $H = \sum_i a_i H_i$ , where  $a_i$  is the weight of the asset in the basket and  $H_i$  the volatility adjustment applicable to that asset.

(i) Supervisory volatility adjustments

The volatility adjustments to be applied in the Supervisory volatility adjustments approach (assuming daily revaluation) for secured lending transactions are prescribed below.

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 days. For other capital market driven transactions, the liquidation period shall be 10 days

## VOLATILITY ADJUSTMENTS

Credit quality step of debt securities	Residual Maturity	Sovereigns			Institutions/ Corporates		
		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 years	2.828	2	1.414	5.657	4	2.828
	> 5 years	5.657	4	2.828	11.314	8	5.657
2-3	≤ 1 year	1.414	1	0.707	2.828	2	1.414
	>1 ≤ 5 years	4.243	3	2.121	8.485	6	4.243
	> 5 years	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 years	21.213	15	10.607	N/A	N/A	N/A
	> 5 years	21.213	15	10.607	N/A	N/A	N/A

Credit quality step of short-term debt securities	Sovereigns			Institutions/ Corporates		
	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

Other collateral			
	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
Main Index Equities	21.213	15	10.607
Other Equities listed on a recognised exchange	35.355	25	17.678
Cash	0	0	0
Gold	21.213	15	10.607
Surcharge for foreign exchange risk	11.314	8	5.657

For non-eligible securities lent or sold under repurchase transactions / securities lending or borrowing transactions, and for non-eligible securities taken as collateral in such transactions in the trading book, and for commodities lent or sold under such transactions in the trading book, the valuation adjustment is the same as for non-main index equities listed on a recognised exchange.

The volatility adjustment to be applied to eligible UCITS/units in mutual funds is the highest volatility adjustment that would be applicable to any of the assets in which the fund has the right to invest.

For unrated bonds issued by institutions and satisfying the eligibility criteria in paragraph 1.1.3.1(g) the volatility adjustments will be the same as for institutions/corporate bonds with an external credit assessment mapped into credit quality steps 2 or 3.

Where collateral is denominated in a currency that differs from that in which the underlying exposure is denominated, the volatility adjustments indicated in the above table shall apply.

#### (ii) Own estimates of volatility adjustments

Competent authorities may permit institutions complying with the requirements set out below to use their Own Estimates of volatility for calculating the volatility adjustments to be applied to collateral and/or exposures..

When debt securities have a credit assessment from a recognised external credit assessment institution equivalent to investment grade or better, supervisors may allow banks to calculate a volatility estimate for each category of security.

In determining relevant categories, institutions shall take into account (a) the type of issuer of the security, (b) the external credit assessment of the securities, (c) their maturity, and (d) their modified duration. Volatility estimates must be representative of the securities actually included in the category by the institution.

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

Institutions using the ‘Own Estimates’ approach must estimate volatility of the collateral instrument or foreign exchange mismatch without taking into account any correlations between unsecured exposure, collateral and exchange rates.

#### Quantitative Criteria

- In calculating the volatility adjustments, a 99<sup>th</sup> percentile one-tailed confidence interval is to be used.
- The liquidation period will 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. Institutions may use volatility adjustment numbers calculated according to shorter or longer liquidation periods, scaled up or down to the liquidation period prescribed in this paragraph 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 prescribed liquidation period

$H_M$  is the volatility adjustment under the prescribed liquidation period

$H_N$  is the volatility adjustment based on the liquidation period  $T_N$

- Institutions must take into account the illiquidity of lower-quality assets. The liquidation period must be adjusted upwards in cases where there is doubt over the liquidity of the collateral. They should also identify where historical data may understate potential volatility, e.g. a pegged currency. Such cases must be dealt with through a stress scenario.
- Subject to the following paragraph, the choice of historical observation period (sample period) for calculating volatility adjustments shall be a minimum length of one year. For banks that use a weighting scheme or other methods for the historical observation period, the “effective” observation period must be at least one year (that is, the weighted average time lag of the individual observations cannot be less than 6 months).
- Institutions must update their data sets no less frequently than once every three months and should also reassess them whenever market prices are subject to material changes. This implies that volatility adjustments must be computed at least every three months. The supervisory authority may also require a bank to calculate its volatility adjustments using a shorter observation period if, in the supervisor's judgement, this is justified by a significant upsurge in price volatility.

#### Qualitative Criteria

- The estimated volatility data must be used in the day-to-day risk management process of the institution including in relation to its internal exposure limits.
- If the liquidation period used by the institution in its day-to-day risk management process is longer than that prescribed in this Directive for the type of transaction in question, the institution's volatility adjustments must be scaled up in accordance with the square root of time formula prescribed above.
- The institution must 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.
- An independent review of the institution's system for the estimation of volatility adjustments should be carried out regularly in the bank'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 institution's risk management process should take place at least once a year and should specifically address, at a minimum:

- the integration of estimated volatility adjustments into daily risk management;
- the validation of any significant change in the process for the estimation of volatility adjustments;
- 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;
- the accuracy and appropriateness of the volatility assumptions;

#### (iii) Scaling up of volatility adjustments

The Supervisory volatility adjustments set out at paragraph 3.1.3.2(b)(i) are the volatility adjustments to be applied, in the case of secured lending transactions, where there is daily revaluation and, in the case of capital market driven transactions, daily remargining.

Similarly where an institution uses its Own Estimates of the volatility adjustments to be applied, these must be calculated in the first instance on the basis of daily revaluation (in the case of secured lending transactions) and daily remargining (in the case of capital market driven transactions).

In relation to both standard volatility adjustments and Own Estimates volatility adjustments, if the frequency of revaluation (in the case of secured lending transactions) or remargining (in the case of capital market driven transactions) is less than daily, larger volatility adjustments are required. These will be calculated by scaling up the daily revaluation/remargining volatility adjustments, using the following 'square root of time' formula :

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

where :

H = volatility adjustment to be applied

H<sub>M</sub> = volatility adjustment where there is daily revaluation/remargining

N<sub>R</sub> = actual number of days between revaluation/remargining

T<sub>M</sub> = liquidation period for the type of transaction in question.

#### (iv) Conditions for applying a 0% volatility adjustment

In relation to repurchase transactions / securities lending or borrowing transactions, where an institution uses the Supervisory volatility adjustments or the Own Estimates volatility adjustments approach and where the conditions set out below are satisfied competent authorities may choose to allow institutions not to apply the volatility adjustments specified above and may instead apply a 0% volatility adjustment. This option is not available in respect of institutions using the Internal Models approach to calculating volatility adjustments in relation to the calculation of capital charges for repurchase transactions / securities or commodities lending or borrowing transactions covered by Master Netting Agreements.

- 1 Both the exposure and the collateral are cash or a sovereign or PSE security qualifying for a 0 % risk weight in the Standardised Approach ;
- 2 Both the exposure and the collateral are denominated in the same currency.
- 3 Either the transaction is overnight or both the exposure and the collateral are marked-to-market daily and are subject to daily remargining ;
- 4 Following a counterparty's failure to remargin, the time between the last mark to market before the failure to remargin and the liquidation of the collateral is no more than four business days;
- 5 The transaction is settled across a settlement system proven for that type of transaction.
- 6 The documentation covering the agreement is standard market documentation for repurchase transactions / securities lending or borrowing transactions in the securities concerned;
- 7 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;
- 8 Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the institution or the institution have the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.
- 9 The counterparty is a core market participant,  
Core market participants may include, at the discretion of the national competent authority, the following entities :
  - Sovereigns, central banks, regional governments, local authorities, and PSEs claims on which are treated as claims on institutions under Annex C-1, section 3;
  - institutions;
  - other financial companies (including insurance companies) which are eligible for a 20 % risk weight under the Standardised Approach or which, if unrated, are internally rated by an IRB institution and associated with a PD equivalent to credit quality step 2 or better.
  - regulated mutual funds that are subject to capital or leverage requirements;
  - regulated pension funds; and
  - recognised clearing organisations.

Where a competent authority applies the treatment set out above to repurchase transactions / securities lending or borrowing transactions in securities issued by its domestic government, then other competent authorities may choose to allow institutions incorporated in their jurisdiction to adopt the same approach to the same transactions.

(c) *Calculating risk-weighted assets*

(i) Standardised Approach

The adjusted exposure (E\*) shall be taken as the exposure value for the purposes of Article 27(2).

(ii) IRB Foundation Approach

The effect of collateral on the risk weight calculation in respect of an exposure under the IRB Foundation Approach is a function of its effect on the Loss Given Default risk component.

The effective Loss Given Default (LGD\*) applicable to a collateralised transaction is as follows, where:

LGD is that of the unsecured exposure before recognition of collateral

E is the uncollateralised exposure amount (ie cash lent or securities lent or posted, and in the case of OTC derivative transactions E is its relevant value as determined in accordance with Article 27(4) of this chapter)

E\* is the adjusted value of the exposure amount as calculated using the formula set out under 'Valuation' above

$$\text{LGD}^* = \text{Max} \{0, \text{LGD} \times [(E^*/E)]\}$$

**3.1.4. Other eligible collateral under the IRB Foundation Approach**

**3.1.4.1. Valuation**

The value of recognised real estate collateral shall be determined subject to the minimum requirements as set out in Annex E-2, 2.1.4.

Where other physical collateral is taken as security its value shall be taken to be that ascribed in accordance with the provisions of paragraph 2.1.6.

**3.1.4.2. Calculating risk-weighted assets**

The methodology for determining the effective LGD under the Foundation Approach for cases where banks have taken other eligible IRB collateral is as follows.

Exposures where the minimum eligibility requirements are met, but the ratio of current collateral value (C) to the nominal exposure (E) is below a threshold level of C\* (i.e. the required minimum collateralisation level for the exposure) would receive the appropriate LGD for unsecured exposures or those secured by non-eligible collateral.

Exposures where the ratio of collateral value to the nominal exposure exceeds a second, higher threshold level of C\*\* (i.e. the required level of over-collateralisation to receive full LGD recognition) would be assigned an LGD according to the table below.

The following table displays the applicable LGD and required over-collateralisation levels for the secured parts of senior exposures:

### Minimum LGD for secured portion of exposures

	Minimum LGD	Required collateralisation level of the exposure (C*)	Required level of over-collateralisation for full LGD recognition (C**)
<i>Receivables</i>	35% (65%)	0%	125%
<i>CRE/RRE</i>	35% (65%)	30%	140%
<i>Other collateral</i>	40% (70%)	30%	140%

Exposures are to be divided into fully collateralised and uncollateralised portions.

The part of the exposure considered to be fully collateralised, that is the collateralised exposure amount divided by the required level of over-collateralisation (C/C\*\*), receives the LGD associated with the type of collateral.

The remaining part of the exposure is regarded as unsecured.

The competent authorities of the member states may authorise their institutions alternatively to the treatment described above to apply a 50% risk weighting to the part of the exposure fully collateralised by RRE and/or CRE collateral situated within the territory of those Member States that allow the 50% risk weighting, if the competent authorities of the Member States have evidence that this is a well-developed and long-established market and loss-rates stemming from RRE and/or CRE lending do not exceed the following limits:

- c) up to 50 % of the market value (or where applicable and if lower 60 % of loan-to-value (LTV) based on mortgage-lending-value (MLV)) must not exceed 0.3 % of the outstanding RRE and/or CRE loans in any given year.
- d) overall losses stemming from RRE lending and/or CRE lending must not exceed 0.5 % of the outstanding loans in any given year.

If either of these tests is not satisfied in a given year, the eligibility to use this treatment will cease and the original eligibility criteria would need to be satisfied again before it could be applied in the future. Countries applying such a treatment must publicly disclose that these conditions are met. For CRE collateral the valuation requirements for the preferential treatment under the Revised Standardised Approach apply.

This paragraph shall not prevent the competent authorities of a Member State, which applies a higher risk weighting in its territory, from allowing, under the conditions defined above, the 50 % risk weighting to apply for this type of lending in the territories of those Member States that allow the 50 % risk weighting.

Member States shall inform the Commission of the use they make of this paragraph.

#### 3.1.5. Calculating risk weighted assets for mixed pools of collateral

The methodology for determining the effective LGD of a transaction under the Foundation Approach where banks have taken both financial collateral and other eligible collateral is as follows.

In the case where an exposure is protected by more than one type of eligible collateral, the institution will be required to subdivide the adjusted value of the exposure (after the haircut for financial collateral) into portions each covered by only one CRM type. That is, the bank must divide the exposure into the portion covered by eligible financial collateral, the portion covered by receivables, the portion covered by CRE/RRE collateral, a portion covered by other eligible collateral, and an unsecured portion, where relevant.

The risk weighted assets for each fully secured portion of exposure must be calculated separately.

Where the ratio of the sum of the value of other CRE and RRE collateral to the reduced exposure after recognising the effect of financial and receivables collateral is below the associated threshold level (i.e. the minimum degree of collateralisation of the exposure), the exposure would receive the appropriate LGD value.

### **3.1.6. Other funded credit protection**

#### ***3.1.6.1. Deposits with third party institutions***

Where the conditions set out in paragraphs 1.1.4.1 and 2.1.8.1 of this Annex are satisfied, credit protection deriving from the borrower's deposits or cash assimilated instruments placed with institutions other than the lending institution shall be treated as a guarantee by the third party institution.

#### ***3.1.6.2. Life insurance policies pledged to the lending institution***

Where the conditions set out in paragraphs 1.1.4.2 and 2.1.8.2 of this Annex are satisfied, credit protection deriving from the pledging of a life insurance policy with the lending institution shall be treated as a guarantee by the company providing the life insurance. The value of the credit protection (G) recognised shall be the surrender value of the life insurance policy.

#### ***3.1.6.3. Institution instruments repurchased on request***

Instruments eligible under paragraph 1.1.4.3 shall be treated as a guarantee by the issuing institution.

For the purposes of this guarantee treatment such instruments shall be valued as follows:

- (a) where the instrument will be repurchased at its face value, it shall be valued at that amount;
- (b) where the instrument will be repurchased at market price, it shall be valued in the same way as the debt securities specified in paragraph 1.1.3.1(h).

### **3.2. Unfunded credit protection**

#### **3.2.1. Valuation**

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 of the borrower or on the occurrence of other specified events.

Where unfunded credit protection is denominated in a currency different from that in which the exposure is denominated (a currency mismatch) the amount of the credit protection will be reduced by the application of a volatility adjustment  $H_{FX}$  as follows:

$$G^* = G \times (1 - H_{FX})$$

G is the nominal amount of the credit protection; and

G\* is G adjusted for any foreign exchange risk.

$H_{fx}$  is the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation.

Where there is no currency mismatch

$$G^* = G$$

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. The calculation of such volatility adjustments is subject in all respects to the same rules, requirements and conditions as for the calculation of such volatility adjustments in respect of funded credit protection.

### **3.2.2. Calculating risk weighted assets**

#### ***3.2.2.1. Partial protection – tranching***

Where the bank transfers a portion of the risk of a loan in one or more tranches and the risk transferred and the risk retained are of different seniority, the rules set out in Title II, Chapter 1, Section IV will apply. Materiality thresholds on payments below which no payment will be made in the event of loss are considered to be equivalent to retained first loss positions and to give rise to a tranching transfer of risk.

#### ***3.2.2.2. Standardised Approach***

##### *(a) Full protection*

An exposure which is fully protected by unfunded protection ( $G_A$ ) is assigned a risk weight  $g$ ,

where

$g$  is the risk weight of claims on the protection provider as specified under Title II, Chapter 1, Section I; and

$G_A$  is the amount of  $G^*$  as calculated under paragraph 3.2.1 above further adjusted for any maturity mismatch as prescribed in Annex E-4.

##### *(b) Partial protection – equal seniority*

Where the protected amount is less than the amount of the exposure and, the protected and unprotected portions are of equal seniority – ie the bank and the protection provider share losses on a pro-rata basis, proportional regulatory capital relief will be afforded. Risk weighted assets will be calculated in accordance with the following formula:

$$(E - G_A) \times r + G_A \times g$$

where E is the value of the exposure

$G_A$  is the amount of  $G^*$  as calculated under paragraph 3.2.1 above further adjusted for any maturity mismatch as prescribed in Annex E-4.

$r$  is the risk weight of claims on the obligor as specified under Title II, Chapter 1, Section I

$g$  is the risk weight of claims on the protection provider as specified under Title II, Chapter 1, Section 1.

*(c) Sovereign guarantees*

As specified in Title II, Chapter 1, Section I, a lower risk weight may be applied at national discretion to a bank's exposures to the sovereign (or central bank) where the bank is incorporated and where the exposure is denominated in domestic currency and funded in that currency. National authorities may extend this treatment to portions of claims guaranteed by the sovereign (or central bank), where the guarantee is denominated in the domestic currency and the exposure is funded in that currency.

**3.2.2.3. IRB Foundation Approach**

*Full protection/ Partial protection – equal seniority*

For the covered portion of the exposure (based on the adjusted amount of the credit protection  $G_A$ ), the risk weight of the guarantor/protection provider may be applied as calculated under Title II, Chapter 1, Section II taking the risk weight function appropriate to the type of guarantor, the PD appropriate to the guarantor's borrower grade, or some grade between that of the borrower and that of the guarantor if a full substitution is deemed not to be warranted, and the relevant LGD (the bank may replace the LGD of underlying transaction with that of the guarantee). The adjusted risk weight will not be less than that of a comparable direct exposure to the protection provider.

The uncovered portion of the exposure is assigned the risk weight associated with the borrower.

$G_A$  is the amount of  $G^*$  as calculated under paragraph 3.2.1 above further adjusted for any maturity mismatch as prescribed in Annex E-4.

## ANNEX E- 4

### **Maturity Mismatches**

For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of the credit protection is less than that of the underlying exposure. Protection of less than one year residual maturity, which does not have matching maturities with the underlying exposure, will not be recognised.

#### **4.1. Definition of maturity**

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

Where there is an option to terminate the protection which is at the discretion of the protection seller, the maturity of the protection will be taken to be 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 bank to call the transaction before contractual maturity, the maturity of the protection will be taken to be the earliest date at which that option may be exercised .

#### **4.2. Regulatory Capital Treatment**

##### **4.2.1. Transactions subject to funded credit protection – Financial Collateral Simple Method**

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

##### **4.2.2. Transactions subject to funded credit protection in the Standardised and IRB Foundation Approach - Financial Collateral Comprehensive Method**

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:

$$C_{VAM} = C_{VA} \times t/T$$

where

$C_{VA}$  is the market value of the collateral after the application of volatility adjustments in accordance with the terms of Annex E-3 or the amount of the exposure, whichever is the lowest.

$t$  is the residual maturity of the collateral arrangement or the value of  $T$  whichever is the lower; and

$T$  is the residual maturity of the exposure or 5 years whichever is the shorter.

$C_{VAM}$  is then taken as the value of the collateral for inclusion in the formula for the calculation of adjusted exposure ( $E^*$ ) set out at paragraph 3.1.3.2 (a) above.

#### **4.2.3. Transactions subject to unfunded credit protection in the Standardised and IRB Foundation Approach**

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

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 residual maturity of the collateral arrangement or the value of  $T$  whichever is the lower; and

$T$  is the residual maturity of the exposure or 5 years whichever is the lower

$G_A$  is then taken as the value of the guarantee for the calculation of risk weighted assets under paragraphs 3.2.2. above.

## **ANNEX E- 5**

### **Combinations of CRM in the Standardised Approach**

In the case where a bank has more than one form of credit risk mitigation covering a single exposure (e.g. a bank has both collateral and a guarantee partially covering an exposure), the bank will 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 assets of each portion must be calculated separately.

When credit protection provided by a single protection provider has differing maturities, the above approach shall also be applied.

## ANNEX E-6

### **Basket CRM techniques**

#### **6.1. First-to-default credit derivatives**

Where an institution obtains credit protection for a basket of reference names under terms that the first default among the reference names shall trigger payment and this credit event shall terminate the contract, the institution may recognise regulatory capital relief for the asset within the basket with the lowest risk weighted amount, but only if the notional amount is less than or equal to the notional amount of the credit derivative.

With regard to the institution providing credit protection through such an instrument, if the product has an external credit assessment from an eligible credit assessment institution, the risk weights prescribed in Title II, Chapter 1, Section IV will be applied. If the product is not rated by an eligible external credit assessment institution, the risk weights of the assets included in the basket will be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk weighted asset amount.

#### **6.2. Second-to-default credit derivatives**

In the case where the second default among the assets within the basket triggers the credit protection, the institution obtaining credit protection through such a product will only be permitted to obtain capital relief if first-to-default protection has also been obtained or when one of the assets within the basket has already defaulted. In such cases the methodology shall follow that prescribed above for first-to-default derivatives appropriately modified for second-to-default products.

For institutions providing credit protection through such a product, if the product has an external credit assessment from an eligible credit assessment institution, the risk weights prescribed in Title II, Chapter 1, Section IV will be applied. If the product is not rated by an eligible external credit assessment institution, the risk weights of the assets included in the basket will be aggregated, except the asset with the lowest risk weighted amount, up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk weighted asset amount.

## **ANNEX F-1**

### **Definitions for purposes of Annex F**

Securitisation of revolving exposures. A traditional or synthetic securitisation in which the pool of exposures which are securitised, or the drawn amounts of which are securitised, consists of revolving exposures that permit borrowers to vary the drawn amount within an agreed limit. Specifically this includes, but may not be limited to, credit card securitisations as well as commercial loans drawn under long-term commitments that are securitised as collateralised loan obligations (CLOs).

Early amortisation provision. A contractual clause which requires, on the occurrence of defined triggering events, investors' positions to be redeemed prior to the originally stated maturity of the securities issued.

Excess spread means gross finance charge collections and other fee income received by the trust or special purpose entity (SPE) net of costs and expenses.

Clean-up call. An option held by the originator to repurchase or extinguish the securitisation positions created by the structure before all of the underlying credit exposures have been repaid, when the amount of outstanding exposures falls below a specified level.

Liquidity facility. A contractual agreement to provide funding to ensure timeliness of cashflows to investors.

Kirb. The IRB charge calculated in accordance with Title II, Chapter 1, Section II on the securitised asset pool had those assets not been securitised. The calculation of Kirb should reflect any credit risk mitigation applicable to the underlying asset pool. This calculation should reflect the effects of any credit risk mitigant that is applied on the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures.

For securitisation of purchased receivables that meet the conditions in Section II with the exception of the requirement that the residual maturity not be greater than one year unless it is fully secured, supervisors may allow banks to use the top-down methodology for calculating Kirb described in Section II on an exceptional basis. This may be permitted to be used when the supervisor has determined that, in the specific case in question, fulfilment by the institution of the requirements for the calculation of Kirb that would otherwise apply would be unduly burdensome in relation to the exposures in question. Such permission shall not be given in case the institution is the originating institution in relation to the exposures in question.

Supervisory Formula Method. The Supervisory Formula Method refers to the method of calculating capital requirements in respect of securitisation positions under the IRB Approach using the supervisory formula set out at Annex F-6.

Ratings Based Method. The Ratings Based Method refers to the method of calculating capital requirements in respect of securitisation positions under the IRB Approach using the tables of risk weights set out at Annex F-6.

Unrated exposure. An exposure which is not rated by an ECAI which is recognised by the competent authority and nominated by the institution for the purposes of this Section.

Rated exposure. An exposure which has been rated by an ECAI which is recognised by the competent authority and nominated by the institution for the purposes of this Section.

Implicit support. Implicit support arises when an institution provides support to a securitisation in excess of its predetermined contractual obligation.

## ANNEX F- 2

### **Minimal operational requirements for recognition of significant risk transfer in a traditional securitisation (for Standardised Approach and IRB Approaches)**

An originating institution may exclude securitised exposures from the calculation of risk weighted assets if the following conditions have been met.

- a) The securitisation documentation reflects the economic substance of the transaction.
- b) Significant credit risk associated with the securitised exposures has been transferred to third parties.
- c) The credit risk exposures must be put beyond the reach of the originator and its creditors, even in bankruptcy or receivership. These conditions must be supported by a legal opinion provided by a qualified legal counsel.
- d) The securities issued are not obligations of the transferor. Thus, investors by purchasing the securities only have claim to the underlying pool of exposures.
- e) The transferee is a special-purpose entity (SPE) and the holders of the beneficial interests in that entity have the right to pledge or exchange those interests without restriction.
- f) The originator does not maintain effective or indirect control over the transferred credit exposures. It will be determined that a originator has maintained effective control over the transferred credit exposures if, other than under the terms of a clean-up call satisfying the conditions prescribed under paragraph g) below, it is able to repurchase from the transferee the previously transferred credit exposures in order to realise their benefits or is obligated to retain the risk of the transferred credit exposures. The originator's retention of servicing rights to the credit exposures will not necessarily constitute indirect control of the exposures.
- g) Regarding clean-up calls, the following conditions must be satisfied:
  - The clean up call is not mandatory in substance or in form, but rather it is exercisable at the discretion of the originating institution;
  - The clean up call is only exercisable when 10% or less of the original value of the exposures securitised remains unamortised; and
  - The clean up call provisions must not be structured to avoid allocating losses to credit enhancements or positions held by investors, or be otherwise structured to provide credit enhancement.

- h) The securitisation does not contain clauses that (i) require the originating institution to systematically alter the underlying credit exposures, such that the pool's weighted average credit quality is improved unless this is achieved by selling assets to independent and unaffiliated third parties at market prices; or (ii) allow for increases in a retained first loss position or credit enhancement provided by the originating institution after the transaction's inception; or (iii) increase the yield payable to parties other than the originating bank, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.

Where these conditions are met, institutions must still hold regulatory capital against any securitisation positions they hold in accordance with the provisions of this Section.

### **ANNEX F-3**

#### **Minimum operational requirements for recognition of significant risk transfer in a synthetic securitisation (for Standardised Approach and IRB Approaches)**

An originating institution may exclude securitised exposures from the calculation of risk weighted assets if the following conditions have been met. However, where these conditions are met, institutions must still hold regulatory capital against any securitisation positions they hold in accordance with the provisions of this Section and subject to the further rules in relation to maturity mismatch in the context of synthetic securitisations set out below.

- a) The securitisation documentation reflects the economic substance of the transaction.
- b) Credit risk mitigants used to transfer credit risk must comply with the eligibility and minimum requirements prescribed under Article 68. In addition, SPEs will not be recognised as eligible guarantors or unfunded protection providers.
- c) Significant credit risk has been transferred to third parties either through funded or unfunded instruments.
- d) The instruments used to transfer credit risk may not contain terms or conditions that limit the amount of credit risk transferred, such as:
  - Clauses that materially limit the credit protection or credit risk transference (e.g. significant materiality thresholds below which credit protection is deemed not to be triggered if a credit event occurs or those that allow for the termination of the protection due to deterioration of the credit quality of the underlying credit exposures);
  - Clauses that require the originating institution to alter the underlying credit exposure such that it can result in improvements to the pool's weighted average credit quality;
  - Clauses that increase the institutions' cost of credit protection in response to deterioration in the pool's quality;
  - Clauses that increase the yield payable to parties other than the originating institutions, such as investors and third-party providers of credit enhancements in response to a deterioration in the credit quality of the underlying pool;
  - Clauses that provide for increases in a retained first loss position or credit enhancement provided by the originating institution after the transaction's inception.
- e) An opinion must be obtained from qualified legal counsel that confirms the enforceability of the contracts in all relevant jurisdictions.

#### *Clean-up calls*

The existence of a clean-up call will not be deemed to result in a failure to satisfy the above conditions where the following conditions are satisfied. Where these conditions are not satisfied the presence of a clean-up call will result in the above conditions not

being satisfied.

- The clean up call is not mandatory in substance or in form, but rather it is exercisable at the discretion of the originating institution;
- The clean up call provisions must not be structured to avoid allocating losses to credit enhancements or positions held by investors, or be otherwise structured to provide credit enhancement; and
- The clean up call is only exercisable when 10% or less of the original value of the reference portfolio remains unamortised.

### ***Time calls***

The existence of a time call option on the part of the originator will not be deemed to result in a failure to satisfy the above conditions provided that it is not set for a date earlier than the duration or the weighted average life of the securitised credit exposures. Competent authorities shall consider whether to require a minimum period to elapse before the exercise of the call.

When intending to exercise a time call institutions must give prior notice to the competent authority.

### ***Treatment of maturity mismatches in synthetic securitisations***

For purposes of calculating risk weighted exposures, the maturity of the underlying credit exposures shall be taken to be the latest maturity of any of the underlying assets subject to a maximum of five years. Subject to the paragraphs below in relation to clean-up calls, the maturity of the credit protection shall be determined in accordance with Title II, Chapter 1, Section III.

Under the Standardised Approach, the originating institution must deduct all retained or repurchased securitisation positions that are unrated or rated below investment grade. For all other retained or repurchased securitisation positions, the institution must apply the maturity mismatch treatment prescribed in Title II, Chapter 1, Section III in accordance with the following formula:

$$RW^* = [RW(SP) \times t/T] + [RW(Ass) \times (T-t)/T]$$

Where

$RW^*$  = Total effective risk weighted assets

$RW(Ass)$  = Risk weighted assets if assets remained on balance sheet

$RW(SP)$  = Risk weighted assets under securitisation treatment if there was no maturity mismatch

T = maturity of underlying

t = maturity of credit protection.

Under the IRB Approach the originating institution must deduct all retained or repurchased securitisation positions or parts of securitisation positions which fall within those securitisation positions or parts of securitisation positions which, assuming losses arise on the securitised assets, will absorb losses up to Kirb. For all other retained or repurchased securitisation positions, the institution must apply the maturity mismatch treatment prescribed in Title II, Chapter 1, Section III in accordance with the formula set out in the previous paragraph.

## ANNEX F-4

### **External credit assessments**

#### **1. Operational requirements regarding the recognition of external credit assessments**

The following operational criteria concerning the use of external credit assessments apply to the Standardised and IRB Approaches of the securitisation framework:

- a) To be eligible for risk-weighting purposes, the external credit assessment must take into account and reflect the entire amount of credit risk exposure the institution has with regard to all payments owed to it. For example, if an institution is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with timely repayment of both principal and interest.
- b) In addition to the principles that must be complied with under Article 37 and as elaborated in Annex C-2, to be recognised as eligible for these purposes an external credit assessment institution must have a demonstrated experience in securitisation, which may be evidenced by a strong market acceptance;
- c) In addition to the principles that must be complied with under Article 38 and as elaborated in Annex C-2, the credit assessments of an external credit assessment institution will only be recognised as eligible for these purposes if they are available publicly to the market. Assessments are considered to be publicly available if (i) they have been published in a publicly accessible forum and (ii) they are included in the ECAI's transition matrix. Assessments that are made available only to a limited number of entities are not considered to be publicly available.
- d) Subject to paragraphs (f) and (g) below, an institution must apply external credit assessments from eligible ECAIs consistently across a given type of securitisation exposure. Further, an institution may not use an ECAI's credit assessments for some tranches and another ECAI's assessments for tranches within the same structure that may or may not be rated by the first ECAI.
- e) In cases where there are two external credit assessments of recognised ECAIs available in respect of a tranche, the institution shall use the less favourable assessment.
- f) In cases where there are more than two external credit assessments of recognised ECAIs available in respect of a tranche, the two assessments generating the two lowest risk weights shall be used. If the two lowest risk weights are different, the higher risk weight shall be applied. If the two lowest risk weights are the same, that risk weight shall be applied.
- g) Where credit protection is provided directly to an SPE of a structure, by a provider of unfunded credit protection eligible under Section III and that protection is reflected in the external credit assessment of a tranche provided by a nominated ECAI, the risk weight appropriate to that assessment may be used.

If the protection provider is not eligible under Section III, the tranche should be treated as unrated.

In the situation where the credit protection is not obtained by the SPE but rather is provided directly to a securitisation position, the bank would treat the exposure as if it is unrated and then use the CRM treatment outlined in Section III to recognise the hedge.

## **2. Mapping**

- a) In order to differentiate between the relative degrees of risk expressed by each credit assessment, competent authorities shall consider quantitative factors associated with all items assigned the same credit assessment. For recently established ECAIs and for those that have compiled only a short record of quantitative data, competent authorities shall ask the ECAI what it believes to be the quantitative assessment associated with all items assigned the same credit assessment.
- b) In order to differentiate between the relative degrees of risk expressed by each credit assessment, competent authorities shall consider qualitative factors such as the pool of issuers that the ECAI covers, the range of credit assessments that the ECAI assigns, each credit assessment meaning and the ECAI's definition of default.
- c) Competent authorities shall compare aspects such as default rates experienced for each credit assessment of a particular ECAI and compare them with a benchmark based on the experience of other ECAIs on a population of issuers that the competent authorities believes to present an equivalent level of credit risk.
- d) When competent authorities believe that the default rates experienced for the credit assessment of a particular ECAI are materially and systematically higher than the benchmark, competent authorities shall assign a higher risk step in the credit quality assessment scale to the ECAI credit assessment.
- e) When competent authorities have increased the associated risk weight for a specific credit assessment of a particular ECAI, if the ECAI demonstrates that the quantitative assessments such as default rates experienced for its credit assessment are no longer materially and systematically higher than the benchmark, competent authorities may decide to restore the original step in the credit quality assessment scale for the ECAI credit assessment.

## ANNEX F- 5

### Capital Treatment under the Standardised Approach

#### Treatment of securitisation positions

Subject to paragraphs A-D below, the risk weighted amount of a securitisation position is computed by multiplying the notional amount of the position by the appropriate risk weight determined in accordance with the following tables.

All off-balance sheet securitisation positions are subject to a conversion factor of 100% unless otherwise stated.

Throughout Annex F deduction indicates a requirement that the amount of the position be deducted from own funds - 50% from original own funds and 50% from additional own funds.

#### Long-term claims for which a credit assessment by an external credit assessment institution is available

<i>Credit quality step</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 and below, or unrated</i>
<i>Risk weight (or deduction requirement)</i>	<i>20%</i>	<i>50%</i>	<i>100%</i>	<i>350%</i>	<i>Deduction</i>

#### Short-term claims for which a credit assessment by an external credit assessment institution is available

<i>Credit quality step</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>All other ratings or unrated</i>
<i>Risk weight (or deduction requirement)</i>	<i>20%</i>	<i>50%</i>	<i>100%</i>	<i>Deduction</i>

#### A. Positions rated below credit quality step (CQS) 3

Originating institutions and sponsoring institutions must deduct from capital all retained and repurchased securitisation exposures rated below credit quality step 3.

#### B. Exceptions to deduction requirements

##### *Treatment of unrated most senior tranches in securitisations*

If the most senior tranche of a traditional or synthetic securitisation is unrated, an institution having a securitisation position in that tranche may apply the 'look-through' treatment for calculating its capital requirements in respect of that position provided the composition of the pool of credit exposures securitised is known at all

times.

When determining whether a tranche is most senior for the purpose of applying the 'look-through' approach, institutions are not required to consider amounts due under interest rate or currency derivative contracts, fees due, or other similar payments. .

In the look-through treatment, the notional amount of such a position will receive the weighted-average risk weight assigned to the underlying credit exposures subject to supervisory review. Where the institution is unable to determine the risk weights assigned to the underlying credit risk exposure(s), the unrated position must be deducted.

**Treatment of securitisation positions that are in a second loss position or better in Asset-backed Commercial Paper (ABCP) programs**

Subject to the availability of a more favourable treatment by virtue of the provisions concerning liquidity facilities below, where the following conditions are satisfied, a credit conversion factor of 100% will apply to the position and the institution must apply a risk weight that is the greater of (i) 100% or (ii) the highest of the risk weights assigned to any of the underlying individual credit exposures covered by the position.

- a) economically be in a second loss position or better and the first loss position must provide meaningful credit protection to the second loss position;
- b) the associated credit risk must be the equivalent of investment grade or better; and
- c) the institution providing the unrated position must not retain or provide the first loss position.

**C. Treatment of Liquidity Facilities**

Institutions will be required to categorise liquidity facilities they may provide into three general categories: eligible liquidity facilities, liquidity facilities extended to cover market disruption and servicer cash advance facilities.

A conversion factor as indicated below will be applied and, except where stated otherwise in the following paragraphs, the resulting credit equivalent amount assigned a risk weight based on the treatment of securitisation positions outlined above.

If the facility is externally rated, the institution may rely on the external rating provided it assigns a 100% conversion factor to the facility.

***Eligible liquidity facilities***

When the following conditions have been met, a 20% conversion factor will apply to the notional amount of the liquidity facility with an original maturity of one year or less. A credit conversion factor of 50% will apply to facilities with an original maturity of more than one year. The risk weight to be applied to the credit equivalent amount so arrived at will be the highest risk weight that would be applied to any of the securitised credit exposures covered by the liquidity facility.

- The facility documentation must clearly identify and limit the circumstances under which it may be drawn. In particular, the facility must not be able to be used to provide credit support at the time it may be drawn by covering losses already sustained (e.g. by acquiring assets at above fair value), or serve as permanent or regular funding for the securitisation;
- Repayment of draws on the facility (i.e. assets acquired under a purchase agreement or loans made under a lending agreement) must not be

subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments, and or subject to a waiver or deferral;

- The facility cannot be drawn after all applicable credit enhancements) from which the liquidity facility would benefit is exhausted(e.g. transaction specific and programme-wide;
- The facility must include an asset quality test that precludes it from being drawn to cover credit risk exposures that are in default as defined in Article 1 (46).
- The facility must include a provision that results in an automatic reduction in the amount that can be drawn by the amount of exposures that are in default as defined in Article 1(46), or where the pool consists of rated instruments that terminates the facility if the average quality of the pool falls below investment grade.

#### ***Liquidity facilities that are available only in the event of a general market disruption***

Liquidity facilities that are only available in the event of a general market disruption (i.e. where a capital market instrument cannot be issued at any price) will be assigned a 0% conversion factor, provided that the operational requirements for eligible liquidity facilities are satisfied.

#### **Servicer cash advance facilities**

Subject to national discretion and subject to the conditions that apply in the case of eligible liquidity facilities, if contractually provided for, servicers may advance cash to ensure an uninterrupted flow of payments to investors so long as the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures. Subject to national discretion, such servicer cash advances that are unconditionally cancellable can receive a 0% credit conversion factor.

### **D. Capital requirement for revolving securitisations with early amortisation provisions**

#### ***Scope***

An originating institution will be required to apply the methodology described below when it sells revolving exposures into a securitisation of revolving exposures that contains an early amortisation feature.

The institution will be required to hold capital against the sum of the originator's interest and the investors' interest as prescribed below.

For the purposes of these provisions, 'originator's interest' means that notional part of a pool of drawn amounts sold into a structure, the proportion of which in relation to the total pool sold into the structure determines the proportion of the cashflows generated by principal and interest collections and other associated amounts which are not available to make payments to those having securitisation positions in the securitisation. 'Investors' interest' means the notional remaining part of the pool of drawn amounts.

For securitisation structures wherein the underlying pool comprises revolving and

non-revolving credit exposures, an institution must apply the treatment prescribed below to that portion of the underlying pool containing revolving credit exposures.

### ***Exemptions from early amortisation treatment***

Transactions involving revolving credit exposures that mimic term structures (i.e. where the risk on the underlying facilities does not return to the originating institution) are also excluded from the treatment prescribed below.

Further, structures where an institution securitises one or more credit line(s) for which investors remain fully exposed to future draws by borrowers even after an early amortisation event has occurred are exempt from the early amortisation treatment.

### ***Maximum capital requirement***

For an institution subject to the early amortisation treatment the total of its capital charge arising in relation to its positions in the investors' interest and its capital charge under the early amortisation treatment will be subject to a maximum capital charge equal to the greater of (i) that required for retained or repurchased positions in relation to the investors interest, or (ii) the capital requirement that would apply in relation to the amount of the investors interest had the assets not been securitised. Deduction of capitalised assets if any, will be treated outside this maximum limit.

### ***Mechanics***

The capital to be held against the amount of the originator's interest shall be determined in accordance with the treatment prescribed in sections I or II of this chapter as appropriate.

The capital charge to be held against the investors' interest shall be determined by multiplying the notional amount of the investors' interest by the product of (a) the appropriate conversion factor (as prescribed below), and (b) the risk weight appropriate to the underlying exposure type as if the credit exposures had not been securitised. The credit conversion factors differ depending upon whether the early amortisation repays investors through a controlled or non-controlled mechanism. They also differ according to whether the securitised exposures are uncommitted unconditionally cancellable retail credit lines (e.g. credit card receivables) or other credit lines (e.g. revolving corporate facilities).

### **Securitisations with controlled early amortisation provisions**

An early amortisation provision will be considered to be controlled if it meets the following conditions:

- (a) The originating institution has an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortisation.
- (b) Throughout the duration of the transaction there is a pro rata sharing between the originator's interest and the investors' interest of interest, principal, expenses, losses and recoveries based on the beginning of the month balance of receivables outstanding.
- (c) The institution must set a period for amortisation that is considered sufficient for 90% of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default; and

- (d) The pace of repayment should not be any more rapid than would be allowed by straight-line amortisation over the period set out in condition (c).

In the case of securitisations of retail credit lines which are uncommitted and unconditionally cancellable without prior notice where the securitisation contains controlled early amortisation features, institutions must compare the three-month average excess spread level with the following two excess spread levels:

- The point at which the institution is required to trap excess spread as economically required by the structure; and
- The excess spread level at which an early amortisation is triggered.

In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points greater than the excess spread level as which an early amortisation is triggered.

The institution must divide the distance between the two points described above into four equal segments. For example if the spread trapping point is 4.5% and the early amortisation trigger is 0%, then 4.5% is divided into four equal segments of 112.5 basis points each. The conversion factors set out in the following table apply.

In this table, 'excess spread levels A' means levels of excess spread falling within the first such segment immediately below the trapping point; 'excess spread levels B' means levels of excess spread falling within such segment immediately below the segment containing excess levels A; 'excess spread levels C' means levels of excess spread falling within such segment immediately below the segment containing excess levels B; and 'excess spread levels D' means levels of excess spread falling within such segment falling immediately above the excess spread level at which an early amortisation is triggered.

All other securitisations of revolving exposures (i.e. those that are committed and/or not unconditionally cancellable without prior notice and all non-retail exposures) with controlled early amortisation features will be subject to a credit conversion factor against the off-balance sheet exposures as indicated in the table.

	<b>Uncommitted, unconditionally cancellable</b>	<b>Committed and/or not unconditionally cancellable</b>
<b>Retail credit lines</b>	<b>3 months average excess spread</b> <i>Conversion factor</i> <b>Above segment A</b> 0% <b>Segment A</b> 1% <b>Segment B</b> 2% <b>Segment C</b> 20% <b>Segment D</b> 40%	Conversion factor of 90%
<b>Non-retail credit lines</b>	Conversion factor of 90%	Conversion factor of 90%

#### Securitisations with non-controlled early Amortisation features

Any early amortisation provision, other than one meeting the conditions to be considered a controlled early amortisation provision, shall be deemed a non-controlled early amortisation provision.

In the case of securitisations of retail credit lines which are uncommitted and unconditionally cancellable without prior notice where the securitisation contains non-controlled early amortisation features, institutions must compare the three-month average excess spread level with the following two excess spread levels:

- The point at which the institution is required to trap excess spread as economically required by the structure; and
- The excess spread level at which an early amortisation is triggered.

In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points greater than the excess spread level as which an early amortisation is triggered.

The institution must divide the distance between the two points described above into four equal segments. For example if the spread trapping point is 4.5% and the early amortisation trigger is 0%, then 4.5% is divided into four equal segments of 112.5 basis points each. The conversion factors; set out in the following table apply.

In this table, excess spread levels A, B, C and D have the same meaning as prescribed for the previous table.

All other securitised revolving exposures (i.e. those that are committed and/or not unconditionally cancellable and all non-retail exposures) with non-controlled early amortisation features will be subject to a credit conversion factor against the off-balance sheet exposures as indicated in the table.

	<b>Uncommitted, unconditionally cancellable</b>	<b>Committed and/or not unconditionally cancellable</b>
<b>Retail credit lines</b>	<p><b>3 months average excess spread</b></p> <p><i>Conversion factor</i></p> <p><b>Above segment A</b> 0%</p> <p><b>Segment A</b> 5%</p> <p><b>Segment B</b> 10%</p> <p><b>Segment C</b> 50%</p> <p><b>Segment D</b> 100%</p>	Conversion factor of 100%
<b>Non-retail credit lines</b>	Conversion factor of 100%	Conversion factor of 100%

## **Recognition of credit risk mitigation on securitisation positions**

### **Funded protection**

Eligible funded protection is limited to that which is eligible for the Standardised Approach as prescribed under Title II, Chapter 1, Section III and recognition is subject to compliance with the relevant minimum requirements set out in that Section.

### **Unfunded protection**

Eligible unfunded protection and unfunded protection providers are limited to those which are prescribed as eligible under Title II, Chapter 1, Section III and recognition is subject to compliance with the relevant minimum requirements set out in that Section. Special purpose entities will not be recognised as unfunded protection providers, except in relation to credit linked notes.

### **Calculation of capital requirements**

Capital requirements in respect of the credit protected portions of securitisation positions will be calculated in accordance with Title II, Chapter 1, Section III.

## **ANNEX F-6**

### **Capital Treatment under the Internal Ratings Based Approach**

Throughout Annex F deduction indicates a requirement that the amount of the position be deducted from own funds - 50% from original own funds and 50% from additional own funds.

All off-balance sheet securitisation positions are subject to a conversion factor of 100% unless otherwise stated.

#### **Hierarchy of methods**

Subject to the rules applying in relation to liquidity facilities prescribed below, the following rules determine the circumstances in which the Supervisory Formula Method and the Ratings Based Method shall be used.

#### **Originating institutions and sponsoring institutions**

In respect of any securitisation position or part of a securitisation position of the originating or sponsoring institution which falls within those securitisation positions or parts of securitisation positions which, assuming losses arise on the securitised assets, will absorb losses up to Kirb, the position or part of position shall be deducted.

In respect of any securitisation position or part of a securitisation position of the originating or sponsoring institution which falls outside the securitisation positions or parts of securitisation positions described in the preceding paragraph, the Ratings Based Method shall be used where there is available in respect of the tranche in which the securitisation position is held an eligible credit assessment from a nominated external credit assessment institution an eligible inferred assessment. Where such an eligible credit assessment or inferred credit assessment is not available, the Supervisory Formula Method shall be used.

If the originating or sponsoring institution is unable to calculate Kirb, the amount of the securitisation position must be deducted from capital.

#### **Investing institutions**

Subject to supervisory approval, institutions other than originators and sponsors may calculate their capital requirements in accordance with the rules for originating institutions prescribed in this Annex (including the hierarchy rules set out above). Otherwise such institutions shall calculate their capital requirements in accordance with the rules for investing institutions prescribed in this Annex (including the hierarchy rules set out below).

For institutions that are neither originating institutions, sponsoring institutions nor institutions calculating their capital requirements in accordance with the rules for originating institutions, risk weighted assets in respect of securitisation positions shall be calculated on the following basis:

Where, in respect of a tranche in which a securitisation position is held, an eligible assessment by an external credit assessment institution recognised as eligible for these purposes and nominated by the institution is available, or if such an assessment is not available but an eligible inferred assessment is available, the Ratings Based Method shall be used.

In respect of securitisation positions in tranches where neither such an eligible credit assessment by an external credit assessment institution nor an inferred assessment is available, the amount of the securitisation position must be deducted from capital.

### **Maximum capital requirements**

For originating institutions, sponsoring institutions and other institutions calculating their risk weighted assets in accordance with the rules for originating institutions, the institution may choose to calculate its capital requirements as if the assets were on its balance sheet and had not been securitised. In addition banks must deduct any capitalised assets as prescribed in Article 85.

### **Ratings Based Method**

Under the Ratings Based Method an institution shall determine the risk weighted assets by multiplying the amount of the securitisation position by the risk weights set out in the tables below.

The risk weights depend on (i) the external credit assessment or an eligible inferred credit assessment, (ii) whether the credit assessment represents a long-term or short-term rating, (iii) the granularity of the underlying pool, and (iv) the high-level seniority of the tranche in which the securitisation position is held relative to the size of the pool (denoted as 'Q').

'Q' is defined as the total size of all tranches (including the tranche in which the securitisation position is held) rated at least CQS 2 that are not more senior than the tranche in which the securitisation position is held, measured relative to the size of the pool of securitised exposures and expressed as a decimal.

Institutions may apply the risks weight for highly-rated thick tranches backed by highly granular pools (column 2 of Tables 1 or 2 as appropriate) if the effective number of underlying exposures (N) (defined below) is 100 or more and the seniority of the position relative to the size of the pool ('Q') is greater than or equal to  $0.1 + 25/N$  (i.e.  $Q \geq 0.1 + 25/N$ ). When the effective number of underlying exposures comprises less than 6 exposures the risk weights in column 4 of Tables 1 or 2 as appropriate must be applied. In all other cases, the risk weights in column 3 of Tables 1 or 2 as appropriate apply.

The risk weights provided in Table 1 apply when the external assessment represents a long-term credit rating, as well as when an inferred rating based on a long-term credit assessment is available.

**Table 1: risk weights and deduction requirements for long-term claims for which a credit assessment by an external credit assessment institution is available and/or an inferred credit assessment**

<b>External Rating</b>	<b>Risk Weight (or deduction requirement) For Thick Tranches backed by highly granular pools</b>	<b>Base Risk weight (or deduction requirement)</b>	<b>Risk Weight (or deduction requirement) for tranches backed by non-granular pools</b>
Credit Quality Step 1	7%	12%	20%
CQS 2	10%	15%	25%
CQS 3	20%	20%	35%
CQS 4	50%	50%	50%
CQS 5	75%	75%	75%
CQS 6	100%	100%	100%
CQS 7	250%	250%	250%
CQS 8	425%	425%	425%
CQS 9	650%	650%	650%
Below CQS 9 or unrated	Deduction	Deduction	Deduction

The risk weights in Table 2 apply when the external assessment represents a short-term credit rating, as well as when the inferred rating is based on a more subordinated position that has a short-term credit rating.

**Table 2: risk weights and deduction requirements for short-term claims for which a credit assessment by an external credit assessment institution is available and/or an inferred credit assessment**

<b>External Rating</b>	<b>Risk Weight (or deduction requirement) For Thick Tranches backed by highly granular pools</b>	<b>Base Risk Weight (or deduction requirement)</b>	<b>Risk Weight (or deduction requirement) for tranches backed by non-granular pools</b>
CQS 1	7%	12%	20%
CQS 2	20%	20%	35%
CQS 3	75%	75%	75%
All other ratings or unrated	Deduction	Deduction	Deduction

### **Use of inferred ratings**

When the following minimum operational requirements are satisfied a institution must attribute to an unrated position an inferred rating equivalent to the credit assessment of the most senior securitisation positions which are in all respects subordinate to the unrated securitisation position in question and which have an eligible credit assessment from an ECAI recognised as eligible for these purposes and nominated by the institution.

#### ***Operational requirements for inferred ratings***

- (a) The reference securitisation position must be subordinate in all respects to the unrated securitisation tranche. Credit enhancements, if any, must be taken into account when assessing the relative subordination of the reference securitisation positions. For example, if a subordinate securitisation position benefits from any third party guarantee or other credit enhancement that is not available to the unrated securitisation position in question, then the latter may not be assigned an inferred rating based on that subordinate position.
- (b) The maturity of the reference securitisation positions must be equal to or longer than that of the unrated securitisation position in question.
- (c) On an ongoing basis, any inferred rating must be updated continuously to reflect any changes in the external rating of the reference securitisation positions.
- (d) The external rating of the reference securitisation position must satisfy the general requirements for the recognition of external ratings as prescribed in Article 83.

## Supervisory Formula Method

Under the Supervisory Formula Method, risk-weighted assets are calculated by multiplying the capital charge arrived at under the formula by 12.5. When this calculation results in a risk weight of 1250%, the amount equal to the size of the exposure should be deducted from capital. The capital charge for a securitisation tranche depends on five institution-supplied inputs: (1) Kirb; (2) the credit enhancement level of the tranche in which the securitisation position is held (L); (3) the thickness of the tranche in which the securitisation position is held (T); (4) the effective number of credit exposures in the pool of credit exposures securitised (N); and (5) the exposure-weighted average loss-given-default of the pool of credit exposures securitised (LGD). Given these inputs, all of which are defined below, the IRB capital charge for the securitisation tranche is as follows:

The IRB capital charge on a securitisation position calculated under the supervisory formula Method = the notional amount of credit exposures that have been securitised *times* the greater of (a)  $0.0056 \cdot T$ , or (b)  $(S[L+T] - S[L])$ , where the function  $S[.]$  (termed the 'Supervisory Formula') is defined in the following paragraph. When the institution holds only a proportional interest in the tranche, that position's capital charge equals the prorated share of the capital charge for the entire tranche.

The Supervisory Formula is given by the following expression:

$$S[L] = \left\{ \begin{array}{l} L \quad \text{when } L \leq Kirbr \\ Kirbr + K[L] - K[Kirbr] + (d \cdot Kirbr / \omega) \left( 1 - e^{\omega(Kirbr - L) / Kirbr} \right) \quad \text{when } Kirbr < L \end{array} \right\}$$

where

$$\begin{aligned} h &= (1 - Kirbr / LGD)^N \\ c &= Kirbr / (1 - h) \\ v &= \frac{(LGD - Kirbr) Kirbr + 0.25(1 - LGD) Kirbr}{N} \\ f &= \left( \frac{v + Kirbr^2}{1 - h} - c^2 \right) + \frac{(1 - Kirbr) Kirbr - v}{(1 - h) \tau} \\ g &= \frac{(1 - c)c}{f} - 1 \\ a &= g \cdot c \\ b &= g \cdot (1 - c) \\ d &= 1 - (1 - h) \cdot (1 - Beta[Kirbr; a, b]) \\ K[L] &= (1 - h) \cdot ((1 - Beta[L; a, b])L + Beta[L; a + 1, b]c). \end{aligned}$$

In these expressions, Beta [L; a, b] refers to the cumulative beta distribution with parameters a and b evaluated at L.

The supervisory-determined parameters in the above expressions are as follows:

$\tau = 1000$ , and  $\omega = 20$ .

- **$K_{IRBR}$**

$K_{IRBR}$  is the ratio of (a)  $K_{IRB}$  to (b) the notional amount of credit exposures that have been securitised (i.e. the sum of drawn amounts plus undrawn commitments).  $K_{IRB}$  is expressed in decimal form (e.g. a capital charge equal to 15% of the pool would be expressed as 0.15).

- ***Credit enhancement level (L)***

L is measured (in decimal form) as the ratio of (a) the notional amount of all tranches subordinate to the tranche in question to (b) the notional amount of credit exposures that have been securitised. Institutions will be required to determine L before considering the effects of any tranche-specific credit enhancements, such as third party guarantees that benefit only a single mezzanine tranche. Capitalised assets must not be included in the measured L.

Amounts due by counterparties to interest rate or currency derivative contracts that are more junior than the tranche in question may be measured at their current values (without the potential future exposures) in calculating the enhancement level. If the current value of the instrument cannot be measured, the instrument should be ignored in the calculation of L.

In cases where a bank has set aside a specific provision or has a purchase discount on an exposure in the pool, the amount of the specific provision or purchase discount can be treated as a credit enhancement and be included in the calculation of L.

If there is any reserve account funded by accumulated cash flows from the underlying credit exposures that is more junior than the tranche in question, this can be included in the calculation of L. Unfunded reserve accounts may not be included if it is to be funded from future receipts from the underlying credit exposures.

- ***Thickness of exposure (T)***

T is measured as the ratio of (a) the nominal size of the tranche of interest to (b) the notional amount of credit exposures that have been securitised.

In case of a securitisation position constituted of an exposure deriving from an interest rate or currency derivative transaction the bank must incorporate potential future exposure. If the replacement cost of the instrument is non-negative, the exposure size should be measured by the current value plus the add-on as in the XXX. If the replacement cost is negative, the exposure should be measured by using the potential future exposure part only.

- ***Effective number of exposures (N)***

Multiple exposures to one obligor must be consolidated. The effective number of exposures is calculated as:

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

where  $EAD_i$  represents the exposure-at-default associated with all exposures to the  $i^{\text{th}}$  obligor. In the case of resecuritisation (securitisation of securitisation exposures),

the bank must look at the number of securitisation exposures in the pool and not the number of underlying exposures in the original pools from which the underlying securitisation exposures stem.

- **Exposure-weighted average loss-given-default (LGD)**

The exposure-weighted average loss-given-default is calculated as follows:

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

where  $LGD_i$  represents the average loss-given-default associated with all exposures to the  $i^{\text{th}}$  obligor. In the case of resecuritisation, an LGD of 100% must be applied to the underlying securitisation exposures.

### **Simplified Method for Computing N and LGD**

For securitisations involving retail exposures, subject to supervisory review, the Supervisory Formula Method may be implemented using the simplifications:  $h = 0$  and  $v = 0$ .

Under the conditions provided below, institutions may employ a simplified method for calculating the effective number of exposures and the exposure-weighted average LGD. Let  $C_m$  in the simplified calculation denote the share of the pool corresponding to the largest 'm' exposures (e.g., a 15% share corresponds to a value of 0.15). The level of m is to be set by each institution.

- If the portfolio share associated with the largest exposure,  $C_1$ , is no more than 0.03 (or 3% of the underlying pool), then for purposes of the Supervisory Formula Method the institution may set  $LGD=0.50$  and N equal to the following amount

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

- Alternatively, if only  $C_1$  is available and this amount is no more than 0.03, then the institution may set  $LGD=0.50$  and  $N=1/ C_1$ .

## **Liquidity Facilities**

### **Eligible Liquidity Facilities**

An eligible liquidity facility as defined in F-5 will receive a credit conversion factor of 100%. For originating and sponsoring institutions and institutions with supervisory approval to use the originators approach, positions or parts of positions below Kirb will be required to be deducted while for positions above Kirb the institution may use the Supervisory Formula Method or if the facility is externally rated the Ratings Based Method.

### **Liquidity Facilities Only Available in the Event of General Market Disruption**

An eligible liquidity facility that may only be drawn in the event of a general market disruption may be assigned a 20% conversion factor under the Supervisory Formula Method. That is, an IRB institution is to recognise 20% of the capital charge generated under the Supervisory Formula Method for the facility. If the facility is externally rated, the institution may rely on the external rating under the Ratings Based Method provided it assigns a 100% conversion factor rather than a 20% conversion factor to the facility.

### **Servicer Cash Advances**

Subject to national discretion and subject to the conditions that apply in the case of eligible liquidity facilities, if contractually provided for, servicers may advance cash to ensure an uninterrupted flow of payments to investors so long as the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures. Subject to national discretion, such servicer cash advances that are unconditionally cancellable can receive a 0% credit conversion factor.

### **Fallback solution for liquidity facilities**

When it is not practical for the bank to use either the 'bottom-up' approach or the 'top-down' approach and an external rating is not available for use by the institution including non-availability by virtue of the rules prescribed under the 'Hierarchy of Methods' paragraphs above, the institution may, on an exceptional basis and subject to supervisory consent, temporarily be allowed to apply the following method. The highest risk weight assigned under the Standardised Approach to any of the underlying individual exposures covered by the liquidity facility can be applied. The credit conversion factor must be 50% for a facility with an original maturity of one year or less, or 100% if the facility has an original maturity of more than one year. If the liquidity facility complies with the requirements in F-5 for Liquidity Facilities Only Available in the Event of General Market Disruption, the credit conversion factor will be 20%. In all other cases, the notional amount of the liquidity facility needs to be deducted.

### **Treatment of overlapping facilities**

Where an institution provides two or more liquidity facilities, and a draw on one facility precludes (in whole or in part) a draw under another, the institution does not need to hold the full amount of capital in respect of each of the overlapping positions. It shall only be required to hold capital once for the position covered by the overlapping facilities (whether they are eligible facilities or credit enhancements). Where the overlapping facilities are subject to different conversion factors, the bank

must attribute the overlapping part to the facility with the highest conversion factor.

## **Recognition of Credit Risk Mitigants in respect of securitisation positions**

### **Funded protection**

Eligible funded protection is limited to that which is eligible for the Standardised Approach as prescribed under Title II, Chapter 1, Section III and recognition is subject to compliance with the relevant minimum requirements set out in that Section.

### **Unfunded protection**

Eligible unfunded protection and unfunded protection providers are limited to those which are prescribed as eligible under Title II, Chapter 1, Section III and recognition is subject to compliance with the relevant minimum requirements set out in that Section. Special purpose entities will not be recognised as eligible guarantors.

### **Calculation of capital requirements in the case of full protection**

#### ***Ratings Based Method***

Where the Ratings Based Method applies, capital requirements for a securitisation position in respect of which credit protection is obtained will be calculated in accordance with the provisions for the calculation of capital requirements in the context of credit risk mitigation under the Standardised Approach as specified under Title II, Chapter 1, Section III.

#### ***Supervisory Formula Method***

Where the Supervisory Formula Method applies, the institution must first of all determine the risk weighted asset amount for the securitisation position. This is obtained by multiplying the capital charge resulting from the application of the Supervisory Formula by 12.5. The 'effective risk weight' shall then be obtained by dividing the risk weighted asset amount by the amount of the securitisation position and multiplying by 100.

(Where the securitisation position or part of the securitisation position is required to be deducted, the effective risk weight of the securitisation position or of the relevant part of the securitisation position will be taken to be 1250%.)

In the case of funded credit protection, the minimum capital requirement in respect of the securitisation position shall be calculated by multiplying the adjusted exposure amount ( $E^*$ , calculated in accordance with the provisions of Title II, Chapter 1, Section III and taking the amount of the securitisation position to be  $E$ ) by the effective risk weight.

In the case of unfunded credit protection, the minimum capital requirement in respect of the tranche shall be calculated by multiplying  $G^*$  (calculated in accordance with the provisions of Title II, Chapter 1, Section III) by the risk weight of the protection provider; adding this to the amount arrived at by multiplying the amount of the securitisation position minus  $G^*$  by the effective risk weight for the securitisation position.

### **Calculation of capital requirements in the case of partial protection**

If the credit risk mitigant covers the 'first loss' or losses on a proportional basis on the securitisation position, the institution may reduce the capital charge on the

securitisation position proportionally. In other cases the institution should treat the uncovered portion as the most junior position. The thickness 'T' should be adjusted to  $T-e^*$  in the case of funded protection; and to  $T-g$  in the case of unfunded protection, where  $e^*$  denotes the ratio of  $E^*$  to the total notional amount of the underlying pool, where  $E^*$  is the adjusted exposure amount as calculated in accordance with paragraph 3.1.3.2(a) of Annex E; and  $g$  is the ratio of the nominal amount of credit protection to the total notional amount of the underlying pool.

### **Revolving securitisations with early amortisation clauses**

An originating institution must use the methodology and treatment prescribed in section F-5 of this Annex for determining the capital charge for securitisations of revolving exposures containing early amortisation provisions.

## **ANNEX F-7**

### **Implicit recourse**

When an institution provides implicit support to one of its securitisations, it will be required, at a minimum, to hold capital against all of the exposures associated with the securitisation transaction as if they had not been securitised. Additionally, the institution is required to disclose publicly that (a) it has provided non-contractual support and (b) the capital impact of doing so.

## ANNEX G-1

### **Trading intent**

#### **1 Positions/portfolios held with trading intent shall comply with the following requirements:**

- There must be a clearly documented trading strategy for the position/instrument or portfolios, approved by senior management (which shall include expected holding horizon).
- There must be clearly defined policies and procedures for the active management of the position, which shall include:
  - positions are managed on a trading desk;
  - position limits are set and monitored for appropriateness;
  - dealers have the autonomy to enter into/manage the position within agreed limits and according to the agreed strategy;
  - positions are reported to senior management as an integral part of the institution's risk management process; and
  - positions are actively monitored with reference to market information sources (assessment shall be made of the marketability or hedge-ability of the position/its component risks). This would include assessing the quality and availability of market inputs to the valuation process; level of market turnover, sizes of positions traded in the market, etc.
- There must be clearly defined policy and procedures to monitor the position against the institution's trading strategy including the monitoring of turnover and stale positions in the institution's trading book.

When all these conditions are met, then positions/portfolios are eligible for trading book capital treatment.

## **ANNEX G-2**

### **Prudent valuation**

#### **A. Systems and controls**

- 1 In order to be compliant with regulation on prudent valuation, an institution's systems shall include at least the following elements:
  - Documented policies and procedures for the process of valuation. This includes clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, month end and ad-hoc verification procedures; and
  - Clear and independent (i.e., independent of front office) reporting lines for the department accountable for the valuation process. The reporting line shall ultimately be to a main board executive director.

#### **B. Marking to model**

- 2 Institutions must comply with the following requirements when marking to model:
  - Senior management shall be aware of the elements of the trading book which are subject to mark to model and shall understand the materiality of the uncertainty this creates in the reporting of the risk/performance of the business;
  - Market inputs shall be sourced, to the extent possible, in line with market prices. The appropriateness of the market inputs for the particular position being valued and the parameters of the model shall be assessed on a daily basis;
  - Where available, generally accepted valuation methodologies for particular products shall be used as far as possible;
  - Where the model is developed by the institution itself, it shall be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process. The model shall be developed or approved independently of the front office. It shall be independently tested. This includes validating the mathematics, the assumptions and the software implementation;
  - There shall be formal change control procedures in place and a secure copy of the model shall be held and periodically used to check valuations;
  - Risk management shall be aware of the weaknesses of the models used and how best to reflect those in the valuation output;
  - The model shall be subject to periodic review to determine the accuracy of its performance (e.g. assessing continued appropriateness of the assumptions, analysis of P&L versus risk factors, comparison of actual close out values to model outputs);

- Valuation adjustments shall be made as appropriate, for example, to cover the uncertainty of the model valuation, in accordance with prudential standards on valuation adjustments.

### **B1. Independent price verification**

- 3 Independent price verification should be performed in addition to daily marking to market or marking to model. This is the process by which market prices or model inputs are regularly verified for accuracy and independence. While daily marking-to-market may be performed by dealers, verification of market prices and model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). For independent price verification, where independent pricing sources are not available or pricing sources are more subjective, e.g., only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

### **C. Valuation adjustments or reserves**

#### A) General standards

- 4 The competent authorities shall require the following valuation adjustments/reserves to be formally considered: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, future administrative costs and, where appropriate, model risk.

#### B) Standards for less liquid items

- 5 Less liquid positions could arise from both market events and institution-related situations (i.e., concentrated positions and/or stale positions).
- 6 Institutions shall consider several factors when determining whether a valuation reserve is necessary for less liquid items. These factors include the amount of time it would take to hedge out the position/risks within the position, the average and volatility of bid/offer spreads, the availability of market quotes (number and identity of market makers) and the average and volatility of trading volumes.

### **D. Impact of valuation adjustments on the definition of Own Funds**

- 7 When valuation adjustments/reserves give rise to material losses of the current financial year, these shall be deducted from an institution's original own funds according to Article 34 (2), item (11) of Directive 2000/12/EC.
- 8 Other profits/losses originated from valuation adjustments/reserves shall be included in the calculation of the "net trading-book profits" mentioned in Annex V, paragraph 2, item (b) of Directive 93/6/EEC and be added to/deducted from the additional Own Funds eligible to cover market risk requirements according to such provisions.

## **ANNEX G-3**

### **Treatment of CIUs in the trading book**

- 1 The following rules shall apply to open-ended unit trusts/common funds or investment companies (“CIUs”) that meet the conditions specified in Article 100 for a trading book capital treatment.
- 2 In order to be eligible for look-through approaches as specified in paragraphs (i), (ii) and (iii) below, CIUs must meet the conditions specified in paragraph 3 below. When these conditions are not met, positions in CIUs in the trading book must be subject to a 100% capital charge as specified in paragraph (iv) below.

### **General conditions for look-through approaches**

3. In order to be eligible for either the “full look-through” or the “capital charge look-through” or the “partial look-through” approaches, as specified in paragraphs (i), (ii) and (iii) below, a CIU must meet the following conditions with regard to (a) authorisation; (b) disclosure; and (c) redemption.

a) Authorisation. The CIU must be authorised for sale to the general public in a Member State. Additionally, subject to approval of the trading institution's competent authority, CIUs can be eligible for one of the look-through approaches if (i) they are authorised for sale to the general public in a third country; (ii) they are subject to regulation that is considered equivalent to that laid down in Community law; and (iii) co-operation between authorities is sufficiently ensured.

b) Disclosure. The CIU's prospectus or equivalent document must indicate the categories of assets the CIU is authorised to invest in and, in case investment limits apply, the relative limits and the methodologies to calculate them. In addition, the CIU's prospectus or equivalent document must indicate if leverage is allowed, for instance via use of financial derivative instruments, and the maximum level of leverage. The same documents must indicate, when transactions in financial derivative instruments are authorised, the possible outcome of the use of financial derivative instruments on the risk profile of the CIU. Where the CIU mandate allows investment in OTC financial derivatives or repo-style transactions, the CIU must have a policy to limit counterparty risk arising from these transactions (for instance, the CIU shall collateralise/limit any counterparty risk/large exposure coming from OTC derivatives or repos versus its counterparties; or counterparties must have a specified rating). The business of the CIU must be reported in half-yearly and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period.

c) Redemption/liquidity. The units/shares of the CIU are redeemable in cash or specie, out of the undertaking's assets, at the request of the unit-holder and at least on a daily basis.

#### **(i) Full look-through**

4. The competent authorities may allow net positions in CIU that meet the general conditions specified above, that are exchange traded, and whose purpose based on the mandate is to replicate the composition and performance of an externally generated index or fixed basket of equities or debt securities to be treated as if they were individual positions, proportionally, in each of the constituent securities within the CIU, subject to the following additional conditions:

- disclosure: the composition of assets within the CIU is known on a daily basis through the publication of the CIU's portfolio composition;
- redemption/creation: the firm's net position allows it to redeem/create units in specie and in exchange for the underlying assets. This right may be conditional on a minimum quantity required because of the indivisibility of the underlying assets; and
- price correlation: a minimum correlation of 0.9 <sup>(1)</sup> between daily price movements of the CIU and the index or basket of equities it tracks can be clearly established over a minimum period of six months.

5. The individual debt or equity positions shall be subject to capital requirements for position risk and foreign exchange risk based on Annexes I and III or, as appropriate, Annex VIII of Directive 93/6/EEC. Alternatively, where positions in CIUs eligible for full look-through approach are not treated as if they were individual positions in each of the constituent securities within the CIU, the position must be treated under one of the other approaches indicated below ("capital charge look-through" or "partial look-through").

#### **(ii) Capital charge look-through**

6. The competent authorities may allow units in collective-investment undertakings [that meet the general conditions specified above] to be treated on the basis of the capital charge that would apply to the actual CIU's portfolio under Directive 93/6/EEC provided that the institution:

- is able to calculate, on a daily basis, for the CIU's actual portfolio the capital requirement for position risk in accordance with Annex I or, as appropriate, Annex VIII of Directive 93/6/EEC, or it can rely on a third party reporting such capital requirement for the CIU where [both the institution and] the competent authority [are/is] convinced of the correctness of this report;
- is aware of the currency positions in the CIU's portfolio on a daily basis or, alternatively, is able to determine the capital requirement for foreign-exchange based on the CIU's investment mandate applying the principles specified in paragraph 12 below; and
- is aware of the potential leverage of the CIU as specified in paragraph 13 below.

7. Under the capital charge look-through approach, the capital charge for net positions in CIUs is calculated by cumulating a position risk capital charge and a foreign exchange risk capital charge. The position risk capital charge is calculated in accordance with Annex I or, as appropriate, Annex VIII of Directive 93/6/EEC. The foreign exchange risk charge is calculated in accordance with Annex III or, as appropriate, Annex VIII of Directive 93/6/EEC.

8. Where the capital requirements are calculated by a third party in accordance with paragraph 6 above, the third party must specify these requirements in terms of percentage charge [(i.e., the total capital requirement for the CIU portfolio must be divided by the net asset value of the CIU and the institution must then multiply this value by its net position in the CIU)]. Where the third party does not calculate and/or specify the charges for foreign exchange risk applicable to the CIU, the institution must adopt the approach specified in paragraph 12 below.

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<sup>1</sup> "Correlation" in this context means the correlation coefficient between daily returns on the ETF and the index or basket of equities or debt securities it tracks.

### **(iii) Partial look-through**

9. The competent authorities may allow positions in CIU that [meet the general conditions specified above but] are not eligible for a full look-through approach or a capital charge look-through approach to be treated under a partial look-through approach. This option can only be adopted when the following conditions are met:

- **Investment mandate:** the investment mandate, which specifies the constraints on the portfolio that may be held by the CIU, must provide information regarding the type of asset classes the CIU will invest in and whether the CIU can be leveraged either through borrowing or through the use of derivatives;

Where the mandate allows for leverage the institution must be able to establish the maximum level of leverage the CIU can achieve either under applicable regulation or the mandate;

- **Foreign exchange risk:** the institution must be able to establish if the underlying investments of the CIUs imply foreign exchange risk for the institution.

10. The capital charge under the partial look-through approach is the charge that would be incurred by the institution if it directly held the hypothetical asset or assets attracting the highest market risk charge - as set out in Directive 93/6/EEC – permitted by the investment mandate of the CIU.

- a) Long and short positions in the same units or class of share in the same CIU can be netted out prior to calculating the capital charge under partial look-through.
- b) The market risk charge for positions in CIUs where the investment mandate states the maximum proportion of funds that can be invested in each asset class (debt or equities) must be calculated as the sum of the asset in each asset class with the highest general and specific risk charge as set out in CAD multiplied by the maximum proportion of the fund that can be invested in that asset class.
- c) Positions in CIUs where the investment mandate does not state the maximum proportion of funds that can be invested in each asset class must be treated as direct holdings in the single asset that attracts the highest general and specific risk charge under CAD.
- d) Account must be taken of the foreign exchange position of the CIU and of its potential leverage as described in paragraphs 12 and 13 below.
- e) Under this approach, no netting is permitted between a “look-through” position - actual or otherwise held by the CIU - and other trading book positions held by the institution.
- f) Should the capital charge under this approach exceed 100%, the capital charge may be capped at 100%.

[Paragraph 11 – Blank]

### 12. **Foreign exchange risk.**

[Positions in CIUs held in the trading book shall be subject to a capital charge for foreign exchange risk.

Whenever the investment mandate makes it clear that the CIU may invest in currencies different from the investing institution's base currency – whether identical to the CIU's denomination or not – the investing institution shall calculate a capital charge for foreign exchange risk for its CIU investments. Where the currency of the CIU's investment is unknown, the treatment of these positions shall be similar to the treatment of investments in gold under Annex III of Directive 93/6/EEC subject to the following modifications:

- If the information about the direction of the CIU's investments in the unknown currencies is available then the investing institution is allowed to use this information by adding the total long position in the unknown currencies to the total long open foreign exchange position and adding the total short position in the unknown currencies to the total short open foreign exchange position. There would be no netting between positions in the unknown currencies prior to this calculation.
- If it is not possible, based on the investment mandate, to identify the direction of the foreign exchange investment of the CIU (or the direction of the CIU's investment in its base currency, if it differs from the investing institution's denomination), then an additional 8% charge has to be applied to the entire position in the CIU. ]

**Note.** The treatment of Fx risk arising from positions in CIUs remains under active consideration. See the discussion in Section 12 of the CP3 Explanatory Document.

13. **Leverage-related risk.** Institutions shall take account of the maximum indirect exposure that they could achieve by taking leveraged positions through the CIU when calculating their capital charge on the CIU under market risk rules. This shall be done by proportionally adjusting (i.e., increasing) the position in the CIU up to the maximum exposure to the underlying investment items resulting from the investment mandate.

For example, an investment firm holds a 10 million Euro position in an equity-only CIU whose investment mandate allows the fund to achieve 50% leverage. For the purposes of the partial look-through, the position would be increased by 50% (15m Euros) and the highest market risk charge based on the investment mandate would apply to this position.

**(iv) 100% capital charge**

14. In cases where neither of options (i), (ii) or (iii) is viable, positions in CIU shall be subject to a 100% capital charge.

***Further convergence***

The competent authorities of each Member State shall provide the Commission with information concerning the implementation of a look-through approach for CIUs booked in the trading book, notably covering: eligible CIUs, the methodologies applied, and the resulting capital requirements. The Commission shall forward this information to the other Member States.

## ANNEX G-4

### Specific risk for debt securities

- 1 The institution shall assign its net positions in the trading book, as calculated in accordance with paragraph 1 of Annex 1 of Directive 93/6/EEC, to the appropriate categories in Table 1 below on the basis of their issuer/obligor, external or internal credit assessment, and residual maturity, and then multiply them by the weightings shown. It shall sum its weighted positions (regardless of whether they are long or short) in order to calculate its capital requirement against specific risk.

**Table 1**

Items	Specific-risk capital charge
<ul style="list-style-type: none"><li>• Debt securities issued by sovereigns, central banks, international organisations, multilateral development banks or MS' regional government or local authorities which would receive a 0% risk weighting under the RSA or IRB approaches</li></ul>	0%
<ul style="list-style-type: none"><li>• Debt securities issued by sovereigns, central banks, international organisations, multilateral development banks or MS' regional government or local authorities which would receive a 20% or 50% risk weighting under the RSA<sup>2</sup></li><li>• Other qualifying items as defined in paragraph 2 below</li></ul>	0.25% (residual term to final maturity six months or less)  1.00% (residual term to final maturity greater than six and up to and including 24 months)  1.60% (residual term to final maturity exceeding 24 months)
<ul style="list-style-type: none"><li>• All others</li></ul>	8.00%

- 2 'Qualifying items' shall mean:

- a) long and short positions in assets qualifying for a credit quality step corresponding at least to investment grade in the mapping process described in Article 40;
- b) long and short positions in assets which, because of the solvency of the issuer, have a PD which is not higher than that of the assets referred to under a) above under the IRB approach described in Title II, Chapter 1, Section II of the present Directive;

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<sup>2</sup> A 0% weighting can be assigned to debt securities issued by the same entities and denominated and funded in the domestic currency, subject to national discretion.

- c) long and short positions in assets for which a credit assessment by a nominated ECAI is not available and which are:
- considered by the institution concerned to be sufficiently liquid; and
  - whose investment quality is – according to the institution's own discretion – at least equivalent to that of the assets referred to under a) above; and
  - listed on at least one regulated market in a Member State or on a stock exchange in a third country provided that that exchange is recognised by the competent authorities of the relevant Member State.

The manner in which the debt instruments are assessed shall be subject to scrutiny by the competent authorities, which shall overturn the judgement of the institution if they consider that the instruments concerned are subject to too high a degree of specific risk to be qualifying items;

- [d) subject to the competent authorities discretion, long and short positions in assets issued by institutions subject to the capital adequacy requirements set forth in the present Directive.]

The competent authorities shall require the institutions to apply the maximum weighting shown in Table 1 in Annex G-4 to instruments that show a particular risk because of the insufficient solvency of the issuer or liquidity.

The competent authorities of each Member State shall regularly provide the Commission with information concerning the methods used to evaluate the qualifying items, in particular the methods used to assess the degree of liquidity of the issue and the solvency of the issuer.

### **Specific risk for equities**

- 3 The institution shall sum all its net long positions and all its net short positions in accordance with paragraph 1 of Annex 1 of Directive 93/6/EEC. The sum of the two figures shall be its overall gross position. It shall multiply its overall gross position by 4 % in order to calculate its capital requirement against specific risk.
- 4 Notwithstanding paragraph 3, the competent authorities may allow the capital requirement against specific risk to be 2 % rather than 4 % for those portfolios of equities that an institution holds which meet the following conditions:
- (i) the equities shall not be those of issuers which have issued only traded debt instruments that currently attract an 8 % requirement in Table 1 appearing in paragraph 1 above or that attract a lower requirement only because they are guaranteed or secured;
  - (ii) the equities must be adjudged highly liquid by the competent authorities according to objective criteria;
  - (iii) no individual position shall comprise more than 5 % of the value of the institution's whole equity portfolio. However, the competent authorities may authorise individual positions of up to 10 % provided that the total of such positions does not exceed 50 % of the portfolio.

### **Specific risk capital charges for trading book positions hedged by credit derivatives**

- 5 Allowance will be recognised for protection provided by credit derivatives, in accordance with the principles specified below.
- 6 Full allowance will be recognised when the value of two legs (i.e., long and short) always move in the opposite direction and broadly to the same extent. This would be the case in the following situations:
  - (a) the two legs consist of completely identical instruments, or
  - (b) a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (i.e., the cash position)<sup>3</sup>.

In these cases, no specific risk capital requirement applies to both sides of the position.

- 7 An 80% offset will be recognised when the value of two legs (i.e., long and short) always move in the opposite direction. This would be the case when a long cash position is hedged by a credit default swap or a credit linked note (or vice versa) and there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency to the underlying exposure. In addition, key features of the credit derivative contract (e.g., credit event definitions, settlement mechanisms) should not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk (i.e., taking account of restrictive payout provisions such as fixed payouts and materiality thresholds), an 80% specific risk offset will be applied to the side of the transaction with the higher capital charge, while the specific risk requirement on the other side will be zero.
- 8 Partial allowance will be recognised when the value of two legs (i.e., long and short) usually move in the opposite direction. This would be the case in the following situations:
  - (a) the position is captured in paragraph 6 under (b) but there is an asset mismatch between the reference obligation and the underlying exposure. However, the position meets the following requirements:
    - i. the reference obligation ranks pari passu with or is junior to the underlying obligation, and
    - ii. the underlying obligation and reference obligation share the same obligor (i.e., the same legal entity) and have legally enforceable cross-default or cross-acceleration clauses;
  - (b) the position is captured in paragraph 6 under (a) or paragraph 7 but there is a currency or maturity mismatch<sup>4</sup> between the credit protection and the underlying asset;
  - (c) the position is captured in paragraph 7 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

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<sup>3</sup> The maturity of the swap itself may be different from that of the underlying exposure.

<sup>4</sup> Currency mismatches should feed into the normal reporting of foreign exchange risk.

In each of these cases the following rule applies. Rather than adding the specific risk capital requirements for each side of the transaction (i.e., the credit protection and the underlying asset) only the higher of the two capital requirements will apply.

- 9 In all other cases a specific risk capital charge will be assessed against both sides of the position.

## ANNEX G-5

### **Settlement and counterparty risk**

- 1 Institutions shall be required to calculate the settlement/counterparty credit risk charge for the positions mentioned in Article 102 according to the provisions of Title II, Chapter 1, Sections I and II and in a manner consistent with the rules on roll-out prescribed in Articles 49 and 50.
- 2 Paragraph 1 is subject to the following:
  - (a) The Financial Collateral Simple Method will not be available for transactions subject to Article 102;
  - (b) Master Netting Agreements covering repurchase transactions/securities or commodities lending or borrowing transactions across books (i.e., when repos are booked in the trading book and in the non-trading book and these are covered by the same netting agreement) shall be recognised only when:
    - (i) legal certainty is satisfied;
    - (ii) daily mark-to-market is conducted for all transactions covered by the agreement; and
    - (iii) collateral is eligible according to the non-trading book treatment;

### **OTC derivative instruments**

- 3 The calculation of counterparty risk capital requirements for OTC derivative instruments booked in the trading book will be calculated in accordance with the rules prescribed in Article 3(1)(a) and Chapter 1 of this Title. As regards credit derivatives, the methodologies in Annex III of Directive 2000/12/EC shall apply. The add-on factors shall be those specified below.

### **Add-on factors for credit derivatives**

- 4 The add-on factors to cover potential future exposure for single name credit derivative transactions in the trading book are as follows.

	<b>Protection buyer</b>	<b>Protection seller</b>
<b>Total Return Swap</b>		
“Qualifying” reference obligation	5%	5%
“Non-qualifying” reference obligation	10%	10%
<b>Credit Default Swap</b>		5%
“Qualifying” reference obligation	5%	10%
“Non-qualifying” reference	10%	

obligation		
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There will be no difference depending on residual maturity.

The definition of “qualifying” is the same as for “qualifying items” as specified in Annex G-4 of this Directive.

In relation to credit default swaps, the protection seller shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent.

- 5 Where the credit derivative is a first-to-default transaction the add-on will be determined by the lowest credit quality underlying in the basket, (i.e., if there are any non-qualifying items in the basket the non-qualifying reference obligation add-on should be used). For second- and subsequent –to-default transactions, underlying assets should continue to be allocated according to credit quality (i.e., the second lowest credit quality will determine the add-on for a second-to-default transaction, etc.).

## ANNEX G-5A

### **Internal hedges and credit derivatives**

1. An internal hedge is a position that materially or completely offsets the component risk elements of a non-trading book position or a set of positions. Positions arising from internal hedges are eligible for trading book capital treatment, provided that they are held with trading intent and that the general criteria on trading intent and prudent valuation specified in Articles 96-99 are met. In particular:

- internal hedges shall not be designed to avoid or reduce capital requirements;
- internal hedges shall be properly documented and subject to particular internal approval and audit procedures;
- the internal transaction shall be dealt with at market conditions (prices, and effective liquidity);
- the bulk of the market risk that is generated by the internal hedge shall be dynamically managed in the trading book (like external transactions) within the authorized limits and;
- internal transactions shall be carefully monitored. This must be ensured by adequate procedures.

This treatment applies without prejudice to the capital requirements applicable to the ‘non-trading book leg’ of the internal hedge.

2. When an 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 institution to receive any reduction in the capital requirement for the exposure in the non-trading book, the credit risk in the trading book must be transferred out to an outside third party (i.e., an eligible protection provider). The CRM treatment for credit derivatives will be used to calculate the capital requirements for the hedged non-trading book position. The following rules apply to credit derivatives eligible for trading book treatment:

- a capital charge for general and specific market risk will apply based on the CAD and Annex G-4, with specific risk offsets being allowed based on Annex G-4 are;
- a counterparty risk charge will apply based on Annex G-5.



## **[ANNEX H-1**

### **Investment firms with limited licence**

Investment firms with limited licence are those that are not authorised to provide the following investment services covered under section A of Annex I to the Investment Services Directive (Directive Proposal COM(2002) 625 final)

- (1) Dealing on own account.
- (2) Underwriting and placing of financial instruments on a firm commitment basis.]

Note: this draft Annex represents the text that would be introduced to implement the 'potential way forward' discussed in Section 14 of the CP3 Explanatory Document.

## ANNEX H-2

### **Basic Indicator Approach**

#### **1. Capital requirement**

The capital requirement for operational risk under the Basic Indicator Approach is equal to 15% of the relevant income indicator defined below.

When the relevant income indicator is negative, the capital requirement for operational risk shall be equal to zero.

#### **2. Relevant income indicator**

The relevant income indicator is the three-year average of the sum of net interest income, and net non-interest income.

Based on accounting categories for the profit and loss account of credit institutions under the Bank Accounts Directive (BAD) 86/635/EEC, this definition can be expressed as the combination of the following positions, subject to the methodological indications further below:

POSITIONS UNDER ARTICLE 27 OF BAD	
+ 1	Interest receivable and similar income
- 2	Interest payable and similar charges
+ 3	Income from securities: a) from shares and other variable-yield securities b) from participating interests c) from shares in affiliated undertakings
+ 4	Commissions/fees receivable
- 5	Commissions/fees payable
± 6	Net profit or net loss on financial operations
+ 7	Other operating income

#### **Methodological indications:**

The income indicator shall be calculated before the deduction of any provisions and operating expenses.

The following elements shall not enter into consideration for the calculation of the income indicator:

- Realised profits/losses from the sale of non-trading book items
- Income from extraordinary or irregular items

- Income derived from insurance.

When revaluation of trading items is part of the profit and loss statement, revaluation could be included. When Article 36 (2) of Directive 86/635/EEC is applied, revaluation booked in the profit and loss account should be included.

**Use of a different accounting framework:**

When investment firms use the general accounting framework under Directive 78/660/EEC or Directive 83/349/EEC, they should calculate the relevant income indicator on the basis of internal data that best reflect the above definition.

## ANNEX H-3

### **Standardised Approach**

#### **1. Capital requirement**

The capital requirement for operational risk under the Standardised Approach is the simple sum of the capital requirements calculated for each of the business lines presented below.

The capital requirement for a given business line is equal to a certain percentage [beta factor] of a proxy indicator.

This proxy indicator is the income indicator calculated for each business line individually [using the same methodology as in Annex H-2 section 2, but at the level of each individual business line]. When the income indicator for any business line is negative, the capital requirement for operational risk for this business line shall be equal to zero.

Business line	Percentage [“beta factor”]
Corporate finance	18%
Trading and sales	18%
Retail brokerage	12%
Retail banking	12%
Commercial banking	15%
Payment and settlement	18%
Agency services (custody, corporate agency, corporate trust)	15%
Asset management	12%

At the request of an institution, the competent authorities may authorise this institution to calculate its capital requirement for operational risk using an alternative standardised approach, subject to the modalities and conditions set out in section 3 below.

#### **2. Principles for business line mapping**

Institutions must develop specific policies and have documented criteria for mapping the exposure indicator for current business lines and activities into the standardised framework. The criteria must be reviewed and adjusted for new or changing business activities and risks as appropriate. The principles for business line mapping are set out below.

- (a) All activities must be mapped into the business lines in a mutually exclusive and jointly exhaustive manner;
- (b) Any activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, must

be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criteria must be used (e.g., proportional allocation of the indicators);

- (c) When mapping the proxy exposure indicator, if an activity cannot be mapped into a particular business line then the business line yielding the highest charge must be used. The same business line equally applies to any associated ancillary activity.
- (d) Institutions may use internal pricing methods to allocate the income indicator between business lines, provided that the sum of income indicators for the business lines equals the income indicator defined for the Basic indicator approach under Annex H-2.
- (e) The mapping of activities into business lines for operational risk capital purposes must be consistent with the definitions of business lines used credit and market risks.
- (f) The mapping process used must be clearly documented.
- (g) Processes must be in place to define the mapping of any new activities or products;
- (h) Senior management is responsible for the mapping policy;
- (i) The mapping process to business lines must be subject to independent review

***An indicative general mapping of activities, with further guidance for the mapping of investment services into the eight business lines framework is provided in the following two tables.***

***Comments are invited on the relevance of this suggested allocation of activities and on the extent to which such allocation should be included in the scope of the mandatory provisions of the EU capital adequacy framework, in complement to the overarching mapping principles set out above.***

Level 1	Level 2	Activity Groups
Corporate Finance	Corporate Finance	Mergers and Acquisitions, Underwriting, Privatisations, Securitisation, Research, Debt (Government, High Yield), Equity, Syndications, IPO, Secondary Private Placements
	Government Finance	
	Merchant Banking	
	Advisory Services	
Trading & Sales	Sales	Fixed Income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage
	Market Making	
	Proprietary Positions	
	Treasury <sup>1</sup>	
Retail Banking	Retail Banking	Retail lending and deposits, banking services, trust and estates
	Private Banking	Private lending and deposits, banking services, trust and estates, investment advice
	Card Services	Merchant/Commercial/Corporate cards, private labels and retail
Commercial Banking	Commercial Banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lends, guarantees, bills of exchange
Payment and Settlement <sup>154</sup>	External Clients	Payments and collections, funds transfer, clearing and settlement
Agency Services	Custody	Escrow, Depository Receipts, Securities lending (Customers) Corporate actions
	Corporate Agency	Issuer and paying agents
	Corporate Trust	
Asset Management	[see below]	
Retail Brokerage	Retail Brokerage	Execution and full service

<sup>1</sup> Unless treasury activities are allocated to other business lines as ancillary function (see mapping principle b) above.

<sup>154</sup> Payment and settlement losses related to a bank's own activities would be incorporated in the loss experience of the affected business line.

## Mapping of investment services into business lines

<u>Main</u>	<u>Finer Business Lines</u>	<u>The Exposure Indicator Would Include Income From <sup>(2)</sup>:</u>
<i>Corporate Finance</i>	<i>Underwriting and Placing under ISD)</i>	Underwriting, placing or other activities undertaken in agreement with the issuer of the instrument to assist the distribution of or subscription to public or private offers of financial instruments, when these activities imply firm commitment or subscription on the part of the institution.
	<i>Municipal/government finance, Merchant banking, corporate finance, Advisory services</i>	Mergers and Acquisitions, IPOs, privatisations and other similar transactions, corporate finance services, securitisations, syndications, and advice on note issuance.
<i>Trading and Sales</i>	<i>Dealing under ISD</i>	Dealing on own account under ISD including dividend or interest income on cash equities and other ISD instruments; net gains from changes in the fair value of principal positions held for dealing, Foreign exchange trading repos, reverse repos, stock lending and borrowing].
	<i>Sales, market making, proprietary positions, treasury</i>	Fixed income, equity, foreign exchanges, commodities, derivatives, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage in general
<i>Retail Brokerage</i>	<i>Execution of Orders under ISD</i>	Execution of orders on behalf of clients under ISD, Operation of Multilateral Trading Facilities under the ISD, Execution of orders on FX
	<i>Retail brokerage</i>	Execution and full service when not included under "Execution of orders under ISD"
	<i>Other ISD services, when they are not ancillary to any of the other business lines</i>	Reception and transmission of orders from clients in relation to one or more financial instruments or connected foreign exchange services under ISD, investment advice under ISD; placing or other activities undertaken in agreement with the issuer of the instrument to assist the distribution of or subscription to public or private offers of financial instruments when these activities do not imply firm commitment or subscription on the part of the institution under the ISD; advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to mergers and the purchase of undertakings under the ISD; investment research and financial analysis or other forms of general recommendation relating to transactions in financial instruments under the ISD

<sup>2</sup> Costs generated in one business line (for instance, fees paid for clearing and settlement) which are imputable to a different business line (for instance execution of orders) can be reallocated to the business line to which they pertain (in this case, execution of orders), for instance by using a treatment based on internal transfer costs between the two business lines.

<b>Retail Banking</b>	<b>Retail Banking, Private Banking, Card Services</b>	Granting credits or loans to a non professional investor to allow him to carry out a transaction in one or more ISD instruments, where the firm granting the credit or loan is involved in the transaction. Lending <sup>3</sup> , deposits and bank placements, retail credit card services, factoring, documentary credits, guarantees, bills of exchange, acceptances and endorsements and other contingent liabilities.
<b>Commercial Banking</b>	<b>Commercial Banking</b>	Granting credits or loans to a professional investor or counterparty to allow him to carry out a transaction in one or more ISD instruments, where the firm granting the credit or loan is involved in the transaction. Lending <sup>4</sup> , deposits and bank placements, non-retail credit card services, factoring, documentary credits, guarantees, bills of exchange, acceptances and endorsements and other contingent liabilities.
<b>P &amp; S</b>	<b>Payments and Settlements</b>	Payments, collection, fund transfer not related to banking; clearing and settlement services in ISD instruments.
<b>Asset Management</b>	<b>Asset Management under ISD</b>	Managing portfolios in accordance with mandates given by clients on a discretionary, client-by-client basis where such portfolios include ISD financial instruments. This business line would notably include client-by-client retail and institutional fund management.
	<b>Asset Management under UCITSD</b>	Managing of UCITS in the form of unit trusts/common funds and/or investment companies (collective portfolio management of UCITS) as defined in Art.1, paragraph 2 of the UCITS Directive, including retail and institutional fund management.
	<b>Other Asset Management</b>	Asset management other than Asset Management under ISD or under UCITSD. This notably includes discretionary and non-discretionary asset management, on a client-by-client or collective basis, to retail, professional or other institutional investor, including closed and open-end fund management which does not fall under the previous two finer business lines.
<b>Agency Services</b>	<b>Depository Services under UCITSD</b>	Safekeeping, administration, and depository services according to the UCITSD.
	<b>Custody under ISD</b>	Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management;
	<b>Agency Services, Custody, Corporate Agency, Corporate trust</b>	Escrow, Depository Receipts, Corporate actions, Safekeeping, administration, and safe custody other than those covered in the previous two finer business lines

<sup>3</sup> This may include export/ trade finance\*, leasing\*, credit lines, hire purchase contracts, revolving and standby facilities, loan originations, loan servicing, margin lending and project finance\*.

<sup>4</sup> This may include export/ trade finance\*, leasing\*, credit lines, hire purchase contracts, revolving and standby facilities, loan originations, loan servicing, margin lending and project finance\*.

### **3. Alternative standardised approach**

#### **3.1. Modalities**

Under the alternative standardised approach, the capital requirement for operational risk capital is the same as for the Standardised Approach set out in section 1 except for the two following business lines: retail banking; commercial banking.

For these business lines, the proxy indicator is the three-year average of the total nominal amount of loans and advances multiplied by 0.035.

For the retail banking business line, the loans and advances shall consist of the total drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables.

For the commercial banking business line, the loans and advances shall consist of the drawn amounts in the following credit portfolios: Corporate, Sovereign, Bank, Specialised Lending, SMEs treated as Corporate and Purchased Corporate Receivables. The securities held in banking book shall also be included.

#### **3.2. Conditions**

An individual institution may be allowed to calculate its capital requirement for operational risk using the alternative standardised approach if the following conditions are met:

- The institution is overwhelmingly active in retail and/or commercial banking activities, which shall account for at least 90% of its income indicator.
- The institution is able to demonstrate to the competent authorities that a significant proportion of its retail and/or commercial banking activities comprise loans associated with a high probability of default, and that the alternative standardised approach provides an improved basis for assessing the operational risk.
- The institution meets the qualifying criteria set out in section 4.

### **4. Qualifying criteria**

To be eligible for the Standardised Approach, institutions must satisfy their competent authorities that they meet the following qualifying criteria listed below, in addition to the general risk management standards set out in Annex I:

- (a) Institutions shall have a well-documented assessment and management system for operational risk. They shall identify their exposures to operational risk and track relevant operational risk data, including material loss data. This system shall be subject to regular independent review.
- (b) Institutions shall implement a system of management reporting that provides operational risk reports to relevant functions within the institution. Institutions shall have procedures for taking appropriate action according to the information within the management reports.

## ANNEX H-4

### **Advanced Measurement Approaches**

#### **1. Qualifying criteria**

To be eligible for the Advanced Measurement Approaches, institutions must satisfy their competent authorities that they meet the qualifying criteria listed below, in addition to the general risk management standards for operational risk set out in Annex I:

##### 1.1. Qualitative Standards

- (a) The institution's internal operational risk measurement system shall be closely integrated into its day-to-day risk management processes.
- (b) There must be regular reporting of operational risk exposures and loss experience. The institution shall have procedures for taking appropriate corrective action.
- (c) The institution's risk management system must be well documented. The institution shall have a routine in place for ensuring compliance. This routine must include policies for the treatment of non-compliance issues.
- (d) The operational risk management processes and measurement systems shall be subject to regular reviews performed by internal and/or external auditors.
- (e) The validation of the operational risk measurement system by the competent authorities shall include the following:
  - Verifying that the internal validation processes are operating in a satisfactory manner; and
  - Making sure that data flows and processes associated with the risk measurement system are transparent and accessible.

##### 1.2. Quantitative Standards

###### *1.2.1. Process*

- Institutions shall calculate their capital requirement as the sum of expected loss and unexpected loss, unless they can demonstrate that expected loss is adequately captured in their internal business practices. The operational risk measure must capture potentially severe tail events, achieving a soundness standard comparable to a 99.9% confidence interval over a one year period.
- The risk measurement system shall capture the major drivers of risk affecting the shape of the tail of the loss estimates.
- Correlations in operational risk losses across individual operational risk estimates may be recognised only if institutions can demonstrate to a high degree of confidence that their systems for measuring correlations are sound, implemented with integrity, and take into account the uncertainty surrounding any such correlation estimates, particularly in periods of stress. The institution must validate its correlation assumptions.
- The risk measurement system shall be internally consistent and shall avoid the multiple counting of qualitative assessments or risk mitigants recognised in other areas of the capital adequacy framework.

### 1.2.2. *Internal data*

- Internally generated operational risk measures shall be based on a minimum historical observation period of five years. When an institution first moves to the AMA, a three-year historical observation period is acceptable.
- Institutions must be able to map their historical internal loss data into the business lines defined in Annex H-3 and into the event types defined in Annex H-8, and to provide these data to competent supervisory authorities upon request. There must be documented, objective criteria for allocating losses to the specified business lines and event types. The operational risk losses that are related to credit risk and have historically been included in the internal credit risk databases must be recorded in the operational risk databases and be separately identified. Such losses will not be subject to the operational risk charge, as long as they continue to be treated as credit risk for the purposes of calculating minimum capital requirements.
- The institution's internal loss data must be comprehensive in that it captures all material activities and exposures from all appropriate sub-systems and geographic locations. Institutions must be able to justify that any excluded activities or exposures, both individually and in combination, would not have a material impact on the overall risk estimates. An appropriate *de minimis* loss threshold for internal loss data collection must be defined.
- Aside from information on gross loss amounts, institutions shall collect information about the date of the event, any recoveries of gross loss amounts, as well as some descriptive information about the drivers or causes of the loss event.
- There shall be specific criteria for assigning loss data arising from an event in a centralised function or an activity that spans more than one business line, as well as from related events over time.
- Institutions must have documented procedures for assessing the on-going relevance of historical loss data, including those situations in which judgement overrides, scaling, or other adjustments may be used, to what extent they may be used and who is authorised to make such decisions.

### 1.2.3. *External data*

- The institution's operational risk measurement system shall use relevant external data, especially when there is reason to believe that the bank is exposed to infrequent, yet potentially severe, losses. An institution must have a systematic process for determining the situations for which external data must be used and the methodologies used to incorporate the data in its measurement system. The conditions and practices for external data use must be regularly reviewed, documented and subject to periodic independent review.

### 1.2.4. *Scenario analysis*

- The institution shall use scenario analysis of expert opinion in conjunction with external data to evaluate its exposure to high severity events. Over time, such assessments need to be validated and re-assessed through comparison to actual loss experience to ensure their reasonableness.

### *1.2.5. Business environment and internal control factors*

- The institution's firm-wide risk assessment methodology must capture key business environment and internal control factors that can change its operational risk profile.
- The choice of each factor needs to be justified as a meaningful driver of risk, based on experience and involving the expert judgment of the affected business areas.
- The sensitivity of risk estimates to changes in the factors and the relative weighting of the various factors need to be well reasoned. In addition to capturing changes in risk due to improvements in risk controls, the framework must also capture potential increases in risk due to greater complexity of activities or increased business volume.
- This framework must be documented and subject to independent review within the institution and by supervisors.
- Over time, the process and the outcomes need to be validated and re-assessed through comparison to actual internal loss experience, relevant external data.

## **2. Impact of insurance**

Institutions will be able to recognise the impact of insurance subject to the conditions set out below.

- The provider is authorised to provide insurance or re-insurance
- The provider has a minimum claims paying ability rating of A (or equivalent);
- The insurance policy has a minimum initial term of one year. For policies with a residual term of less than one year but more than 90 days, appropriate haircuts are made to reflect the declining residual term of the policy. The policies with a residual term of 90 days or less shall be ignored.
- The insurance policy has a minimum notice period for cancellation and non-renewal [threshold to be determined]
- The insurance policy contains no exclusions or limitations based upon action by the competent authorities or in the context of reorganisation and winding-up procedures;
- The insurance coverage has been explicitly mapped to the actual operational risk loss exposure of the institution;
- The insurance is provided by a third party entity. In the case of insurance through captives and affiliates, the exposure has to be laid off to an independent third party entity, for example through re-insurance, that meets the eligibility criteria.

In addition, the methodology for recognising insurance shall capture the following elements through discounts or haircuts in the amount of insurance recognition:

- The residual term of a policy, where less than one year, as noted above;
- A policy's cancellation and non-renewal terms;

- Mismatches in coverage of insurance policies
- The uncertainty of payment

The capital alleviation arising from the recognition of insurance shall not exceed 20% of the capital requirement before the recognition of risk mitigation techniques.

The reduction of the capital requirement for operational risk due to insurance shall be disclosed.

## **ANNEX H-5**

### **Combination of different methodologies**

An institution may use an Advanced Measurement Approaches in combination with either the Basic Indicator Approach or the Standardised Approach and for determining its capital requirement for operational risk, subject to the following conditions:

- All operational risks of the institution are captured. The competent authority shall be satisfied with the methodology used to cover different activities, geographical locations, legal structures or other relevant divisions determined on an internal basis.
- The qualifying criteria set out in Annex H-3 and H-4 are fulfilled for the part of activities covered by the Standardised Approach and Advanced Measurement Approaches respectively.
- On the date of implementation of an Advanced Measurement Approach, a significant part of the bank's operational risks are captured by the Advanced Measurement Approach;
- The institution takes a commitment to roll out the Advanced Measurement Approach to a material part of its legal entities and business lines within a time schedule agreed with its competent authorities.

An institution shall not use a combination of the Basic Indicator Approach and the Standardised Approach for determining its capital requirement for operational risk, unless exceptional circumstances such as the recent acquisition of new business require a transition period for the roll out of the Standardised Approach. In this event, the institution shall take a commitment to roll out the Standardised Approach within a time schedule agreed with its competent authorities.

**Annex H-6; Annex H-7**

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## Annex H-8 Loss event type classification

Event-Type Category (Level 1)	Definition	Categories
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/ discrimination events, which involves at least one internal party.	Unauthorised Activity
		Theft and Fraud
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party	Theft and Fraud
		Systems Security
Employment Practices and Workplace Safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity / discrimination events	Employee Relations
		Safe Environment
		Diversity & Discrimination
Clients, Products & Business Practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.	Suitability, Disclosure & Fiduciary
		Improper Business or Market Practices
		Product Flaws
		Selection, Sponsorship & Exposure
		Advisory Activities
Damage to Physical Assets	Losses arising from loss or damage to physical assets from natural disaster or other events.	Disasters and other events
Business disruption and system failures	Losses arising from disruption of business or system failures	Systems
Execution, Delivery & Process Management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors	Transaction Capture, Execution & Maintenance
		Monitoring and Reporting
		Customer Intake and Documentation
		Customer / Client Account Management
		Trade Counterparties
		Vendors & Suppliers

## Annex I

### Additional requirements on the institutions' assessment process, management and coverage of risks

#### Section 1 – Risk management

Competent authorities shall require institutions:

- (a) to implement policies that prohibit, or strictly limit under rigorous and transparent conditions, activities and relationships that might diminish the quality of the control environment;
- (b) to adopt and maintain an effective organisational structure with clear and well defined lines of responsibility, authority and reporting. Delegation of authority at all levels shall be accompanied by oversight, with ultimate accountability resting with the delegator;
- (c) to prevent assignment of conflicting responsibilities to personnel. Any exceptions to this shall be identified, minimised and subject to rigorous and independent monitoring;
- (d) to design the policies and procedures referred to under Article 116.2(a) as an integral part of their business activities and to include frequent verifications of their compliance. Those policies and procedures shall address risks comprehensively, precisely and timely;
- (e) to identify the risks inherent in new products or activities before these are introduced or undertaken, and to ensure that those risks are subject to adequate management and control;
- (f) to communicate the policies and procedures referred to under Article 116.2(a) throughout their organisation, to ensure that the relevant staff at all levels understand their responsibility and involvement in respect of the management of risks.

#### Section 2 - Credit and counterparty risk

Competent authorities shall require institutions:

- (a) to operate within sound, well-defined credit-granting criteria. These criteria shall include a clear indication of the institutions' target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment;
- (b) to have a clearly-established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits, respecting the arm's-length principle;
- (c) to ensure that the credit-granting function is properly managed and that credit exposures are in compliance with prudential requirements and internal limits;
- (d) to have in place systems for the ongoing administration and monitoring of their various credit risk-bearing portfolios and individual exposures, including determining the adequacy of provisions and reserves, and for identifying and managing problem credits;

- (e) to hold sufficient own funds above the minimum level laid down under Article 3 to cover deficiencies resulting from the credit risk stress test to be performed pursuant to Annex D-5, paragraphs 34-35.

### Section 3 - Concentration risk

Competent authorities shall require institutions:

- (a) to ensure that their credit portfolio is adequately diversified given their target markets and overall credit strategy. In particular, such policies shall establish targets for portfolio mix as well as set exposure limits on single counterparts and group of connected counterparts, particular industries or economic sectors, geographical regions and specific products. When setting their risk concentration limits, institutions shall ensure that their systems allow them to aggregate their risk exposures accordingly with these limits;
- (b) to conduct periodic stress tests of their credit risk concentrations including in relation to the realisable value of any collateral taken. These shall address risks arising from potential changes in market conditions that could adversely impact the institutions' adequacy of own funds and risk arising from the realisation of collateral in stressed situations. In the event that such a stress test indicates a lower realisable value of any collateral taken than is recognised by an institution for the purpose of calculating its exposures for the purpose of calculating its exposures for the purposes of Article 49 of Directive 2000/12/EC, that institution shall modify its collateral recognition accordingly;
- (c) to include risks arising from maturity mismatches between exposures and any credit protection on those exposures into their credit risk strategies in relation to concentration risk;
- (d) to include policies and procedures relating to concentration risk arising from the application of credit risk mitigation techniques, and in particular large indirect credit exposures (e.g. to a single collateral issuer), into their credit risk strategies.

### Section 4 - Residual risk associated with the use of recognised credit risk mitigation techniques

- (1) Competent authorities shall require institutions to have appropriate written policies and procedures to address and control the risk that recognised credit risk mitigation techniques used by the institution prove less effective than expected – for example, as a result of an unexpected inability to liquidate, obtain transfer or appropriation of or to retain assets or amounts provided as collateral or other funded protection in a timely manner; as a result of an unexpected refusal by an unfunded protection provider to pay on the default of the borrower or of an unexpected delay in such payment; or as an unexpected failure or ineffectiveness of legal documentation.
- (2) Without prejudice to the general requirement prescribed by Article 116.3, institutions shall, regardless of the recognition of credit risk mitigation permitted under Title II, consider, in the policies and procedures required under paragraph 1, the extent to which recognition of credit risk mitigation is appropriate having regard to the risk mentioned in that paragraph. Institutions must not recognise credit risk mitigation to an extent greater than that indicated by such consideration.

## Section 5 – Securitisation risks

(1) Without prejudice to the general requirement prescribed by Article 116.3, institutions shall, in relation to securitisation transactions [in relation to which they are originator or sponsor], have own funds above the minimum level laid down under Article 3 to the extent indicated by the economic substance of the transaction in question. Amongst the aspects to be taken into account in determining the level of own funds to be held are the following:

- maturity mismatches in the transactions
  - asset correlation in the pools securitised
  - substitution clauses
  - levels of risk transferred. Amongst the factors that shall be taken into consideration in this regard are the levels of retention or repurchase of exposure to the assets securitised (including, in the case of re-purchase for market-making purposes, the extent of repurchase and the period for which the securities are held before re-sale), and the amount of the nominal value of the pool transferred to independent third parties
  - new features of securitisation transactions
  - the use of credit protection techniques by the institution in the context of securitisation transactions – including the extent to which expected loss is transferred where credit protection is acquired in relation to junior tranches
- Where an institution provides implicit support on more than one occasion it shall hold own funds in respect of securitisation transactions for which it is originator or sponsor reflective of the extent to which this indicates that the legal transfer of risk is greater than the true extent of the economic transfer of risk.

When intending to exercise a time call institutions must give prior notice to the competent authority

(2) Insofar as an institution is an originator of revolving securitisation transactions involving early amortisation provisions, competent authorities shall require that institution to have adequate own funds and liquidity plans to address the implications of both scheduled and early amortisation.

## Section 6 - Interest rate risk arising from non-trading activities

Competent authorities shall require institutions:

- (a) to have systems that capture all material sources of interest rate risk arising from non-trading activities and that determine the effect of interest rate changes in ways that are consistent with the scope of their activities. The assumptions underlying the systems shall be clearly understood by risk managers;
- (b) to provide the competent authorities with the results of their internal measurement systems, expressed in terms of economic value relative to own funds, using a standardised interest rate shock.

## Section 7 - Operational risk

Competent authorities shall require institutions:

- (a) to base the policies and procedures for operational risk referred to under Article 118.1(a) on a definition of that risk which, without prejudice to

Article 107, clearly articulates what constitutes operational risk in each institution;

- (b) to have policies and processes to mitigate their exposure to material operational risks, in particular to low-frequency high-severity operational risk events;
- (c) to have in place contingency and business continuity plans to ensure the institutions' ability to operate on an ongoing basis and limit losses in the event of severe business disruption.

#### Section 8 - Market risk

Pursuant to Article 98 and Annex G-2, competent authorities shall require institutions to have systems for monitoring their proprietary transactions that make it possible to measure at least on a day to day basis the risks resulting from their trading book positions.

#### Section 9 - Liquidity risk

Competent authorities shall require institutions:

- (a) to establish a process for the ongoing measurement and monitoring of their net funding requirements. These requirements shall be analysed under alternative scenarios and the assumptions utilised by the institutions to manage their liquidity shall be regularly reviewed;
- (b) to manage their access to market by building relationships with key providers of funding and maintaining an appropriate diversification of their funding sources;
- (c) to have in place contingency plans that address the strategy for handling liquidity crises and include procedures for making up cash flow shortfalls in emergency situations.

#### Section 10 - Allocation of items in the trading book

- (1) Competent authorities shall require institutions to have policies to allocate items in the trading book or other books and procedures to ensure a consistent implementation of such policies.
- (2) The policies referred to under paragraph 1 shall be inspired by the principle of avoiding any abusive switching between the trading book and other books, aimed at minimising capital charges or exploiting arbitrage opportunities between different accounting standards.
- (3) Those policies shall pay particular attention to less liquid items (i.e. securities which are not marked to market), items bearing high credit risk, and hedging instruments (notably internal hedges).

#### Section 11 – Reporting

- (1) Competent authorities shall require that the processes for identification and measurement of risks referred to under Article 116.2(a) provide relevant, reliable, timely and accessible reporting to the relevant personnel in a consistent format. Such information shall include appropriate internal financial, operational and compliance data as well as external market information that is relevant to decision making.

Management information systems shall be secure, monitored independently and supported by adequate contingency arrangements.

- (2) The processes referred to under paragraph 1 shall be aimed at the following objectives:
  - (a) evaluate the level and trend of risks incurred by the institutions and the effect on capital adequacy;
  - (b) evaluate the sensitivity and reasonableness of key assumptions used in the assessment process referred to under Article 116;
  - (c) check that sufficient internal capital is held against risk and that this is in compliance with established goals;
  - (d) assess future levels of own funds based on the institutions' reported risk profile; and
  - (e) adjust strategies and business plan accordingly.

#### Section 12 – Adequate internal capital goals

Competent authorities shall require institutions to set targets of adequate internal capital in a way which is consistent with the institutions' overall risk profile and current operating environment. Assessments of adequacy of internal capital shall be mindful of the particular stage of the business cycle in which the institution is operating. Rigorous, forward-looking stress testing that identifies possible events or changes in market conditions that could adversely impact the institution shall be performed.

#### Section 13 – Internal reviews

Competent authorities shall require institutions to include the following in the periodical reviews of their assessment process:

- (a) appropriateness of the procedures in relation to the provisions laid down under Article 116.2;
- (b) accuracy and completeness of data inputs into the assessment process;
- (c) reasonableness and validity of scenarios used in the assessment process; and
- (d) stress testing and analysis of assumptions and inputs.

#### Section 14 – Internal audit function

- (1) Competent authorities shall require institutions to have an internal audit function independent from the activities audited and from the processes set forth under Article 116.2(a).
- (2) The internal audit function referred to under paragraph 1 shall carry out its assignments with objectivity and impartiality, and report directly to the management body of the institution.
- (3) The internal audit function shall draw up and periodically review an internal audit charter which establishes at least the objectives and scope of the function, the function's position within the institution's organisation, its powers, responsibilities and relations with other control processes, and the accountability of the responsible of the function.

- (4) Every activity and articulation of institutions shall fall within the scope of investigation of the internal audit function. Examinations and evaluations regularly carried out by this function shall include the appropriateness and effectiveness of the processes set forth in Articles 116.2(a) and the manner in which assigned responsibilities are fulfilled.
- (5) If the internal audit function is outsourced by institutions, these shall remain responsible for the compliance with the minimum requirements laid down in this Section. Institutions shall also remain responsible for ensuring that the recommendations of the audit are addressed and for determining who is responsible for implementing them.

## Annex J

### Additional criteria on the evaluation process, prudential measures and transparency

#### Section 1 – Evaluation process

- (1) At a minimum, the evaluation process shall cover the following control and risk factors of institutions:
  - (a) Legal structure and ownership;
  - (b) Structure of current and planned business;
  - (c) Objectives and articulation of strategy;
  - (d) Sensitivity to changes to the overall business environment and the structure of the industry;
  - (e) Quality of corporate governance, control environment, organisation, management and staffing;
  - (f) Soundness of risk management and reporting, and capital adequacy assessment process;
  - (g) Structure and amount of own funds;
  - (h) Exposure to and management of credit, market and operational risk, including quality of lending and adequacy of provisions;
  - (i) Policies for the allocation of items in the trading book;
  - (j) Exposure to and management of interest rate risk arising from non-trading activities, liquidity risk, and concentration risk (including the institutions' compliance with the requirements laid down in Articles 48 to 50 of Directive 2000/12/EC);
  - (k) the robustness, suitability and manner of application of an institution's policies and procedures for the management of residual risk associated with the use of recognised credit risk mitigation techniques as described in Annex I, Section 4;
  - (l) Level, structure and volatility of earnings.
- (2) Competent authorities shall evaluate the exposure of institutions to the interest rate risk arising from non-trading activities. Adoption of appropriate prudential measures shall be considered on the institutions whose economic value declines by more than 20% of the sum of original and additional own funds as a result of a standardized interest rate shock.
- (3) Competent authorities shall review the institutions' trading strategies, limits and documented policies and procedures adopted for the allocation of items in the trading book, in compliance with the standards laid down in Annex I, Section 10.
- (4) Competent authorities shall review the stress test carried out by institutions applying an IRB approach, to assess whether those institutions are operating with adequate own funds.
- (5) Competent authorities shall issue guidance on how the definition of default laid down under Article 1(46) is transposed in their jurisdiction. Competent authorities will also assess the institutions' application of that definition and its impact on capital requirements.

- (6) The evaluation process shall also evaluate the extent to which the capital held by an institution in respect of assets which it has securitised is adequate. The factors to be considered in this regard shall include those set out at Section 4 below.
- (7) The evaluation process shall also consider the effect of its securitisation activities on the overall balance sheet of an originating institution. In particular it shall have regard to the extent, if any, to which an institution securitises better quality assets with a resultant higher concentration of poorer quality assets on its balance sheet.

### Section 2 – Prudential measures

Member States shall set out the following minimum range of prudential measures available to the competent authorities:

- (a) To require institutions to enhance their control environment;
- (b) To require a specific provisioning policy or capital treatment of assets by the institutions;
- (c) To require restrictions or limitations on the institutions' business, operations and network;
- (d) To require the institutions to reduce the risk inherent in their activities, products and systems.

### Section 3 – Transparency and accountability

While communicating the results of the evaluation process pursuant to Article 129, paragraph 2 to the institutions the competent authorities shall:

- (a) explain in sufficient detail the factors which have led to the evaluation process' conclusions;
- (b) indicate areas of weakness identified, the prudential measures required and the timeframe for their implementation;
- (c) explain any major action planned by the competent authority.

### Section 4 – Securitisations

Amongst the aspects to be considered by competent authorities in determining whether additional capital is required to be held by an institution in respect of individual securitisation transactions are the following:

- degree of risk transfer. Amongst the factors that shall be taken into consideration in this regard are the levels of retention or repurchase of exposure to the assets securitised (including, in the case of re-purchase for market-making purposes, the extent of repurchase and the period for which the securities are held before re-sale), and the amount of the nominal value of the pool transferred to independent third parties.
- maturity mismatches in the transactions (including the use of maturity mismatches to artificially reduce capital requirements)
- asset correlation in the pools securitised
- substitution clauses
- new features of securitisation transactions
- the extent if any to which an institution may have provided implicit support to a securitisation

- the use of credit protection techniques by the institution in the context of securitisation transactions – including the extent to which expected loss is transferred where credit protection is acquired in relation to junior tranches
- the manner of exercise of time calls by the institution
- in the context of controlled early amortisation provisions, the manner in which an institution determines the minimum amortisation period to pay down 90% of the outstanding balance at the point of early amortisation.

Supervisors shall monitor whether an institution has provided implicit support to a securitisation. If an institution is found to have provided implicit support on more than one occasion the supervisory authority shall take appropriate action [reflective of the expectation that it will provide future support to its securitisations]. Such action may include:

- preventing the institution from gaining favourable capital treatment on securitised assets for a period of time to be determined by the national supervisor;
- requiring the institution to hold capital against all securitised assets as though the institution had created a commitment to them, by applying a conversion factor to the risk weight of the underlying assets;
- for purposes of capital calculations, requiring the institution to treat all securitised assets as if they remained on the balance sheet;
- requiring the institution to disclose its provision of implicit support
- requiring the institution to hold regulatory capital in excess of the minimum risk-based capital ratios.

Competent authorities must have policies and procedures in place in relation to the review of the proposed exercise of time calls by institutions. Such policies and procedures shall take account of, for example, the following:

- the possibility of the institution having to account for losses on the securitised exposures;
- the reason for the exercise of the call;
- any impact on the institution's own funds..

Competent authorities shall consider whether to require a minimum period to elapse before the exercise of the call.

[Annex K – blank]

## **Annex L-1**

### **Additional criteria on disclosure requirements**

1. Information shall be regarded as material in disclosures if its omission or misstatement could change or influence the economic assessment or decision of a user relying on that information.
2. Information shall be regarded as proprietary to an entity set forth in Article 137 if sharing that information with the public would undermine its competitive position. It may include information on products or systems which, if shared with competitors, would render an entity's investments therein less valuable.
3. Information shall be regarded as confidential if there are obligations to customers or other counterparty relationships binding an entity set forth in Article 137 to confidentiality.
4. Competent authorities shall require the entities set forth in Article 137 to assess the need to publish some or all disclosures more frequently than annually in the light of the relevant characteristics of their business such as scale of operations, range of activities, presence in different countries, involvement in different financial sectors, and participation in international financial markets and payment, settlement and clearing systems. That assessment shall pay particular attention to the possible need for more frequent disclosure of items of information laid down in Annex L-2, paragraphs (3)(b), (e) and (4)(b) to (f), and information on risk exposure and other items prone to rapid change. Competent authorities shall require entities to publish disclosures as soon as practicable.
5. Competent authorities shall require the entities set forth in Article 137:
  - (a) to provide all disclosures in one medium or location to the degree feasible;
  - (b) to indicate where required disclosures can be found if they are not included in the financial statements;
  - (c) to ensure that disclosures not covered by statutory audit are appropriately verified.

## **Annex L-2**

### **Disclosure requirements for all entities**

1. Competent authorities shall require the entities set forth in Article 137 to disclose their risk management objectives and policies for each separate category of risk they incur, including the risks referred to under paragraphs 5 to 11. These disclosures shall include:
  - (a) the strategies and processes to manage risks;
  - (b) the structure and organisation of the relevant risk management function or other appropriate arrangements;
  - (c) the scope and nature of risk reporting and measurement systems; and
  - (d) the policies for hedging and mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges and mitigants.

2. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding the scope of application of this Directive's requirements:
  - (a) the name of the top corporate entity in the group to which this Directive's requirements apply;
  - (b) an outline of differences in the basis of consolidation for accounting and regulatory purposes, with a brief description of the entities within the group (i) that are fully consolidated, (ii) that are pro-rata consolidated, (iii) that are given a deduction treatment, and (iv) from which surplus capital is recognised plus (v) that are neither consolidated nor deducted;
  - (c) any restrictions, or other major impediments, on transfer of own funds or other funds within the group;
  - (d) the aggregate amount of surplus capital (i.e. in unconsolidated regulated subsidiaries, the difference between the amount of the investment in those subsidiaries and their regulatory capital requirements) of insurance subsidiaries (whether deducted or subjected to an alternative method) included in the capital of the consolidated group;
  - (e) the aggregate amount of capital deficiencies (i.e. the amount by which actual capital is less than the regulatory capital requirement) in all subsidiaries not included in the consolidation (i.e. that are deducted) and the name(s) of such subsidiaries;
  - (f) the aggregate amounts of the entity's total interests in insurance entities which are risk weighted rather than deducted from capital or subjected to an alternative group-wide method, as well as their name, their country of incorporation or residence, the proportion of ownership interest and, if different, the proportion of voting power in these entities. In addition, the quantitative impact on own funds of using this method versus using the deduction or alternate group-wide method shall be indicated.
  
3. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their own funds:
  - (a) summary information on the terms and conditions of the main features of all own funds items and components thereof;
  - (b) the amount of original own funds, with separate disclosure of all positive items, deductions and surplus capital from insurance companies;
  - (c) the total amount of additional own funds and own funds as defined in Annex V of Directive 93/6/EEC;
  - (d) deductions from original and additional own funds, pursuant to Article 38.1.c of Directive 2000/12/EC;
  - (e) total eligible own funds, net of deductions and limits laid down in Article 38 of Directive 2000/12/EC.

4. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their capital adequacy:
- (a) a summary discussion of their approach to assessing the adequacy of their own funds to support current and future activities;
  - (b) minimum capital requirements for credit risk related to (i) portfolios subject to standardised and simple risk weight approaches (excluding equities), (ii) portfolios subject to PD/LGD approaches (corporate, interbank and sovereign; mortgage retail; non-mortgage retail – qualifying revolving exposures; other non-mortgage retail); (iii) asset securitisation exposures;
  - (c) minimum capital requirements for equity risk related to (i) equity portfolios subject to simple risk weight approaches, (ii) equity portfolios subject to PD/LGD approaches; (iii) equities not included in the trading book under the internal models approaches (for entities using these approaches for those equities);
  - (d) minimum capital requirements for market risk calculated in accordance with Article 4, paragraphs 1 and 2 of Directive 93/6/EEC;
  - (e) minimum capital requirements for operational risk related to: (i) the Basic Indicator Approach, (ii) the Standardised Approach, and (iii) the Advanced Measurement Approach;
  - (f) the solvency ratios calculated on the basis of total own funds and original own funds.

Disclosure (f) above shall also be provided pursuant to Article 137, paragraph 3.

5. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their exposure to credit risk:
- (a) the requirement set out under paragraph 2 with respect to credit risk, including (i) the definitions for accounting purposes of past due and impaired, (ii) a description of approaches followed for specific and general allowances and statistical methods, (iii) a discussion of the entity's credit risk management policy;
  - (b) the total gross credit risk exposures, plus average gross exposure over the period broken down by different types of credit exposure;
  - (c) the geographic distribution of exposures, broken down in significant areas by major types of credit exposure;
  - (d) the industry or counterparty type distribution of exposures, broken down by major types of credit exposure;
  - (e) the residual contractual maturity breakdown of the whole portfolio, broken down by major types of credit exposure;

- (f) by major industry or counterparty type, the amount of (i) past due/impaired loans, (ii) specific and general allowances, (iii) charges for specific allowances and charge-offs during the period;
  - (g) the amount of impaired loans and past due loans broken down by the significant geographical areas including, if practical, the related amounts of specific and general allowances;
  - (h) the reconciliation of changes in the allowances for loan impairment.
6. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their exposure to credit risk on portfolios subject to the standardised and simple risk weight approaches:
- (a) for the portfolios under the Standardised Approach (i) the names of ECAIs and ECAs used, plus reasons for any changes, (ii) types of exposure for which each agency is used, (iii) a description of the process used to transfer public issue ratings onto comparable assets not included in the trading book, (iv) the alignment of the alphanumerical scale of each agency used with risk buckets;
  - (b) for exposures subject to the standardised approach, HVCRE, specialised lending subject to supervisory slotting criteria and equities under the simple risk weight approach combined, the amount of the entity's outstandings (rated and unrated) in each risk bucket, as well as those that are deducted.
7. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their positions in equities not included in the trading book:
- (a) the requirement set out under paragraph 2, with respect to equity risk including (i) the differentiation between holdings on which capital gains are expected and those taken under other objectives, including for relationship and strategic reasons, and (ii) a discussion of important policies covering the valuation and accounting of equity holdings not included in the trading book, also covering the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices;
  - (b) the value disclosed in the balance sheet and the fair value of investments, and for quoted securities, a comparison to publicly quoted share values where the share price is materially different from the fair value;
  - (c) the types and nature of investments, including the amount that can be classified as (i) publicly traded, and (ii) privately held;
  - (d) the cumulative realised gains or losses arising from sales and liquidations in the reporting period;
  - (e) the total unrealised revaluation gains or losses included in the original or additional own funds.

- (f) the capital requirements broken down by appropriate equity groupings, consistent with the entity's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition or grandfathering provisions regarding regulatory capital requirements.
8. Competent authorities shall require the entities set forth in Article 137 calculating their capital requirements against risks in accordance with Article 4, paragraphs 1 and 2 of Directive 93/6/EEC to disclose the following information:
- (a) the requirement set out under paragraph 2 for market risk, including the portfolios covered by the Standardised Approach;
  - (b) the capital requirements calculated in accordance with Annexes I, II, III and VII of Directive 93/6/EEC.
9. Competent authorities shall require the entities set forth in Article 137 using the Internal Models Approach ('IMA') pursuant to Annex VIII of Directive 93/6/EEC to disclose the following information:
- (a) the requirement set out under paragraph 2 for market risk, including the portfolios covered by the IMA;
  - (b) for each portfolio covered by the IMA: (i) the characteristics of the models used, (ii) a description of stress testing applied to the portfolio, and (iii) a description of the approach used for backtesting/validating the accuracy and consistency of the internal models and modelling processes;
  - (c) the scope of acceptance by the competent authority;
  - (d) for the trading portfolios under the IMA (i) the aggregate value-at-risk (VaR), (ii) the high, mean and low VaR values over the reporting period and period-end, and (iii) a comparison of VaR estimates with actual outcomes, with analysis of important outliers in backtest results.
10. Competent authorities shall require the entities set forth in Article 137 to disclose the following information on their exposure to operational risk:
- (a) in addition to the requirement set out under paragraph 2, the approach(es) for operational risk capital assessment that the entity qualifies for;
  - (b) a description of the Advanced Measurement Approach (AMA), if used by the entity, including a discussion of relevant internal and external factors considered in the entity's measurement approach. In the case of partial use, the scope and coverage of the different approaches used;
  - (c) for entities using the AMA, the operational risk charge before and after any reduction in capital resulting from the use of insurance.
11. Competent authorities shall require the entities set forth in Article 137 to disclose the following information on their exposure to interest rate risk ('IRR') on positions not included in the trading book:

- (a) the requirement set out under paragraph 2, including the nature of IRR and key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits), and frequency of IRR measurement;
- (b) the increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring IRR, broken down by currency (as relevant).

### **Annex L-3**

#### **Disclosures that are qualifying criteria for the use of particular instruments or methodologies**

1. Competent authorities shall require the entities set forth in Article 137 to disclose the following information regarding their portfolios subject to PD/LGD approaches:
  - (a) competent authority's acceptance of approach/approved transition;
  - (b) explanation and review of (i) the structure of internal rating systems and relation between internal and external ratings, (ii) the use of internal estimates other than for IRB capital purposes, (iii) the process for managing and recognising credit risk mitigation, (iv) the control mechanisms for the rating system including a discussion of independence, accountability, and rating systems review;
  - (c) a description of the internal ratings process, provided separately for five distinct portfolios: (i) corporate (including SMEs, specialised lending and purchased corporate receivables), interbank and sovereign, (ii) equities, (iii) mortgage retail, (iv) non-mortgage retail – qualifying revolving exposures, and (v) other non-mortgage retail. The description should include for each portfolio: (i) the types of exposure included in the portfolio; (ii) the definitions, methods and data for estimation and validation of PD, and (for the portfolios subject to IRB advanced approach) LGD and/or EAD, including assumptions employed in the derivation of these variables, and (iii) the descriptions of material deviations from the reference definition of default, including the broad segments of the portfolio(s) affected by such deviations;
  - (d) the percentage of total credit exposures (drawn plus EAD on the undrawn, or credit conversion factor for IRB foundation) to which PD/LGD approach disclosures relate;
  - (e) for each portfolio (as defined above) except retail (i) a presentation of exposures (outstanding loans and EAD on undrawn commitments, outstanding equities) across a sufficient number of PD grades (including default) to allow for a meaningful differentiation of credit risk, (ii) for entities on the IRB Advanced Approach, weighted average LGD in percentage for each PD grade (as defined above), (iii) for entities on the IRB Advanced Approach, amount of undrawn commitments and weighted average EAD in percentage;

- (f) for retail portfolios (as defined above) either (i) the disclosures outlined under (e) above, or (ii) an analysis of exposures (outstanding loans and EAD on commitments) against a sufficient number of EL grades to allow for a meaningful differentiation of credit risk;
  - (g) the actual losses (e.g. charge-offs and specific provisions) in the preceding period for each portfolio (as defined above) and how this differs from past experience;
  - (h) a discussion of the factors that impacted on the loss experience in the preceding period;
  - (i) the entity's estimates against actual outcomes over a longer period. At a minimum, this should include information on estimates of losses against actual losses in each portfolio (as defined above) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each portfolio. Where appropriate, entities should further decompose this to provide analysis of PD and, for entities on the IRB Advanced Approach, LGD and EAD outcomes against estimates provided in the quantitative risk assessment disclosures above.
2. Competent authorities shall require the entities set forth in Article 137 applying credit risk mitigation techniques to disclose the following information:
- (a) the requirement set out under Annex L-2(2) with respect to credit risk mitigation including (i) policies and processes for, and an indication of the extent to which the entity makes use of, on- and off-balance sheet netting, (ii) policies and processes for collateral valuation and management, (iii) a description of the main types of collateral taken by the bank, (iv) the main types of guarantor/credit derivative counterparty and their creditworthiness, and (v) information about (market or credit) risk concentrations within the mitigation taken;
  - (b) for each separately disclosed credit risk portfolio under the Standardised and/or Foundation IRB approach, the total exposure (before the application of haircuts and after netting) that is covered by (i) financial collateral, and (ii) physical collateral;
  - (c) for each separately disclosed portfolio under the Standardised and/or PD/LGD approach, the total exposure (after netting) that is covered by guarantees/credit derivatives.
3. Competent authorities shall require the entities set forth in Article 137 applying asset securitisation to disclose the following information:
- (a) the requirement set out under Annex L-2(2) with respect to asset securitisation (including synthetics), including a discussion of (i) the entity's objectives in relation to securitisation activity, and (ii) the roles played by the entity in the securitisation process and an indication of the extent of the entity's involvement in each of them;

- (b) a summary of the entity's accounting policies for securitisation activities, including (i) whether the transactions are treated as sales or financings), (ii) the recognition of gain on sale, (iii) the key assumptions for valuing retained interests, and (iv) the treatment of synthetic securitisations if this is not covered by other accounting policies;
- (c) the names of the ECAs used for securitisations and the types of securitisation exposure for which each agency is used;
- (d) the total outstanding credit exposure of assets securitised by the entity and subject to the securitisation framework (broken down into traditional/synthetic), by asset type;
- (e) for assets securitised by the entity and subject to the securitisation framework, a breakdown by asset type of (i) the amount of impaired/past due assets securitised, and (ii) the losses recognised by the bank during the current period;
- (f) the aggregate amount of securitisation exposures retained or purchased, broken down by asset type;
- (g) the aggregate amount of securitisation exposures retained or purchased, broken down into a meaningful number of risk weight bands. Exposures that have been deducted shall be disclosed separately;
- (h) the aggregate outstanding amount of securities revolving assets segregated by the originator's interest and the investor's interest;
- (i) the summary of the current year's securitisation activity, including the amount of assets securitised (by asset type), and recognised gain or loss on sale by asset type.



**EUROPEAN COMMISSION**  
Internal Market DG

**REVIEW OF CAPITAL REQUIREMENTS FOR  
BANKS AND INVESTMENT FIRMS**

**COMMISSION SERVICES THIRD  
CONSULTATION PAPER**

**WORKING DOCUMENT**

**1 July 2003**

## Contents of Working Document

Please note that where numbered provisions are indicated to be 'blank' this is due simply to the structural approach adopted in developing the legislative instrument. Unless otherwise indicated, there is no substantive significance to this.

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# **WORKING DOCUMENT - PART ONE**

## **Draft proposed risk-based capital requirements**

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# **Title I – Definitions, General Provisions on Capital Adequacy and Scope of Consolidation**

## **CHAPTER 1 – DEFINITIONS**

### *Article 1*

For the purposes of the present Directive

- (1) 'institutions' shall mean credit institutions and investment firms;
- (2) 'financial institutions' shall mean financial institutions as defined in Article 1(5) of Directive 2000/12/EC;
- (3) 'credit institution' shall mean a credit institution within the meaning of Article 1(1) of Directive 2000/12/EC;
- (4) 'investment firm' shall mean an investment firm within the meaning of Article 1(2) of Directive 93/22/EEC, excluding local firms as defined in Article 2(20) of Directive 93/6/EEEC and firms which only receive and transmit orders from investors without holding money or securities belonging to their clients and which for that reason may not at any time place themselves in debit with their clients; and for the purpose of applying supervision on a consolidated basis shall include undertakings referred to in Article 2(4) of Directive 93/6/EEC
- (5) 'asset management company' shall mean a management company within the meaning of Article 1a(2) of Council Directive 85/611/EEC of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as amended, an undertaking the registered office of which is outside the Community and which would require authorisation in accordance with Article 5(1) of that Directive if it had its registered office within the Community, a management company other than the aforementioned and other than an investment firm, whose principal activity is discretionary and non-discretionary asset management, on a client-by-client or collective basis;
- (7) 'ancillary services undertaking' shall mean an undertaking the principal activity of which consists in owning or managing property, managing data-processing services, or any other similar activity which is ancillary to the principal activity of one or more institutions
- (8) 'insurance undertaking' shall mean an insurance undertaking within the meaning of Article 6 of Directive 73/239/EEC, Article 6 of Directive 79/267/EEC or Article 1(b) of Directive 98/78/EC;
- (9) 'reinsurance undertaking' shall mean a reinsurance undertaking within the meaning of Article 1(c) of Directive 98/78/EC;
- (10) 'insurance holding company' shall mean a parent undertaking, the main business of which is to acquire and hold participations in subsidiary undertakings, where those subsidiary undertakings are exclusively or mainly insurance undertakings, reinsurance undertakings, or non-member-country insurance undertakings, at least

one of such subsidiary undertakings being an insurance undertaking, and which is not a mixed financial holding company within the meaning of Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate;

[(11)-(13) Blank]

- (14) 'group' shall mean a group of undertakings, which consists of a parent undertaking, its subsidiaries and the entities in which the parent undertaking or its subsidiaries hold a participation, as well as undertakings linked to each other by a relationship within the meaning of Article 12(1) of Directive 83/349/EEC;
- (15) 'subgroup' shall mean any group as defined in point 14 of this Article which can be identified within a larger group as defined in point 14 of this Article;
- (16) 'group of institutions' shall mean any group of undertakings which comprise at least two entities such as defined in points 1 or 2 or 5 of this Article of which at least one is an institution such as defined in point 1 of this Article;
- (17) "close links" shall mean a situation in which two or more natural or legal persons are linked by:
  - (a) "participation", which shall mean the ownership, direct or by way of control, of 20 % or more of the voting rights or capital of an undertaking; or
  - (b) "control", which shall mean the relationship between a parent undertaking and a subsidiary, in all the cases referred to in Article 1(1) and 1(2) of Directive 83/349/EEC, or a similar relationship between any natural or legal person and an undertaking; any subsidiary undertaking of a subsidiary undertaking shall also be considered a subsidiary of the parent undertaking which is at the head of those undertakings.

A situation in which two or more natural or legal persons are permanently linked to one and the same person by a control relationship shall also be regarded as constituting a close link between such persons;

- (18) 'subgroup of institutions' shall mean any group of institutions as defined in point 14 of this Article which can be identified within a larger group of institutions as defined in point 14 of this Article;
- (19) 'parent undertaking' shall mean a parent undertaking within the meaning of Article 1 of Seventh Council Directive 83/349/EEC of 13 June 1983 on consolidated accounts as amended and any undertaking which, in the opinion of the competent authorities, effectively exercises a dominant influence over another undertaking;
- (20) 'subsidiary undertaking' shall mean a subsidiary undertaking within the meaning of Article 1 of Directive 83/349/EEC as amended and any undertaking over which, in the opinion of the competent authorities, a parent undertaking effectively exercises a dominant influence; all subsidiary undertakings of subsidiary undertakings shall also be considered as subsidiary undertakings of the parent undertaking

- (21) 'financial holding company' shall mean a financial institution, the subsidiary undertakings of which are either exclusively or mainly institutions or financial institutions, at least one of such subsidiaries being an institution, and which is not a mixed financial holding company within the meaning of Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate<sup>1</sup>;
- (22) 'participation' shall mean a participation within the meaning of the first sentence of Article 17 of Fourth Council Directive 78/660/EEC of 25 July 1978 on the annual accounts of certain types of companies as amended, or the direct or indirect ownership of 20 % or more of the voting rights or capital of an undertaking;
- (23) 'parent undertaking institution' shall mean a parent undertaking as defined in point 19 of this article which is also an institution as defined in point 1 of this article; [(24-25) Blank]

[(24-25) Blank]

- (26) 'public sector entities' means non-commercial administrative bodies responsible to central governments, regional governments or local authorities, or authorities that in the view of the competent authorities exercise the same responsibilities as regional and local authorities;
- (26A) 'Covered bonds', shall mean bonds as defined in Article 22(4) of Directive 85/6111/EEC and collateralised by the following eligible assets:
- Exposures to sovereigns, central banks, multilateral development banks, international organisations, administrative bodies, non-commercial undertakings, regional governments and local authorities that qualify for the credit quality assessment step 1 under the standardised approach,
  - exposures to institutions that qualify for the credit quality assessment step 1 under the standardised approach. The total exposure shall not exceed 5% of the nominal amount of outstanding covered bonds of the institution.
  - loans secured by residential real estate where only liens that are combined with any prior liens within 80% of the market value of the pledged property.
  - loans secured by commercial real estate where only liens that are combined with any prior liens within 60% of the market value of the pledged property. The competent authorities may recognise instruments as eligible where the LTV ratio of 60% is exceeded up to a maximum level of 70% if they are satisfied that there is an adequate level of overcollateralisation. In this case, the market value or, in the absence of a market value, the fair value of the total assets pledged as collateral for the covered bonds must exceed the nominal amount outstanding on the covered bond by at least

8%, and the bondholders' claim must meet the legal certainty requirements set out in Section III. The bondholders' claim must take priority over all other claims on the collateral.

- (27) 'eligible ECAI' means an external credit assessment institution that has been recognised as eligible for regulatory purposes by the national competent authorities;
- (28) 'nominated ECAI' means an eligible ECAI that a particular institution has chosen to make use of for the determination of its regulatory capital requirements;
- (31) 'unsolicited credit assessment' means any credit assessment of an asset, of an off-balance sheet item, or of an entity by an eligible ECAI not commissioned by the entity to which the item refers.

[(33)-(45) Blank]

- (46) For the purposes of the Internal Ratings Based Approach to credit risk minimum capital requirements a 'default' shall be considered to have occurred with regard to a particular obligor (in the case of retail exposures institutions may apply this definition at an obligation level ) when either or both of the two following events has taken place:
  - The institution considers that the obligor is unlikely to pay its credit obligations to the institution in full, without recourse by the institution to actions such as realising security (if held).
  - The obligor is past due more than 90 days on any material credit obligation to the institution. Overdrafts shall be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings. In the case of Retail and PSE exposures the competent authorities of the Member States shall set a number of days past due as specified in Annex D-5, paragraph 42. [Note. See also Article 146(1)]

The elements to be taken as indications of unlikelihood to pay are enumerated in Annex D-5, paragraph 43.

- (47) For the purposes of the Internal Ratings Based Approach to credit risk minimum capital requirements 'loss' shall mean economic loss including material discount effects, and material direct and indirect costs associated with collecting on the instrument in the determination of loss.
- (48) 'PD' shall mean the probability of default of a counterparty over one year.
- (49) 'LGD' shall mean the loss incurred on a facility at default of a counterparty relative to the amount outstanding at default.
- (50) 'Dilution risk' shall mean the possibility that the receivable amount is reduced through cash or non-cash credits to the receivables obligor.
- (51) 'EL' shall mean the expected loss on a facility from a potential default of a counterparty or dilution relative to EAD over one year.

- (52) 'EAD' shall mean the expected gross exposure of a facility upon default of the counterparty.
- (53) 'Publicly traded equity holding' shall mean any equity exposure traded on a recognised exchange.
- (54) 'Foundation Approach' shall mean that institutions use supervisory estimates of LGDs, EADs, and, unless otherwise required by competent authorities, are not required to take into account the effective maturity of its facilities.
- (55) 'Advanced Approach' shall mean that institutions use own estimates of LGDs and/or EADs and are required to take into account the effective maturity of its facilities.

[(56)-(65) Blank]

- (66) 'Credit risk mitigation' means any technique used by an institution to reduce the credit risk associated with an exposure which it continues to hold.
- (67) 'Credit protection' means the protection against credit risk provided by a technique of credit risk mitigation.
- (68) 'Funded credit protection' refers to credit risk mitigation where the mitigation of the credit risk on the exposure of an institution derives from the right of the institution, in the event of the default of the counterparty or on the occurrence of other specified credit events relating to the counterparty, to liquidate, obtain transfer or appropriation of and/or retain certain assets or amounts, or to reduce the amount of the exposure to, or to replace it with, the amount of the difference between the amount of the exposure and the amount of a claim on the institution.
- (69) 'Unfunded credit protection' refers to credit risk mitigation where the mitigation of the credit risk on the exposure of an institution derives from the undertaking of a third party to pay an amount in the event of the default of the borrower or on the occurrence of other specified events.
- (70) 'Repurchase transaction' means any transaction governed by an agreement falling within the definition of 'repurchase agreement' or 'reverse repurchase agreement' as defined in Directive 93/6/EEC (CAD), Article 2 (17) and (18).
- (71) 'Securities or commodities lending or borrowing transaction' means any transaction falling within the definition of 'securities or commodities lending' or 'securities or commodities borrowing' as defined in Directive 93/6/EEC, Article 2 (17) and (18) as amended.
- (72) 'Cash assimilated instrument' means 'a certificate of deposit or other similar instrument issued by the lending institution'
- (73) 'Recognised exchange' shall have the meaning set out in Directive 2000/12, Article 1(27).

[(74)-(80) Blank]

- (81) 'Securitisation' means a transaction or scheme by virtue of which the credit risk associated with a credit risk exposure or pool of credit risk exposures is tranching and
  - (a) payments in the transaction or scheme depend upon the performance of the credit exposure or pool of credit exposures; and

- (b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.
- (82) ‘Traditional Securitisation’ means a securitisation which involves economic transfer of credit exposure(s) to a Special Purpose Entity which issues securities. This must be accomplished by legally isolating the underlying exposure(s) from the originating institution or through sub-participation. Payments to investors are not derived from an obligation of the originating institution.
- (83) ‘Synthetic securitisation’ means a securitisation the tranching in which is achieved by the use of credit derivatives and/or guarantees. The pool of credit exposures is not removed from the originator’s balance sheet.
- (84) ‘Tranche’ means a contractually established segment of the credit risk associated with a credit risk exposure or number of credit risk exposures, a position in which, without taking account of credit protection provided by third parties directly to the holders of positions in the segment, entails a risk of credit loss greater than or less than a position of the same amount in each other such segment, again without taking account of credit protection provided by third parties directly to the holders of positions in the segment.
- (85) ‘Securitisation position’ means an exposure to a securitisation. Where there is an exposure to different tranches in a securitisation, the exposure to each tranche shall be considered a separate securitisation position. The providers of credit protection to securitisation positions will be considered to hold positions in the securitisation.

In the context of a synthetic securitisation the retained exposure of the originating institution to the pool of assets securitised shall be deemed to represent a position or positions in the securitisation.

Securitisation positions include exposures to a securitisation arising from interest rate or currency derivative contracts. [Valuation to be in accordance with valuation rule prescribed under 'Thickness of exposure' paragraph in F7.]

- (86) ‘Originator’ means an entity which, either itself or through related entities, directly or indirectly, was involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the credit risk exposure being securitised; or which purchases a third party’s credit risk exposures onto its balance sheet and then securitises them.
- (87) ‘Sponsor’ means an institution other than an originating institution that establishes and manages an asset-backed commercial paper programme or other securitisation scheme that purchases credit exposures from third party entities.
- (88) ‘Investor in a securitisation’ means an entity, other than an originating or sponsoring institution, having a securitisation position.
- (89) ‘Servicer’ means an entity that manages the underlying credit exposures of a securitisation on a day-to-day basis in terms of collection of principal and interest.
- (90) ‘Credit enhancement’ means contractual arrangement by which the credit quality of a position in a securitisation is improved in relation to what it would be if the enhancement was not provided. Credit enhancement includes the enhancement provided by more junior tranches in the scheme or other types of credit protection.
- (91) Special purpose entity (‘SPE’). A corporation trust or other entity, other than an institution, organised for a narrow and well-defined objective, in this case the

carrying on of a securitisation or securitisations, the activities of which are limited to those appropriate to accomplish [that objective], and the structure of which is intended to isolate the SPE and the credit risk of the originator from each other.

[(91)-(95) Blank]

- (96) 'Trading book'. The trading book of an institution shall consist of all positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any restrictive covenants on their tradability or able to be hedged completely.
- (97) 'Trading intent'. Positions held with trading intent are those held intentionally for short-term resale and/or with the intent of benefiting from actual or expected short-term price movements or to lock in arbitrage profits, and include proprietary positions, positions arising from client servicing (e.g. matched principal broking) and market making.
- (98) A 'trading book hedge' is a position that materially or entirely offsets the component risk elements of another trading book position or a set of positions.
- (99) 'Financial instrument'. A financial instrument is any contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party. Financial instruments include both primary financial instruments or cash instruments, and derivative financial instruments the value of which is derived from the price of an underlying financial instrument or a rate or an index or the price of an underlying other item.
- (100) A 'financial asset' is any asset that is cash, the contractual right to receive cash or another financial asset from another party ; or the contractual right to exchange instruments with another party on potentially favourable terms, or an equity instrument of another party.
- (101) A 'financial liability' is the contractual obligation to deliver cash or another financial asset to another party or to exchange instruments with another party under conditions that are potentially unfavourable.
- (102) An 'equity instrument' is any contract that evidences a residual interest in the assets of a party after deducting all of its liabilities.

## CHAPTER 2 - GENERAL PROVISIONS ON CAPITAL ADEQUACY

### *Article 2*

#### **Capital Adequacy**

Member States shall require that, pursuant to the provisions of this Directive, institutions

- (a) hold at all times own funds which are adequate having regard to the overall risk profile of the institution;
- (b) implement and apply a sound control environment, including appropriate risk management and reporting, and an adequate capital adequacy assessment process; and
- (c) disclose information regarding the scope of application of this Directive, their own funds and capital adequacy, and their risk exposure and assessment;

and that, pursuant to the provisions of this Directive, competent authorities

- (d) review and evaluate the compliance of institutions with the provisions of this Directive; and,
- (e) adopt, as appropriate, relevant measures in relation to the specific risk profile, level of own funds, control environment and capital adequacy assessment process of institutions.

### *Article 3*

#### **Minimum Level of Own Funds**

1. Without prejudice to the obligation of an institution to comply with requirements imposed under the provisions of Title III, Member States shall require institutions to provide own funds which are at all times more than or equal to the sum of the following capital requirements:
  - a. for credit risk, 8 per cent of the total amount of its risk weighted assets calculated in accordance with Title II, Chapter 1 of this Directive;
  - b. for position risk and, insofar as the limits laid down under Directive 2000/12/EC Article 49 are authorised to be exceeded, for large exposures exceeding such limits, the capital requirements determined in accordance with Annex I and VI and, as appropriate, Annex VIII of Directive 93/6/EEC, for their trading book business;
  - c. for settlement and counter-party risk, the capital requirements determined according to Article 102;
  - d. for foreign-exchange risk and for commodities risk for all of their business activities, the capital requirements determined in accordance with Annex III and VII and, as appropriate, Annex VIII of Directive 93/6/EEC;
  - e. for operational risk, the capital requirements determined in accordance with Title II, Chapter 3 of this Directive.

[Subject to the respective of the amount of the capital requirement referred to in (a) to (e) the own-funds requirement for investment firms with limited licence falling under the categories mentioned in Annex H-1 shall never be less than the amount prescribed in Annex IV of Directive 93/6/EEC.]

Note: the above paragraph represents the text that would be introduced to implement the 'potential way forward' discussed in Section 14 of the CP3 Explanatory Document.

2. Notwithstanding paragraph 1, Member States may allow institutions to determine the capital requirements for position, settlement and counterparty risk according to capital requirements for credit risk determined in accordance with paragraph 1(a) above rather than in accordance with paragraphs (1)(b) and (c) above where the trading book business of the institution is determined, in accordance with the provisions of Annex A, to be small both in absolute terms and as a proportion of the total business of the institution.

*Article 4*

**Frequency of reporting**

Placeholder

*[Article 5*

**Prescribed methodologies**

1. In assessing the adequacy of their own funds having regard to their overall risk profile, institutions must assess the own funds for each of the risks covered by Article 3 in an amount which is not less than the minimum requirements imposed by the provisions of Title II in respect of each of those risks. For these purposes, such risks do not include risks associated with the monitoring, measurement, management and control of the risks covered by Article 3.
2. In carrying out their responsibilities under Title III competent authorities shall not interpret the concept of capital adequacy in a manner inconsistent with the previous paragraph. ]

Concerning Article 5, see discussion in Section 3 of the CP3 Explanatory Document

[Articles 6-15 Blank]

## **Chapter 3 – Scope of Consolidation**

### *Article 16*

#### **Individual capital requirements**

1. The capital requirements prescribed in this Directive shall apply to all institutions on an individual basis in accordance with the methods laid down in this Directive.

### *Article 17*

#### **Consolidated capital requirements**

1. Without prejudice to the provisions contained in Article 16 of this Directive, the parent undertaking institution within a group of institutions shall be subject to capital requirements on a consolidated basis in accordance with the methods laid down in this Directive, in Directive 2000/12/EC and in Directive 86/635/EEC.
2. Without prejudice to the provisions contained in Article 16 of this Directive, institutions whose parent undertaking is a financial holding company shall be subject to capital requirements applied on the basis of the consolidated financial situation of that financial holding company in accordance with the methods laid down in this Directive, in Directive 2000/12/EC and in Directive 86/635/EEC.

### *Article 18*

#### **Sub-consolidated capital requirements**

1. Without prejudice to the provisions contained in Article 16 of this Directive, the parent undertaking institution within any subgroup of institutions shall be subject to capital requirements on a sub-consolidated basis in accordance with the methods laid down in this Directive, in Directive 2000/12/EC and in Directive 86/635/EEC when not all institutions within the sub-group are authorised and supervised by the competent authorities of the same Member State.
2. Without prejudice to the provisions contained in Article 16 of the present Directive, competent authorities may impose the application of capital requirements on a sub-consolidated basis to the parent undertaking institution within any sub-group of institutions when such requirements are considered to be relevant for the purposes of supervision.
3. In the cases in which paragraph 1 of this Article applies, as an alternative to the application of capital requirements on a sub-consolidated basis to the institution which is the parent undertaking within a sub-group of institutions, Member States competent authorities may apply capital requirements to such an institution on an individual basis in accordance with provisions laid down in this Directive or in Directive 2000/12/EC except that the book value of any holdings, subordinated claims, and instruments referred to in Article 35 of Directive 2000/12/EC held in respect of institutions, financial institutions, asset management companies and ancillary services undertakings which would

otherwise be consolidated in accordance with the provisions of Articles 52 to 56 of Directive 2000/12/EC is deducted in full from the capital of that institution.

4. Institutions to which paragraph 3 of this Article applies must deduct, for the calculation of their individual capital requirements referred to in that same paragraph, the items referred to in points 12 to 16 of Article 34(2) of Directive 2000/12/EC which are held in institutions, financial institutions, asset management companies, and ancillary services undertakings, as well as in insurance undertaking, reinsurance undertakings, and insurance holding companies, except for the following:
  - where shares in another institution, financial institution, asset management company and ancillary services undertakings, as well as insurance or reinsurance undertaking or insurance holding company are held temporarily for the purposes of a financial assistance operation designed to reorganise and save that entity, the competent authority may waive the provisions on deductions referred to in points 12 to 16 of Article 34(2) of Directive 2000/12/EC.
  - as an alternative to the deduction of the items referred to in points 15 and 16 of Article 34(2) of Directive 2000/12/EC, Member States may allow their institutions to apply *mutatis mutandis* methods 1, 2, or 3 of Annex I to Directive 2002/87/EC. Method 1 (Accounting consolidation) shall only be applied if the competent authority is confident about the level of integrated management and internal control regarding the entities which would be included in the scope of consolidation. The method chosen shall be applied in a consistent manner over time.

#### *Article 19*

#### **Ancillary services undertakings**

When capital requirements apply on a consolidated or sub-consolidated basis in accordance with Articles 17 or 18 of this Directive, ancillary services undertakings shall be included in the consolidation or in the sub-consolidation.

#### *Article 20*

#### **Individual capital requirements for parent undertaking institutions within a sub-group of institutions or within a group of institutions**

1. Competent authorities may provide that, for the calculation of individual capital requirements, the parent undertaking institution within a sub-group of institutions subject to capital requirements on a sub-consolidated basis need not deduct from their own funds and in accordance with the methods laid down in Articles 34 to 39 of Directive 2000/12/EC their holdings in institutions, financial institutions, asset management companies and ancillary services undertakings which are included in the sub-consolidation.

2. Competent authorities may provide that, for the calculation of individual capital requirements, the parent undertaking institution within a group subject to capital requirements on a consolidated basis need not deduct from their own funds and in accordance with the methods laid down in Articles 34 to 39 of Directive 2000/12/EC their holdings in institutions, financial institutions, asset management companies and ancillary services undertakings which are included in the consolidation.

### *Article 21*

#### **Exemption from consolidated capital requirements for investment firms groups**

1. The competent authorities may waive, on a case by case basis, the application of capital requirements on a consolidated basis provided that:
  - (a) all institutions within the group of institutions are investment firms;
  - (b) all institutions within the group of institutions use the definition of own funds given in paragraph 9 of Annex V of Directive 93/6/EEC;
  - (c) all institutions within the group of institutions are authorised and supervised by the competent authorities of the same Member State;
  - (d) no investment firm within the group of institutions is authorised to provide the services listed in point 2 and in point 4 of Section A of the Annex of Directive 93/22/EEC when provided on a firm commitment basis;
  - (e) no investment firm within the group of institutions holds clients' money or securities.
  - (f) the funds of the group of institutions comply with the capital requirements applied on a consolidated basis to the parent undertaking within the group;
  - (g) any financial holding company within the group of institutions holds as much capital as the full book value of any holdings, subordinated claims, and instruments referred to in Article 35 of Directive 2000/12/EC in investment firms, financial institutions and ancillary services undertakings in accordance with Articles 52 to 56 of Directive 2000/12/EC;
  - (h) financial institutions and ancillary services undertakings hold letter of credits for an amount equal to or greater than the capital required to fulfil the capital requirements as provided for in paragraph 1 of Article 16 of this Directive.
2. In cases where paragraph 1 of this Article applies, each institution within the group of institutions has in place systems to monitor and control the sources of capital and funding of all other financial holding company, financial institutions and ancillary services undertakings within the group.

[Articles 22-24 Blank]

# **Title II – Minimum Capital Requirements**

## **Chapter 1 – Credit Risk**

### *Article 25*

#### **Methodology to be adopted**

To determine the total amount of risk weighted assets for the purposes of calculating the minimum amount of own funds to be provided for credit risk under Article 3, institutions shall use the methodology prescribed in Section 1 of this Chapter, except insofar as they are permitted by competent authorities to use the methodologies prescribed in Section 2. Where an institution is permitted to use the methodologies prescribed in Section 2, it shall not use the methodology prescribed in Section 1 except insofar as permitted by the provisions of Section 2.

### **SECTION I – STANDARDISED APPROACH**

#### **Subsection 1 - Determination of risk weighted assets**

### *Article 26*

#### **Exposure values for asset and off-balance sheet items**

1. The valuation of asset and off-balance-sheet items shall be effected according to Directive 86/635/EEC.
2. For any asset item its balance-sheet value and for any off-balance sheet item its relevant value determined according to Annex C-3 shall be taken as the exposure value of the item.
3. Without any prejudice to the provisions of paragraph 1 and 2, if an eligible funded credit risk protection exists for an item according to the provisions of Section 3 of this Chapter and that effect of that protection is calculated using the Financial Collateral Comprehensive method, the exposure value applicable to that item shall be modified according to the provision of that Section.

### *Article 27*

#### **Classes of items**

1. With the exception of items representing securitisation positions as described in Section IV of this Chapter, every asset and off-balance sheet items shall be assigned to one of the following classes:
  - (i) items constituting claims on central governments and central banks;
  - (ii) items constituting claims on regional governments and local authorities;

- (iii) items constituting claims on administrative bodies and non-commercial undertakings;
- (iv) items constituting claims on multilateral development banks;
- (v) items constituting claims on international organisations;
- (vi) items constituting claims on institutions;
- (vii) items constituting claims on corporates;
- (viii) items constituting claims of the regulatory retail portfolio;
- (ix) items constituting claims fully secured on real property;
- (x) past due items;
- (xi) items constituting covered bonds
- (xii) items constituting securitised exposures
- (xiii) items constitution securitisation positions
- (xiv) items belonging to regulatory high-risk categories
- (xv) other items;

2. To be included in the regulatory retail portfolio, claims must meet the following criteria:

- The exposure must be either to an individual person or persons, or to a small business;
- The exposure must take the form of any of the following: revolving credits and lines of credit such as credit cards and overdrafts, personal term loans and leases, instalment loans, mortgage loans, auto loans and leases, student and educational loans, personal finance and small business facilities and commitments;
- Competent authorities must be satisfied that the exposures included in the regulatory retail portfolio are such that the portfolio is sufficiently granular to substantially reduce its risks.
- The aggregated claim to any group of counterparties that can be considered as a single beneficiary, including any past due claim, must not exceed an absolute threshold of EUR 1 million or such other amount reflecting the effects of inflation as may be prescribed in Annex C.

Securities are not eligible for the regulatory retail portfolio.

## *Article 28*

### **Risk weights**

1. As specified in Annex C-1, asset and off-balance sheet items belonging to one of the classes (i) to (xiii) specified in Article 27 are, unless deducted from own funds, risk weighted by means of:
  - risk weights that can be 0%, 20%, 50%, 100% and 150% depending on their credit quality;
  - or
  - fixed risk weights.
2. For the purposes of the first indent of the previous paragraph, credit quality can be determined:
  - from the credit assessments of nominated External Credit Assessment Institutions (ECAIs) by the use of a credit quality assessment scale with 6 steps;
  - from the credit assessments of recognised Export Credit Agencies (ECAs) or from appropriate consensus risk scores of ECAs participating in appropriate arrangements " by the use of a credit quality scale with 7 steps as shown in Annex C-1.
3. Risk weights for items representing securitisation positions shall be determined in accordance with the provisions of Section IV of this Chapter.

## *Article 29*

### **Determination of risk-weighted asset amounts**

1. Any asset and off-balance sheet item exposure value shall be multiplied by the applicable risk weight as determined by the provision of Article 28 and Annex C-1 to produce its risk weighted asset amount.
2. Notwithstanding the provisions of paragraph 1, if an eligible unfunded credit risk protection exists for an item according to the provisions of Section III of this Chapter or an eligible funded credit protection the effect of which is calculated using the Financial Collateral Simple method or using a guarantee treatment, the percentage risk weight applicable to that item may be determined according to the provisions of that Section.

### **Subsection 2 – ECAIs credit assessments**

### *Article 30*

#### **Use of eligible ECAIs credit assessments for the determination of applicable risk weights**

1. An institution may nominate one or more eligible ECAIs to be used for the determination of risk weights applicable to asset and off-balance sheet items.
2. An institution which decides to use the credit assessments produced by an eligible ECAI for a certain class of items must use those credit assessments consistently for all items belonging to that class.
3. An institution which decides to use the credit assessments produced by an eligible ECAI must use them in a continuous and consistent way over time.
4. An institution can only use ECAIs credit assessments that take into account all amounts both in principal and in interest owed to it.

### *Article 31*

#### **Solicited and unsolicited credit assessments**

1. Institutions shall use solicited credit assessments produced by eligible ECAIs. Competent authorities may allow institutions to use the unsolicited credit assessments produced by an eligible ECAI.
2. Competent authorities shall not permit institutions to use the unsolicited credit assessments produced by an eligible ECAI when the ECAI uses them to obtain inappropriate advantages in the relationship with assessed parties.
3. If competent authorities identify that unsolicited credit assessments produced by an ECAI are used to obtain inappropriate advantages in the relationship with assessed parties, competent authorities must:
  - (a) stop permitting institutions to use unsolicited credit assessments produced by that ECAI;
  - (b) evaluate whether to continue recognising the eligibility of that ECAI.

### *Article 32*

#### **Multiple credit assessments**

1. If only one credit assessment is available from a nominated ECAI for a rated item, that credit assessment shall be used to determine the risk weight for that item.
2. If two credit assessments are available from nominated ECAIs and the two correspond to different risk weights for a rated item, the higher risk weight shall be applied.

3. If more than two credit assessments are available from nominated ECAIs for a rated item, the two assessments generating the two lowest risk weights shall be referred to. If the two lowest risk weights are different, the higher risk weight shall be applied. If the two lowest risk weights are the same, that risk weight shall be applied.

### *Article 33*

#### **Issuer and issue credit assessment**

1. Without any prejudice to the provisions of Article 32, in the case where a credit assessment exists for a specific issuing program or facility to which the item constituting the claim belongs, this credit assessment shall be used to determine the risk weight applicable to that item.
2. Without any prejudice to the provisions of Article 32, in the case no directly applicable credit assessment exists for a certain item, but a credit assessment exists for a specific issuing program or facility to which the item constituting the claim does not belong, then:
  - if the use of the existing credit assessment would determine for the unrated item a risk weight which is lower than that otherwise applicable, the credit assessment on the specific issuing program or facility will only be used to determine the risk weight of the item if the item ranks *pari passu* or senior in all respects to the specific issuing program or facility;
  - if the use of the existing credit assessment would determine for the unrated item a risk weight which is higher than that otherwise applicable, the credit assessment on the specific issuing program or facility will be used to determine the risk weight of the unrated item.
3. Without any prejudice to the provisions of Article 32, in the case that a general credit assessment exists for the issuer of a specific issuing program or facility to which the item constituting the claim belongs, and for which no directly applicable credit assessment exists:
  - if the use of the existing issuer credit assessment would determine the application to the unrated facility of a risk weight which is lower than that otherwise applicable, the credit assessment on the issuer will only be used to determine the risk weight of the facility if the item ranks *pari passu* or senior in all respects to senior unsecured claims of that issuer.
  - if the use of the existing issuer credit assessment would determine the application to the unrated facility of a risk weight which is higher than that otherwise applicable, the credit assessment on the issuer of the item will be used to determine the risk weight of the unrated facility.
4. The provisions of paragraph 1, 2 and 3 of this Article do not prevent competent authorities from exercising their discretion regarding the treatment of all claims on institutions in accordance with one of the two methodologies described in paragraphs 6.3 and 6.4 of Annex C-1.

5. The provisions of paragraph 1, 2 and 3 of this Article are not to prevent the application of the provisions on covered bonds contained in paragraph 13 of Annex C-1.
6. Credit assessments for issuers within a corporate group cannot be used as credit assessment of another issuer within the same corporate group.

#### *Article 34*

##### **Long-term and short-term credit assessments**

1. Short-term credit assessments may only be used for short-term asset and off-balance sheet items constituting claims on institutions and corporates.
2. Any short-term credit assessment shall only apply to the item the short-term credit assessment refers to, and it shall not be used to derive risk weights for any other item.
3. Notwithstanding paragraph 2, if a short-term rated facility receives a 150% risk weight, then all unrated unsecured claims on that obligor whether short-term or long-term shall also receive a 150% risk weight.
4. Notwithstanding paragraph 2, if a short-term rated facility attracts a 50% risk-weight, no unrated short-term claim shall attract a risk weight lower than 100%.
5. When a short-term credit assessment is to be used, the nominated ECAI producing the short-term credit assessment needs to meet all the eligibility criteria for being recognised as an eligible ECAI, as specified in Article 37 and 38, in terms of its short-term credit assessments.

#### *Article 35*

##### **Domestic and foreign currency items**

1. A credit assessment that refers to an item denominated in the obligor's domestic currency cannot be used to derive a risk weight for another claim on that same obligor that is denominated in a foreign currency.
2. Notwithstanding paragraph 1, when an exposure arises through a bank's sub-participation in a loan that has been extended by a Multilateral Development Bank whose preferred creditor status is recognised in the market and transferred to the sub-participants, competent authorities may allow the credit assessment on the obligor's domestic currency item to be used for risk weighting purposes.

### **Subsection 3 – Recognition of external credit assessment institutions and mapping of external credit assessment institutions credit assessments**

#### *Article 36*

##### **Recognition of eligible external credit assessment institutions**

1. The credit assessment used to determine the risk weight of an item must be awarded by an external credit assessment institution that has been recognised as eligible by the competent authorities.
2. An external credit assessment institution may be recognised as eligible by the competent authorities for one or more of the item classes specified in Article 27.
3. Competent authorities shall ensure that the list of recognised external credit assessment institutions shall be publicly available.
4. Competent authorities shall make the process for recognising external credit assessment institutions public.

#### *Article 37*

##### **Minimum principles for external credit assessment institutions methodology**

Competent authorities will recognise an external credit assessment institution as eligible only if they are satisfied with the way in which the methodology followed by that external credit assessment institution in the formulation of its credit assessments complies with the following principles:

1. Objectivity
2. Independence
3. Ongoing review
4. Transparency and disclosure

#### *Article 38*

##### **Minimum principles for external credit assessment institutions credit assessments**

Competent authorities will recognise an external credit assessment institution as eligible only if they are satisfied of the way in which the external credit assessment institution's credit assessments comply with the following principles:

1. Credibility and market acceptance
2. Transparency and disclosure

#### *Article 39*

##### **Optional mutual recognition of external credit assessment institutions by Member States**

When an external credit assessment institution has been recognised as eligible by the competent authorities of a Member State, the competent authorities of other Member

States may recognise as eligible that external credit assessment institution as eligible on that basis.

#### *Article 40*

#### **Mapping**

1. Competent authorities are responsible for mapping external credit assessment institutions credit assessments into the steps of the credit quality assessment scale specified in Article 28, paragraph 2, first indent.
2. The mapping process shall be objective and consistent and it shall take account of the full spectrum of steps of the credit quality assessment scale.
3. In order to differentiate between the relative degrees of risk expressed by each credit assessment, competent authorities shall consider quantitative and qualitative factors as specified in Annex C-2.
4. When the competent authorities of a Member State have established the mapping of an external credit assessment institution's credit assessments, the competent authorities of other Member States may recognise that mapping.

[Articles 41-45 Blank]

## SECTION II – INTERNAL RATINGS BASED APPROACH

### *Article 46*

#### **Use of the IRB Approach**

1. The competent authorities may, subject to the conditions set out in this Section, allow institutions to calculate their minimum capital requirements for credit risk using the Internal Ratings Based Approach (IRB Approach) instead of the methods described in Section I of this Chapter. Explicit permission by the competent authorities of the use of the IRB Approach for supervisory capital purposes shall be required in the case of each institution.
2. Permission shall only be given if the competent authority is satisfied that the institutions risk-management system is conceptually sound and implemented with integrity and that, in particular, the following qualitative standards are met:
  - Internal ratings and default and loss estimates play an essential role in the credit approval, risk management, internal capital allocations, and corporate governance functions of the institution. Where institutions use different estimates for minimum regulatory capital and internal purposes it shall be documented and their reasonableness shall be demonstrated to the competent authority.
  - The institution has a credit risk control unit that is independent from the personal and management functions responsible for originating exposures and that reports directly to senior management. The unit shall be responsible for the design or selection, implementation, operation and performance of the institution's internal rating system and further areas set out in Annex D-5, paragraph 39. 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 trading limits;
  - Institutions using the IRB Approach shall collect and store all relevant data to provide effective support to its internal credit risk measurement and management process. At a minimum, institutions shall store the data enumerated in Annex D-5, paragraphs 31-33. Institutions shall also collect and store data on aspects of their internal ratings as required under Title IV.
  - The institution meets the applicable minimum requirements in Annex D-5 at the outset and on an ongoing basis.
3. If institutions use the Foundation Approach the rules set out in this Section shall be read in conjunction with and subject to the rules set out in Section III of this Chapter.
4. Where an institution ceases to be in compliance with the requirements laid down in this Section, the institution shall present a plan for a timely return to compliance to the competent authority or the institution shall demonstrate that the effect of non-compliance is immaterial.

## Article 47

### Asset Classes

1. Exposures shall be categorised into seven asset classes - corporates, institutions, sovereigns, retail, equity, securitisation positions, and fixed assets - based on the exposure definitions set out in this Article. Exposures shall be categorised as corporate exposures if they do not fall within any of the other specified exposure classes.:
2. 'Corporate exposure' shall mean a debt obligation of a corporation, partnership, or proprietorship and off-balance sheet exposures to such an entity.
3. 'Sovereign exposure' shall mean a debt obligation of, and off-balance sheet exposures to a sovereign, its central bank, regional governments and local authorities claims on which are treated as claims on sovereigns under the Standardised Approach, Multilateral Development Banks (MDB) and International Organisations claims on which receive a 0% risk weight under the Standardised Approach.
4. 'Exposure to an institution' shall mean a debt obligation of, and off-balance sheet exposures to an institution, regional governments and local authorities claims on which are not treated as claims on sovereigns under the Standardised Approach, PSEs claims on which are treated as claims on institutions under the Standardised Approach, and Multilateral Development Banks (MDB) claims on which do not receive a 0% risk weight under the Standardised Approach.
5. 'Retail exposure'. An exposure shall be considered 'retail' if it meets the criteria (a) and (b) below:
  - (a) Nature of borrower or low value of individual exposures
    - The exposure is to an individual. Competent authorities may establish exposure thresholds for the retail portfolio;
    - or
    - The exposure is a residential mortgage loan – provided that the exposure is to an individual and secured by a residential structure with one living unit or a small number of living units (with the limit set at discretion of Competent authorities) or a small number of living units in a condominium or co-operative residential property.

Exposures to small businesses are eligible for retail treatment provided the institution meets the requirements of the SME use test as defined in Annex D-1 and the total exposure of the institution to a small business borrower on a consolidated basis is less than € 1 million or such other amount reflecting the effects of inflation as may be prescribed in Annex D. Small business exposures extended through or guaranteed by an individual and exposures to individuals for business use are also eligible for retail treatment provided they meet these requirements.

(b) Large number of exposures

The exposure shall be one of a large pool of exposures, which are managed on a pooled basis. Competent authorities may set a minimum number of exposures within a pool for exposures in that pool to be treated as retail.

6. 'Equity' exposure. An instrument shall be categorised as 'equity' exposure if it meets all the following requirements:

- It is irredeemable in the sense that the return of invested funds can be achieved only by the sale of the investment or sale of the rights to the investment or by the liquidation of the issuer;
- It does not embody an obligation on the part of the issuer; and
- It conveys a residual claim on the assets or income of the issuer.

Any of the instruments enumerated in Annex D-1, paragraph 10 shall be categorised as an equity exposure.

7. Within the retail asset class, institutions shall identify separately three sub-asset classes: (a) exposures secured by residential mortgages as defined above, (b) qualifying revolving retail exposures, as defined in Annex D-1 and (c) all other retail exposures.

8. Within the corporate asset class, institutions shall identify separately five sub-classes of specialised lending (project finance, object finance, commodities finance, income producing real estate and high-volatility commercial real estate as defined in Annex D-1). Such lending possesses all the following characteristics, either in legal form or by economic substance:

- the exposure is to an entity which was created specifically to finance and/or operate physical assets;
- the borrowing entity has little or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed;
- the terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generate; and
- as a result of the preceding factors, the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of a broader commercial enterprise.

9. Institutions shall demonstrate to competent authorities that their methodology for assigning exposures to different asset classes and sub-asset classes is appropriate and consistent over time.

## *Article 48*

### **Requirements for internal ratings systems**

1. Rating and risk estimation systems and processes shall provide for a meaningful assessment of borrower and transaction characteristics, a meaningful differentiation of risk and accurate and consistent quantitative estimates of risk. Furthermore, these systems and processes shall be consistent with internal use of these estimates.
2. The requirements laid down in this Section shall apply to all asset classes unless noted otherwise. The standards related to the process of assigning exposures to borrower or facility grades (and the related oversight, validation, etc.) apply equally to the process of assigning retail exposures and eligible purchased receivables to pools of homogenous exposures, unless noted otherwise.

## *Article 49*

### **Roll out of Internal Ratings Based Approach**

1. Institutions shall adopt the IRB Approach across its whole group. With the approval of the competent authorities institutions can adopt a roll-out plan as specified in Annex D-1 for a phased roll-out subject to the requirements in this Article. For the retail asset class this requirement applies on a basis of the three sub-asset classes. During the roll-out period no capital relief shall be granted for intra-group transactions which are designed to reduce a group's aggregate capital charge by transferring credit risk among entities on the Standardised Approach, Foundation and Advanced IRB Approaches.
2. Institutions may remain on the Slotting Criteria Approach for one or more of its SL product lines, and move to the Foundation or Advanced IRB Approach for other product lines within the corporate asset class, subject to approval of the competent authorities.
3. Institutions moving to the IRB Approach for any of the other asset classes shall at the same time apply the treatment of equity exposures as specified in Article 53.
4. This Section applies for the calculation of minimum capital requirements for all exposures in respect of which an institution adopts the IRB Approach other than securitisation positions. For securitisation positions, risk weighted assets shall be calculated in accordance with Section IV of this Chapter.
5. Exposures in non-significant business units as well as asset classes that are immaterial in terms of size and perceived risk profile can be exempt from the IRB treatment, subject to the approval of the competent authorities. Exposures excluded from the IRB treatment shall be risk weighted according to the rules prescribed in Section I of this Chapter, with the national competent authority

determining whether an institution should hold more capital under the supervisory review process for such positions.

6. A voluntary return to the Standardised or Foundation Approach shall be permitted only in extraordinary circumstances and shall be approved by the competent authority.

#### *Article 50*

##### **Combined use of methodologies**

Institutions applying the IRB Approach for other asset classes can apply the Standardised Approach permanently for exposures to institutions and sovereign exposures, if they have a limited number of counterparties in these asset classes, subject to approval of the competent authorities.

#### *Article 51*

##### **Exposures to corporates, institutions and sovereigns**

1. Institutions shall estimate PDs from long run averages of one-year realised default rates for borrowers in a grade. The PD estimates shall meet the minimum requirements laid down in Annex D-5, Section 5.
2. For purchased corporate receivables which meet the criteria as set out in Annex D-1, paragraph 16 and hold permission from the competent authority to treat them on a pooled basis, institutions shall estimate EL of the pool(s). The EL estimates shall meet the minimum requirements laid down in Annex D-5, Section 5.
3. Institutions shall estimate EL for dilution risk of purchased corporate receivables. Depending on which Approach an institution applies estimates shall be derived on an individual receivables basis or on a pooled basis. The EL estimates shall meet the minimum requirements laid down in Annex D-5, Section 5. If institutions can demonstrate to the competent authorities that dilution risk is immaterial, it need not be recognised.
4. Institutions applying the Foundation IRB Approach shall use supervisory estimates of LGD and EAD, and recognise maturity as laid down in Annex D-3, paragraph 9. If required by competent authorities institutions shall recognise effective maturity as laid down in Annex D-3, paragraph 10.
5. Institutions applying the Advanced IRB Approach shall estimate a long run average LGD for each facility, estimate internal credit conversion factors (CCF) across different product types, and recognise effective maturity. LGDs shall be measured as the loss given default as a percentage of exposure at default. The LGD and CCF estimates shall meet the minimum requirements laid down in Annex D-5, Section 5.

6. The risk weighted asset amounts for exposures to corporates, institutions and sovereigns shall be calculated according to the methods laid down in Annex D-2, paragraph 1.
7. In the Foundation Approach, in the case of unfunded credit protection or funded protection to which a guarantee treatment is applied, risk weighted asset amounts shall be calculated in accordance with the provisions of Section III.
8. The risk weighted asset amounts for dilution risk of purchased corporate receivables shall be calculated according to the methods laid down in Annex D-2, paragraph 1.
9. For SL exposures the same rules as for corporate exposures shall apply. If an institution cannot demonstrate to the satisfaction of its competent authorities that their PD estimates for SL exposures meet the minimum requirements laid down in Annex D-5, Section 5 it shall use the Slotting Criteria Approach. Under the Slotting Criteria Approach institutions shall map their internal rating grades of these exposures to the supervisory risk weight categories laid down in Annex D-2, paragraph 2 - 3, based upon the slotting criteria provided in Annex D-7. Institutions shall demonstrate that the mapping process has resulted in an alignment of grades which is consistent with the preponderance of the characteristics in the respective supervisory risk weight category.

## *Article 52*

### **Retail exposures**

1. Institutions shall estimate PDs from long-run averages of one year default rates for exposures by a pool, long run average LGDs for each facility, and internal credit conversion factors (CFF) across different product types. The estimates shall meet the minimum requirements laid down in Annex D-5, Section 5. The risk parameters shall be estimated for each pool of retail exposures separately. Where an institution purchases retail receivables it shall also comply with the minimum operational requirements as laid down in Annex D-5, paragraphs 85-93.
2. Institutions shall estimate EL for dilution risk of purchased retail receivables pools subject to the minimum operational requirements as laid down in Annex D-5, paragraphs 85-93. If institutions can demonstrate to the competent authorities that dilution risk is immaterial, it need not be recognised.
3. The risk weighted asset amounts for retail exposures shall be calculated for every retail sub-asset class separately according to the methods laid down in Annex D-2, paragraphs 4-6. For purchased receivables belonging unambiguously to one of the sub-asset classes, the risk-weight functions for this sub-asset class shall apply. For hybrid pools containing mixtures of sub-asset classes where purchasing institutions cannot separate the exposures by sub-asset class, the risk weight function producing the highest capital requirements for those exposures shall apply.

4. The risk weighted asset amounts for dilution risk for purchased retail receivables shall be calculated according to the methods laid down in Annex D-2, paragraph 1.

### *Article 53*

#### **Equity exposures**

5. EAD for equity exposures shall be determined as laid down in Annex D-4, paragraph 15.
6. Risk weighted asset amounts for equity exposures shall be calculated using one of the following approaches subject to approval of the competent authorities:
  - a. The simple risk weight approach
  - b. The internal model approach subject to the minimum requirements laid down in Annex D-5, paragraphs 102-112
  - c. The PD/LGD approach

Subject to approval of the competent authorities, an institution can employ different approaches to different portfolios where the institution itself uses different approaches internally. The competent authorities can require the use of any of these approaches based on the individual circumstances of an institution. Where an institution is permitted to use different approaches, the institution shall demonstrate to the competent authorities that the choice is made consistently and is not determined by regulatory arbitrage considerations.

7. Under the PD/LGD Approach institutions shall estimate PDs from long run averages of one-year realised default rates for borrowers in a grade PDs. The PD estimates shall meet the minimum requirements laid down in Annex D-5, Section 5 Institutions shall rely on supervisory estimates of LGD and use the maturity adjustment as laid down in Annex D-3, paragraph 23. The risk weighted asset amounts shall be calculated according to the methods laid down in Annex D-2, paragraph 1.

In the case of unfunded credit protection or funded protection to which a guarantee treatment is applied, risk weighted asset amounts shall be calculated in accordance with the provisions of Section III.

Under the Simple Risk Weight Approach, institutions shall use for the calculation of risk weighted assets the methods as laid down in Annex D-2, paragraphs 7-8 and 15. In the case of unfunded credit protection or funded protection to which a guarantee treatment is applied, risk weighted asset amounts shall be calculated in accordance with the provisions of Section III.

Under the Internal Models Approach, institutions shall use for the calculation of risk weighted asset amounts the methods as laid down in Annex D-2, paragraphs 13-14. [

*Article 54*

**Securitised exposures and securitisation Positions**

Risk weighted asset amounts for items which are either securitised exposures or securitisation positions shall be calculated in accordance with the provisions of Section IV.

*Article 55*

**Fixed Assets**

Risk weighted assets amounts for fixed assets should be calculated in accordance with the method laid down in Annex D-2 paragraph 16.

[Articles 56-65 Blank]

## **SECTION III – CREDIT RISK MITIGATION UNDER THE STANDARDISED APPROACH AND THE IRB FOUNDATION APPROACH**

### *Article 66*

#### **Scope**

The provisions of this Section apply to credit risk mitigation in relation to

- (a) exposures the capital requirements in relation to which are determined under the Standardised Approach; and
- (b) exposures the capital requirements in relation to which are determined under the IRB Foundation Approach, other than items the capital requirements in respect of which are determined under [the Specialised Lending Slotting Criteria Approach].

### *Article 67*

#### **Central Principle**

Credit risk mitigation may be recognised by competent authorities and regulatory capital relief given where reduction in the level of credit risk on the exposure as a result of the credit risk mitigation is sufficiently certain. The minimum conditions for such certainty are set out in this Section.

The benefits of such recognition will be limited to that element of the exposure which is deemed, in accordance with the rules for valuation of the exposure and the credit protection set out in this Directive, to be covered by the credit protection. The capital charge for any uncovered element will be determined on the basis of the credit risk weight of the underlying exposure determined according to the credit risk approach being used to calculate the regulatory capital requirements of the lending institution in relation to exposures of the relevant category.

No exposure in respect of which credit risk mitigation is obtained will receive a higher credit risk capital requirement than an otherwise identical claim in respect of which there is no credit risk mitigation.

### *Article 68*

#### **Regulatory Recognition**

In order for credit risk mitigation to satisfy the requirement of certainty contained in Article 1, the following requirements must be complied with.

#### *1. Eligibility*

##### **Funded protection**

In the case of funded credit protection, to be eligible for recognition the assets relied upon by the institution for protection must be sufficiently liquid and their value over time sufficiently stable to provide appropriate certainty as to the (level of) credit protection achieved, having regard to the credit risk approach being used to calculate the regulatory

capital requirements of the lending institution and to the degree of capital relief allowed. The types of assets which meet these criteria are set out in Annex E-1.

### **Unfunded protection**

In the case of unfunded protection, to be eligible for recognition the party giving the undertaking must be sufficiently creditworthy, to provide appropriate certainty as to the (level of) credit protection achieved (including appropriate certainty in relation to likelihood of payment under the credit protection agreement in the event of default of the counterparty or on the occurrence of other specified credit events), having regard to the credit risk approach being used to calculate the regulatory capital requirements of the lending institution and to the degree of capital relief allowed. The types of protection providers which meet these criteria are set out in Annex E-1.

Only those types of credit derivatives set out in Annex E-1 are eligible for recognition.

## ***2. Minimum requirements***

### **(a) Legal certainty**

In accordance with the requirements set out in Annex E-2, the mechanism used to provide the credit protection together with the actions and steps taken and procedures and policies implemented by the lending institution must be such as to result in credit protection arrangements which are legally robust and effective and enforceable in all relevant jurisdictions.

Without prejudice to the foregoing, in respect of funded protection, the legal mechanism by which protection is given must ensure that the lender has the right to liquidate or retain the assets from which the protection derives in a timely manner in the event of the default, insolvency or bankruptcy (or otherwise-defined credit event set out in the transaction documentation) of the obligor and where applicable of the custodian holding the collateral.

### **(b) Operational requirements**

In accordance with the requirements set out in Annex E-2, the lending institution must take all appropriate steps to ensure the effectiveness of the credit protection arrangement and to address related risks.

### **(c) Further requirements**

#### ***Funded protection***

In order for capital relief to be given, the degree of correlation between the value of the assets relied upon for protection and the credit quality of the borrower must not be of an undue level as prescribed in Annex E-2.

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

In order for capital relief to be given, the nature of the undertaking must be such as to provide appropriate certainty of protection as set out in Annex E-2.

## ***Article 69***

### **Calculation of the effects of CRM**

Regulatory capital relief may be given in respect of an exposure having regard to the degree of credit risk mitigation achieved.

### ***Valuation***

In accordance with the detailed rules set out in Annex E-3, in considering the degree of credit risk mitigation achieved the realisable value and potential changes in such value of any asset or amount lent or transferred or relied upon for credit protection purposes shall be taken into account.

### ***Double counting***

The effects of credit risk mitigation will not be double counted. Therefore, no additional supervisory recognition of credit risk mitigation for regulatory capital purposes may be granted on exposures in respect of which such credit risk mitigation is reflected in the capital charge to be imposed without taking into account the provisions of this Section.

### ***Maturity mismatch***

A maturity mismatch occurs when the residual maturity of the credit risk mitigation is less than that of the underlying exposure. The maturity of both the underlying exposure and the credit protection shall be gauged conservatively subject to the terms of Annex E-4. Maturity mismatched credit risk mitigation may be taken into account in calculating regulatory capital requirements subject to the conditions set out in Annex E-4 and in accordance with the formula for adjustment of the capital relief set out there.

### ***The capital treatment***

The capital treatment that may be applied where credit risk mitigation is recognised in accordance with this Section is set out at Annex E-3, E-5 and E-6.

### ***Compliance with Title IV requirements***

Placeholder for text making the availability of capital relief subject to compliance with the requirements of Title IV.
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## *Article 70*

### **Monitoring of Credit Exposures**

Notwithstanding the existence of credit risk mitigation techniques that have attracted regulatory capital relief, 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 competent authorities.

[Articles 71-80 Blank]

## SECTION IV – ASSET SECURITISATION

### *Article 81*

#### **Approach to be used**

Where an institution uses the IRB Approach for the exposure class of which the exposures being securitised are part, then it shall use the IRB Approach in relation to the securitisation of the assets. In all other cases it shall use the Standardised Approach, subject to the exception that where there is no specific IRB treatment for the underlying asset type an investing institution with approval to use the IRB approach for any exposure class shall use the IRB approach for its positions in the securitisation.

### *Article 82*

#### **Recognition of risk transfer by originators**

Without prejudice to the minimum capital requirements imposed on the institution in respect of its securitisation positions, if any, in the securitisation, an originating institution may be permitted – to the extent prescribed in Annex F-2 or F-3 - to exclude from its minimum capital requirements calculations the credit risk exposures which are the subject of the securitisation, only where significant credit risk associated with those exposures has been transferred from the institution in accordance with the terms of Annex F-2 or F-3 as appropriate.

In the case of a failure to transfer significant credit risk the originating institution will not be required to hold capital against its positions in the securitisation in question.

### *Article 83*

#### **Eligibility of external credit assessment institutions for securitisation risk weighting purposes**

##### **A. Use of external credit assessment institutions' credit assessments for the determination of the risk weighted amounts of securitisation positions under the Standardised Approach and the Ratings Based Method of the IRB Approach.**

1. An institution may nominate one or more external credit assessment institutions recognised by the competent authorities as eligible under paragraphs B below for the purposes of this Section - a 'nominated external credit assessment institution'. The relevant credit assessments of a nominated external credit assessment institution shall be used for the determination of the risk weighted amount of a securitisation position to the extent and in the manner prescribed in Annex F
2. For the purposes of this Section 'relevant credit assessment' means a credit assessment of a tranche of a securitisation which meets the requirements prescribed under Annex F-4 in relation to the public availability of the assessment and the aspects which it takes into account.
3. An institution using the relevant credit assessments of a nominated external credit assessment institution for the purposes of determining the risk weighted amounts of securitisation positions, must do so in a continuous and consistent manner as elaborated in Annex F-4.

4. If two or more relevant credit assessments are available from nominated external credit assessment institutions the mode of use shall be as prescribed in Annex F-4.

## **B. Recognition of external credit assessment institutions for the purposes of this Section**

1. Competent authorities shall recognise an external credit assessment institution as eligible for the purposes of this Section only if

(i) they are satisfied that the methodology followed by the external credit assessment institution in the formulation of its credit assessments complies with the principles prescribed in Article 37 as elaborated in Annex C; and

(ii) they are satisfied that the external credit assessment institution's relevant credit assessments comply with the principles of credibility and market acceptance as elaborated in Annex F-4.

2. When an external credit assessment institution has been recognised as eligible for the purposes of this Section by the competent authorities of one Member State, the competent authorities of other Member States may recognise the external credit assessment institution as eligible for the purposes of this Section on the basis of the assessment performed by the competent authorities of the first Member State.

## **C. Mapping of relevant credit assessments**

1. Competent authorities are responsible for mapping the relevant credit assessments of external credit assessment institutions recognised as eligible for the purposes of this Section into the steps of the credit quality assessment scales specified in Annex F-5 and F-6.

2. The mapping process shall be objective and consistent and it shall take account of the full spectrum of steps of the credit quality assessment scales.

3. In order to differentiate between the relative degrees of risk expressed by each relevant credit assessment, competent authorities shall consider quantitative and qualitative factors as specified in Annex F-4.

4. When the competent authority of one Member State has established the mapping of an external credit assessment institution's relevant credit assessments, the competent authorities of other Member States may recognise that mapping on the basis of the assessment performed by the competent authority of the former Member State.

## *Article 84*

### **Calculation of risk weighted asset amounts**

1. As prescribed in Annex F, the risk weighted amount of a securitisation position shall be calculated having regard to
  - (a) the level of credit risk or potential credit risk associated with the securitisation position;
  - (b) the approach to the calculation of risk weighted amounts used by the institution;
  - (c) the difficulties in identifying with an appropriate level of certainty the risk associated with securitisation positions and the need to ensure sufficient levels of capital in such context;
  - (d) the need to prevent, insofar as possible, securitisation being used as a means of circumventing the capital requirements established under this Directive – so that any reduction in minimum capital requirements resulting from the securitisation of credit exposures should reflect a sufficiently certain reduction in the risk to which the institution is exposed.
2. The risk weighted amounts of securitisation positions shall be calculated as follows:
  - (a) For on-balance sheet securitisation positions the amount of the position shall be multiplied by a risk weight determined in accordance with the appropriate methodology as prescribed in Annex F-5 and F-6;
  - (b) For off-balance sheet securitisation positions the amount of the position shall be multiplied by a conversion factor as specified in Annex F-5 and F-6 and then by a risk weight determined in accordance with the appropriate methodology as prescribed in Annex F-5 and F-6;
  - (c) Credit protection acquired in respect of a securitisation position shall, subject to the eligibility and other requirements prescribed in Section III of this Chapter, be recognised as specified in Annex F.

## *Article 85*

### **Capitalised assets**

Originating institutions will be required to deduct the amount of any capitalised assets from original own funds.

Capitalised assets means any capitalised future income that is recorded as an on-balance sheet asset and has been recognised in regulatory capital.

*Article 86*

**Revolving securitisations with early amortisation provisions**

As prescribed in Annex F, originating institutions shall be required to hold capital against the risk, arising from revolving securitisations with early amortisation provisions, that the levels of credit risk to which it is exposed may increase following the operation of the early amortisation provisions.

*Article 87*

**Implicit Recourse**

An originating or sponsoring institution shall not provide support to the securitisation beyond its contractual obligations with a view to reducing potential or actual losses to investors.

The provision of implicit recourse by an originating institution or a sponsoring institution will result in the treatment set out in Annex F-7.

[Articles 88-95 Blank]

## **Chapter 2 – Market Risks**

### *Article 96*

#### **Trading intent and prudent valuation**

To be eligible for trading book capital treatment, a position or a portfolio must be held with trading intent or in order to hedge other elements of the trading book, and be subject to frequent and accurate valuation.

Trading intent shall be evidenced based on the strategies, policies and procedures set up by the institution to manage the position/portfolio in compliance with the requirements prescribed in Annex G-1.

Regulation on prudent valuation shall apply to all positions in the trading book, based on the requirements set out in Annex G-2. This notably covers: (i) systems and controls; (ii) valuation methodologies; (iii) valuation adjustments and reserves.

### *Article 97*

#### **Systems and controls**

Institutions shall establish and maintain systems and controls sufficient to provide valuation estimates that are prudent and reliable. These systems shall be integrated with other risk management systems within the organisation and comply with the prudential requirements listed in Annex G-2, section A.

### *Article 98*

#### **Valuation methodologies**

(i) Marking to market

Institutions shall evaluate their positions using mark to market as much as possible.

Marking to market is the at least daily valuation of positions at readily available close out prices that are sourced independently. Examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers.

When marking to market, the more prudent side of bid/offer shall be used unless the institution is a significant market maker in a particular position type and it can close out at mid-market.

(ii) Marking to model

Where marking to market is not possible, institutions must mark to model their positions/portfolios before applying trading book capital treatment. Marking to model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input.

When marking to model, institutions must demonstrate compliance with the prudential requirements specified in Annex G-2, section B. In this case, an extra degree of conservatism is appropriate.

*Article 99*

**Valuation adjustments or reserves**

Institutions shall establish and maintain procedures for considering valuation adjustments/reserves. These shall be compliant with the prudential requirements set out in Annex G-2, section C.

Competent authorities expect institutions using third-party valuations to consider whether valuation adjustments are necessary. Such considerations are also necessary when marking to model. In addition, competent authorities will require institutions to consider the need for establishing reserves for less liquid positions and on an ongoing basis review their continued appropriateness.

Valuation adjustments shall impact regulatory capital based on the criteria set out in Annex G-2, section D.

*Article 100*

**Collective investment undertakings (CIU)**

Positions in units of collective-investment undertakings are eligible for trading book capital treatment subject to the conditions specified in Article 96 (trading intent and prudent valuation). Capital requirements shall be calculated according to Annex G-3.

*Article 101*

**Specific risk**

Institutions shall calculate their capital requirement for specific risk in the trading book according to Annex G-4.

*Article 102*

**Settlement / counterparty risk**

An institution shall be required to hold capital against settlement/counterparty risk separate from the capital charge for general market risk and specific risk. This should notably cover:

- Exposures due to unsettled transactions and free deliveries;
- exposures due to over-the-counter (OTC) derivative instruments included in the trading book;
- exposures due to repurchase agreements and securities and commodities lending which are based on securities and commodities included in the trading book;
- exposures due to reverse repurchase agreements and securities-borrowing and commodities-borrowing transactions which meet the conditions on trading intent and prudent valuation for being held in the trading book; and
- exposures in the form of fees, commission, interest, dividends and margin on exchange-traded derivatives which are directly related to the items included in the trading book;

The capital requirement shall be calculated according to the Standardised Approach or the Internal Ratings Based Approach, subject, where appropriate, to the specific rules envisaged in Annex G-5.

*Article 102A*

**Internal hedges**

In the case of internal hedges capital requirements shall be calculated in accordance with the terms of Annex G-5A

*Article 103*

**Amendments to Directive 93/6/EEC (CAD)**

Directive 93/6/EEC is amended as follows:

- 1 In Article 2, the following definitions are repealed:
  - n. 5 – financial instruments;
  - n.6 – trading book;
  - n. 12 – qualifying items.
- 2 Article 4 is replaced by Article 3 of this Directive.
- 3 Article 6 (valuation of positions for reporting purposes) is repealed.
- 4 Annex I is amended as follows:

[Memo: Paragraph 1 to be amended to allow for netting of long and short positions in CIUs]

The following paragraph 7 bis is added after paragraph 7

7 bis. For credit derivatives, unless specified differently the notional amount of the credit derivative contract must be entered. When calculating the capital requirement for the market risk of the party who assumes the credit risk (the 'protection seller'), positions are determined as follows:

A total return swap creates a long position in the general market risk of the reference obligation and a short position in the general market risk of a government bond which is assigned a 0% risk weight under Annex C-1, section 1. It also creates a long position in the specific risk of the reference obligation.

A credit default swap does not create a position for general market risk. For the purposes of specific risk, the institution must record a synthetic long position in an obligation of the reference entity. If premium or interest payments are due under the product, these cash flows must be represented as notional positions in a government security with the appropriate fixed or floating rate.

A credit-linked note creates a long position in the general market risk of the note itself, as an interest product. In order to calculate specific risk a synthetic long position is created in an obligation of the reference entity. In addition, a long position is created in the specific risk of the issuer of the note.

When calculating the specific risk charge, a first-asset-to-default basket creates a position for the notional amount in an obligation of each reference entity. If a capital deduction equal to the size of the maximum credit event payment is lower than the total capital requirement under the above-mentioned method, this amount may be deducted from the capital.

When calculating the specific risk charge, a second-asset-to-default basket product creates a position for the notional amount in an obligation of each reference entity less one (that with the lowest specific risk capital requirement). If a capital deduction equal to the size of the maximum credit event payment is lower than the total capital requirement under the above-mentioned method, this amount may be deducted from the capital. If a credit-linked note basket product has an external rating and meets the conditions for a qualifying debt item, a single long position with the specific risk of the note issuer may be recorded instead of the specific risk positions for all reference entities.

For the party who transfers credit risk (the 'protection buyer') the positions are determined as the mirror image of the position of the protection seller, with the exception of a credit linked note (which entails no short position in the issuer) . If at a given moment there is a call option in combination with a step-up, such moment is treated as the maturity of the protection. In the case of  $n$ th to default credit derivatives protection buyers are allowed to off-set specific risk for  $n-1$  of the underlyings (i.e., the  $n-1$  assets with the lowest specific risk charge).

In order to calculate the specific risk charge for a basket product providing proportional protection, a position whose size is in accordance with the proportionality of the notional amount recorded in the contract must be entered

in an obligation of each reference entity. When more than one obligation of a reference entity can be selected, the obligation with the highest risk weighting determines the specific risk. The maturity of the credit derivative contract is applicable instead of the maturity of the obligation.

Paragraph 11 (CIUs) is repealed;

Paragraph 14 is repealed. References to this paragraph shall be read as references to Annex G-4, paragraph 1.

Paragraphs 32 and 33 are repealed. References to these paragraphs shall be read as references to Annex G-4, paragraph 3.

- 5 Annex II (settlement and counterparty risk) [will be modified or repealed – to reflect the outcome of the issue discussed in Section 12 of CP3 Explanatory Document].
- 6 In Annex V (own funds), paragraph 2 shall be amended by the deletion of ‘II’ from the third line.
- 7 In Annex VI (large exposures), paragraph 2 is amended by the replacement of sub-paragraph (iii) with the following.

(iii) the exposures due to the transactions, agreements and contracts referred to in Article 102 of Directive [new Capital Requirements Directive] to the client or group of clients in question, such exposures being calculated in the manner laid down in that Annex, without application of the weightings for counter-party risk.

- 8 Paragraphs 8 sub-paragraphs 1 and 2 of Annex VI are replaced by the following:

(a) the exposure on the non-trading book to the client or group of clients in question does not exceed the limits laid down in Article 49 of Directive 2000/12/EC, calculated with reference to own funds as defined in Title V, Chapter 2, Section 1 of Directive 2000/12/EC, so that the excess arises entirely on the trading book;

(b) the firm meets an additional capital requirement on the excess in respect of the limits laid down in Article 49 (1) and (2) of Directive 2000/12/EC. This shall be calculated by selecting those components of the total trading exposure to the client or group of clients in question which attract the highest specific-risk requirements in Annex G-4 and/or requirements in Article 102 of Directive [new Capital Requirements Directive], the sum of which equals the amount of the excess referred to in (a); where the excess has not persisted for more than 10 days, the additional capital requirement shall be 200 % of the requirements referred to in the previous sentence, on these components.

As from 10 days after the excess has occurred, the components of the excess, selected in accordance with the above criteria, shall be allocated to the appropriate line in column 1 of the table below in ascending order of specific-risk requirements Annex G-4 and/or requirements in Article 102 of Directive [new Capital Requirements Directive]. The institution shall then meet an additional capital requirement equal to the sum of the specific-risk

requirements in Annex G-4 and/or Article 102 requirements on these components multiplied by the corresponding factor in column 2;

[Table remains the same]

9 The following paragraph is inserted after paragraph 8 of Annex VI:

8 bis. Pending further co-ordination on the treatment of large exposures, competent authorities can establish that the exposures referred to in paragraph 2, point (iii) above be excluded from the treatment envisaged in paragraph 8 above (additional capital requirements) provided that such exposures are, as a general rule, subject to the treatment envisaged for large exposures under Article 49 of Directive 2000/12/EC and paragraph 8 (a) above. Exposures over limits shall in this case not be allowed, unless under the approval of the competent authorities on a case-by-case basis, and provided that exposures are of a temporary nature. When this happens, such exposures shall be computed in the calculation of the capital requirements envisaged in paragraph 8 (b) above.

[Articles 104-105 - Blank]

## **Chapter 3 – Operational Risk**

### *Article 106*

#### **Scope**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk.

### *Article 107*

#### **Capital requirement**

The competent authorities shall require institutions to hold capital against operational risk. This capital will have to be calculated in accordance with the methodologies set out in Articles 108 to 111, and subject to the provisions of Articles 112 and 113.

### *Article 108*

#### **Basic indicator approach**

The capital requirement for operational risk under the basic indicator approach will be set as a certain percentage of a relevant income indicator. The parameters for the basic indicator approach are defined in Annex H-2.

### *Article 109*

#### **Standardised approach**

The Standardised Approach requires institutions to divide their activities in a number of business lines.

For each business line, a proxy indicator for operational risk is identified.

For each business line, institutions will calculate a capital requirement for operational risk by multiplying the relevant proxy indicator by a certain risk factor reflecting the risk of operational losses.

The capital requirement for operational risk under the Standardised Approach will be the simple sum of the capital requirements for operational risk across all individual business lines.

The parameters for the Standardised Approach are laid down in Annex H-3.

To be eligible for the Standardised Approach, institutions must satisfy their competent authorities that they meet the qualifying criteria set out in Annex H-3, section 4.

## *Article 110*

### **Advanced measurement approaches**

Competent authorities may authorise institutions to use advanced measurement approaches based on their own internal risk measurement system to calculate the capital requirement for operational risk. Explicit recognition by the competent authorities of the use of models for supervisory capital purpose shall be required in each case.

To be eligible for advanced measurement approaches, institutions must satisfy their competent authorities that they meet the qualitative and quantitative standards set out in Annex H-4.

The internal risk measurement system must be consistent with the scope of operational risk defined in Article 106 and with the loss event types defined in Annex H-8.

Institutions will be allowed to recognise the impact of insurance against operational risk under advanced measurement approaches. The specific conditions under which capital alleviation may be granted under advanced measurement approaches are laid down in Annex H-4.

## *Article 111*

### **Combination of different methodologies**

Competent authorities may allow institutions to use a combination of the Basic indicator approach, the Standardised approach and Advanced measurement approaches under the conditions laid down in Annex H-5.

## *[Article 112*

### **Specific provisions on operational risk for investment firms with limited licence**

1. Subject to the competent authorities' discretion, investment firms with limited licence falling under the categories mentioned in Annex H-1 may be exempted from the individual capital requirement for operational risk established in Article 107 provided that these firms are required to provide own funds which are at all times more than or equal to the higher of the following two requirements:
  - (a) the sum of the capital requirements mentioned in Article 3, letters a-d (credit and market risk), and
  - (b) the amount prescribed in Annex IV of Directive 93/6/EEC (EBR).
2. These firms shall remain subject to all the other provisions regarding operational risk envisaged in the present Directive.
3. Subject to the competent authorities' discretion, investment firms with limited licence falling under the categories mentioned in Annex H-1 may be exempted from the consolidated capital requirement for operational risk established in Article 107 provided that all the investment firms in the group fall under the categories mentioned

in Annex H-1, and the group does not include credit institutions. When this occurs, the parent investment firm shall be required to provide consolidated own funds which are at all times more than or equal to the higher of the following two consolidated requirements:

- (a) the sum of the capital requirements mentioned in Article 3, letters a-d (credit and market risk)
- (b) the amount prescribed in Annex IV of Directive 93/6/EEC (EBR).

### *Article 113*

#### **Expenditure based Requirement**

Subject to the competent authorities' discretion, the capital requirement established in Article 3, paragraph 1, second sub-paragraph (EBR), can be waived for investment firms that are authorised to use Advanced Measurement Approaches to calculate the capital requirement for operational risk according to Article 110. For these firms the capital charge for operational risk shall remain cumulative with the other capital requirements imposed in Article 3, paragraph 1.]

Note: the above draft Articles 112 and 113 represent the text that would be introduced to implement the 'potential way forward' discussed in Section 14 of the CP3 Explanatory Document.

### *Article 114*

#### **Reports by Member States**

The competent authorities of each Member State shall regularly provide the Commission with information concerning the implementation of Articles 112 and 113.

[Article 115 Blank]

# **Title III – Supervisory Review Process**

## **CHAPTER 1 – CONTROL ENVIRONMENT**

### *Article 116*

#### **Assessment process**

1. Competent authorities shall require each institution to have a sound, effective and complete process for assessing that it holds, on an ongoing basis, internal capital quantitatively and qualitatively adequate to cover the risks inherent in its activities.
2. The process referred to under paragraph 1 shall include the following components:
  - (a) policies and procedures to identify, measure, and report the risks inherent in the institution's activities. At a minimum, the risks referred to under Annex I, Sections 2 to 9 shall be addressed, where applicable. Appropriate processes shall be developed to estimate the risks which cannot be measured precisely;
  - (b) a process to relate the institution's internal capital to its risks;
  - (c) a process to state the institution's goals in terms of adequate internal capital, taking account of the institution's strategies and business plan;
  - (d) a process of internal controls, reviews and audit.
3. Competent authorities shall require each institution to assess the adequacy of its internal capital pursuant to paragraph 1 having regard to the following factors:
  - (a) appropriateness of the methodologies and requirements laid down under Title II to cover the institution's exposure to the risks contemplated under that Title;
  - (b) exposure to risks not incorporated in the framework of Title II;
  - (c) foreseeable effects on the institution of external factors, including the macroeconomic environment and the status of the business cycle.
4. The process referred to under paragraph 1 shall be comprehensive and ensure a full and timely coverage of the risks incurred by every part of an institution's organisation, as well as the risks related to outsourced functions.
5. Competent authorities shall require institutions to review their assessment process to correct any deficiencies promptly. The frequency of reviews shall be prudently determined by institutions in consideration of the risks involved and the frequency and nature of changes occurring in their operating environment.

### *Article 117*

#### **Management and coverage of risks**

1. Competent authorities shall require institutions to lay down strategies for the management of the risks they incur. These strategies shall include limits to risk taking.
2. Competent authorities shall also require institutions to lay down a strategy for maintaining the adequacy of their risk coverage pursuant to Article 116.1 taking into account the objectives of their business plans.

[Articles 118-125 blank]

## **CHAPTER 2 – COMPETENT AUTHORITIES’ EVALUATION PROCESS, INTERVENTION AND TRANSPARENCY**

### *Article 126*

#### **Evaluation Process**

- (1) Competent authorities shall apply a process to each institution to review and evaluate on a systematic and consistent basis:
  - (a) the institution's exposure to risks referred to under Article 116.2(a);
  - (b) the adequacy and reliability of the assessment process in relation to the requirements laid down under Articles 116 and 117 and Annex I;
  - (c) the quantitative and qualitative adequacy of the institution's own funds and internal capital;
  - (d) the institution's ongoing compliance with the requirements and standards laid down in Titles II and IV for the use of specific techniques and access to advanced calculation methodologies;
  - (e) the institution's compliance with the other requirements laid down under this Directive.
- (2) Competent authorities shall determine for each institution the frequency, intensity and scope of the evaluation process referred to under paragraph 1 having regard to systemic importance, nature, scale and complexity of the activities of the institution concerned.
- (3) Competent authorities shall review the results of the evaluation process referred to under paragraph 1 at least annually and consider the need to carry out the evaluation process on an institution, or to review the most recent one, as soon as they get any new information which may significantly impact on that institution.
- (4) Based on the analysis and results of the evaluation process, the competent authorities shall assess whether any weaknesses or inadequacies are identified or can be anticipated at the institution concerned.

### *Article 127*

#### **Competent authorities’ powers**

- (1) Member States shall empower the competent authorities to require any institution to take a range of prudential measures based on the analysis and results of the evaluation process referred to under Article 126.
- (2) At a minimum, the prudential measures referred to under paragraph 1 shall include the obligation to hold own funds in excess of the minimum level laid down under Article 3 and those listed in Annex J, Section 2.

- (3) Member States shall empower the competent authorities to enforce their powers in such a way as to achieve an appropriate treatment by institutions of all risks, including non-measurable ones, and compliance with qualitative requirements.

#### *Article 128*

#### **Prudential measures and intervention**

- (1) Competent authorities shall require from any institution appropriate prudential measures at an early stage with the objective of preventing the adequacy of own funds of that institution from falling below the minimum levels necessary to support its risk and control characteristics.
- (2) A specific own funds adequacy requirement shall be imposed by the competent authorities at least on those institutions whose inadequacy in the level of own funds in relation to the exposure to risk and the effectiveness of the control environment is unlikely to be rectified within an appropriate timeframe solely through the application of other prudential measures.
- (3) Competent authorities shall consider requiring the more prescriptive prudential measures if the institution concerned does not timely and effectively comply with the required measures.
- (4) In the event of an institution's failure to comply with the requirements prescribed in Article 3 or by competent authorities under this Article, Member States shall ensure that the institution in question takes appropriate steps to achieve compliance with those requirements as quickly as possible.
- (5) Competent authorities shall monitor the adequacy of the own funds held by institutions in respect of individual securitisation transactions. This shall be aimed at ensuring that institutions hold appropriate own funds in respect of securitisation transactions having regard to the economic substance of the transaction and the risks arising. Aspects to be considered in determining whether additional own funds are required to be held include those prescribed in Annex J, Section 4.

#### *Article 129*

#### **Transparency and accountability**

- (1) The general criteria and methodologies used by the competent authorities in the evaluation process referred to under Article 126 shall be publicly available.
- (2) At a minimum, the analysis and results of the evaluation process shall be communicated by the competent authorities to the institutions which are required to take prudential measures pursuant to Article 128.
- (3) Requirements to hold an amount of own funds higher than that prescribed in Article 3 shall not be published.

## **Title IV – Market Discipline**

### *Article 136*

#### **Disclosure requirements**

1. For the purposes of this Directive, competent authorities shall require the entities set forth in Article 137 to publicly disclose the information laid down in Annex L-2, subject to the provisions laid down in Article 138.
2. Competent authorities shall also require the entities set forth in Article 137 to adopt a formal policy to comply with the disclosure requirements set forth in paragraph 1 and have policies for assessing the appropriateness of their disclosures, including validation and frequency of them.
3. Recognition by the competent authorities under Title II of the instruments and methodologies referred to in Annex L-3 shall be subject to the public disclosure by the entities set forth in Article 137 of the information laid down in that Annex.

### *Article 137*

#### **Entities subject to disclosure requirements**

1. For the purposes of this Directive, competent authorities shall require the institutions not included within a group to disclose the information laid down in Article 136 on an individual basis.
2. Competent authorities shall require the parent undertakings within a group to disclose the information laid down in Article 136 on a consolidated basis.
3. Competent authorities shall also require the parent undertakings within a group to disclose any information specifically indicated in Annexes L-2 and L-3 with regard to their significant subsidiary institutions, on an individual basis, and significant sub-groups subject to capital requirements pursuant to Article 18, on a sub-consolidated basis.
4. Competent authorities may partially or completely exempt the entities set out in paragraphs 1 and 2 from the disclosure requirements set forth in Article 136 if those entities are included within equivalent disclosures provided at a group level by a parent undertaking established outside the EU.

### *Article 138*

#### **Derogations to the disclosure requirements**

1. Notwithstanding Article 136, competent authorities shall permit the entities set forth in Article 137 not to make one or more disclosures listed in Annex L-2 if the entity concerned considers that the information provided by such disclosures

would not be material in the light of the criterion set forth in Annex L-1, paragraph 1.

2. Notwithstanding Article 136, competent authorities shall also permit the entities set forth in Article 137 not to publish one or more items of information included in the disclosures listed in Annexes L-2 and L-3 if the entity concerned considers that those items would include proprietary or confidential information in the light of the criteria set forth in Annex L-1, paragraphs 2 and 3.
3. In the exceptional cases referred to under paragraph 2, the entity concerned shall state in its disclosures the fact that, and the reason why, the specific items of information are not disclosed, and publish more general information about the subject matter of the disclosure requirement.

#### *Article 139*

### **Frequency of disclosures**

1. Competent authorities shall require the entities set forth in Article 137 to publish the disclosures required under Article 136 on an annual basis at a minimum.
2. Competent authorities shall also require the entities set forth in Article 137 to determine whether a frequency higher than that laid down in paragraph 1 is necessary in the light of the criteria set out in Annex L-1, paragraph 4.

#### *Article 140*

### **Medium and location of disclosures**

Competent authorities shall permit the entities set forth in Article 137 to determine the appropriate medium and location to effectively comply with the disclosure requirements set forth in Article 136. Equivalent disclosures made by those entities under accounting, listing or other requirements may be relied upon for compliance with Article 136, subject to the criteria laid down in Annex L-1, paragraph 5.

#### *Article 141*

### **Competent authorities overriding powers**

Notwithstanding the Articles 138 to 140, Member States shall empower competent authorities to require the entities set forth in Article 137:

- (a) to make one or more disclosures among those referred to in Annexes L-2 and L-3;
- (b) to publish one or more disclosures more frequently than annually, and
- (c) to use specific media and locations for disclosures.

[Articles 142-145 Blank]

# **Title V – Powers of Execution**

## *Article 142*

### **Powers conferred to the Commission**

1. The Commission shall adopt, in accordance with the procedure laid down in paragraph 2, implementing measures and technical adaptations to be made to this Directive in the following areas:

[Provision to be completed to reflect proposal that the implementing measures and technical provisions comprising the Annexes should be capable of amendment by comitology.]

2. The Commission shall be assisted by

[Provision to be completed.]

3. When a reference is made to this paragraph, the regulatory procedure laid down in

[Provision to be completed.]

[Articles 143-145 – Blank]

# Title VI – Transitional and Final Provisions

## Transitional Provisions

### *Article 146*

#### Internal Ratings Based Approach

1. Until 31 December 2011, for corporate exposures the competent authorities of the Member States may set the number of days past due that all institutions in its jurisdiction shall abide by under the definition of default set out in Article 1, paragraph 46 for lending to such counterparts situated within this Member State up to a figure of 180 days if local conditions make it appropriate.  
This paragraph shall not prevent competent authorities of a Member State, which applies a lower past due figure for such exposures in its territory, from allowing higher figures for lending to counterparts situated in the territories of other Member States that allow higher figures. The specific number shall fall within 90 days and the figure, the other Member States have set for lending to such counterparts within its territory.  
Member States shall inform the Commission of the use they make of this paragraph.
2. Until 31 December 2009 the competent authorities may relax the following minimum requirements:
  - For corporate, institutions and sovereign exposures under the Foundation Approach the requirement that regardless of the data source institutions shall use at least five years of data to estimate the probability of default (PD).
  - For retail exposures the requirement that regardless of the data source institutions shall use at least five years of data to estimate loss characteristics (EAD, and either expected loss (EL) or PD and LGD).
  - For corporate, institutions, sovereign and retail exposures the requirement is that an institution shall demonstrate it has been using a rating system that was broadly in line with the minimum requirements articulated in this Directive for at least three years prior to qualification.
  - The applicable aforementioned transitional arrangements also apply to the PD/LGD Approach to equity.

Under these transitional arrangements institutions are required to have a minimum of two years of data at the 31 December 2006. This requirement will increase by one year for each of three years up to the 31 December 2009.

3. Until 31 December 2009 LGDs for retail exposures secured by residential properties cannot be set below 10% for any sub-segment of exposures to which

the formula in Annex D-2, paragraph 4 is applied. The 10% LGD floor shall not apply to exposures that are subject to/benefit from sovereign guarantees.

4. Institutions adopting the Foundation and/or Advanced IRB Approach shall calculate their minimum regulatory capital requirements for this Directive in parallel with the Directive 2000/12 for 2007 and 2008. During 2007, for these institutions capital requirements resulting from the IRB treatment shall be subject to a floor of 90% of the institution's capital requirements that would result under Directive 2000/12. During 2008 the floor shall be 80%.
5. Until 31 December 2016, the competent authorities of the Member States may exempt from the IRB treatment particular equity investments held at the time of application of this directive. The exempted position is measured as the number of shares as of that date and any additional arising directly as a result of owning those holdings, as long as they do not increase the proportional share of ownership in a portfolio company. If an acquisition increases the proportional share of ownership in a specific holding the exceeding part of the holding shall not be subject to the exemption. Nor shall the exemption apply to holdings that were originally subject to the exemption, but have been sold and then bought back. Equity holdings covered by these transitional provisions shall be subject to the capital requirements of the Standardised Approach.

**WORKING DOCUMENT - PART TWO**  
**Draft proposed amendments to the large**  
**exposures provisions (Articles 48-50) of Directive**  
**2000/12/EC**

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## DIRECTIVE 2000/12/EC

### LARGE EXPOSURES – PROPOSED CHANGES

#### Article 48

##### Reporting of large exposures

1. A[n] [credit] institution's exposure to a client or group of connected clients shall be considered a large exposure where its value is equal to or exceeds 10% of its own funds.

<p>The wording '[credit] institution' is used throughout to indicate that the intention is that the proposed requirements apply to all institutions, while retaining the current structure of the legislation.</p>
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2. A[n] [credit] institution shall report every large exposure within the meaning of paragraph 1 to the competent authorities. Member States shall provide that reporting is carried out, at their discretion, in accordance with one of the following methods:
  - reporting of all large exposures at least once a year, combined with reporting during the year of all new large exposures and any increases in existing large exposures of at least 20% with respect to the previous communication;
  - reporting of all large exposures at least four times a year.
3. With the exception of institutions using the Financial Collateral Comprehensive Method under Article 49(7X), exposures exempted under points (a), (b), (c), (d), (f), (g) and (h) of Article 49 (7) need not, however, be reported as laid down in paragraph 2 and the reporting frequency laid down in the second indent of paragraph 2 may be reduced to twice a year for the exposures referred to in points (e) and (i) to (s) of Article 49 (7) and also in paragraphs (8), (9) and (10).
4. The competent authorities shall require that every [credit] institution ~~have~~ has sound administrative and accounting procedures and adequate internal control mechanisms for the purpose of identifying and recording all large exposures and subsequent changes to them, as defined and required by this Directive, and for that of monitoring those exposures in the light of each credit institution's own exposure policies.

Where a[n] [credit] institution invokes paragraph 3, it shall keep a record of the grounds advanced for at least one year after the event giving rise to the dispensation, so that competent authorities may establish whether it is justified.

5. Member States may require the reporting of concentrated exposures to the issuers of collateral taken by the institution.

## Article 49

### Limits on large exposures

1. A[n] [credit] institution may not incur an exposure to a client or group of connected clients the value of which exceeds 25% of its own funds.
2. Where that client or group of connected clients is the parent undertaking or subsidiary of the [credit] institution and/or one or more subsidiaries of that parent undertaking, the percentage laid down in paragraph 1 shall be reduced to 20%. Member States may, however, exempt the exposures incurred to such clients from the limit of 20% if they provide for specific monitoring of such exposures by other measures or procedures. They shall inform the Commission and the Banking Advisory Committee of the content of such measures and procedures.
3. A[n] [credit] institution may not incur large exposures which in total exceed 800% of its own funds.
4. Member States may impose limits more stringent than those laid down in paragraphs 1, 2 and 3.
5. A[n] [credit] institution shall at all times comply with the limits laid down in paragraphs 1, 2 and 3 in respect of its exposures. If in an exceptional case exposures exceed those limits, that fact must be reported without delay to the competent authorities which may, where the circumstances warrant it, allow the [credit] institution a limited period of time to comply with the limits.
6. Member States may fully or partially exempt from the application of paragraphs 1, 2 and 3 exposures incurred by a[n] [credit] institution to its parent undertaking, to other subsidiaries of that parent undertaking or to its own subsidiaries, in so far as those undertakings are covered by the supervision on a consolidated basis to which the [credit] institution itself is subject, in accordance with this Directive or with equivalent standards in force in a third country.

6.A For the purposes of the following paragraphs of this Article, 'guarantee' shall include credit derivatives recognised under Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive other than credit linked notes.

Cash received under a credit linked note issued by the [credit] institution and loans and deposits of a counterparty to or with the [credit] institution which are subject to

an on-balance sheet netting agreement recognised under Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive shall be deemed to fall within paragraph 7 (g).

6.B (i) For the purposes of this Article and subject to paragraph (2) below, the recognition of collateral, on-balance sheet netting, master netting agreements in respect of repurchase agreements and securities or commodities lending or borrowing agreements, guarantees and credit derivatives is subject to compliance with the eligibility requirements and other minimum requirements, as laid down in Article 68, and Annex E1 and E2 of the Risk Based Capital Requirements Directive, Standardised Approach.

(ii) The minimum requirements prescribed in Annex E2 shall not apply to [credit institutions using the Advanced IRB approach under paragraph 7Y below.

7. Member States may fully or partially exempt the following exposures from the application of paragraphs 1, 2 and 3:

(a) asset items constituting claims on ~~Zone A central governments~~ sovereigns or central banks which claims would unsecured receive a 0% risk weighting under the Standardised Approach

(b) asset items constituting claims on international organisations or multilateral development banks which claims would unsecured receive a 0% risk weight under the Standardised Approach,

(c) asset items constituting claims carrying the explicit guarantees of sovereigns, of the European Communities central banks, international organisations or multilateral development banks, where unsecured claims on the entity providing the guarantee would achieve a 0% risk weight under the Standardised Approach  
[to credit risk];

(d) other exposures attributable to, or guaranteed by, ~~Zone A central governments~~ sovereigns, central banks, international organisations, or multilateral development banks where unsecured claims on the entity to which the exposure is attributable or by which it is guaranteed would receive a 0% risk weight under the Standardised Approach

- (e) asset items constituting claims on and other exposures to ~~Zone B central governments~~ sovereigns or central banks not mentioned in paragraph a) above which are denominated and, where applicable, funded in the national currencies of the borrowers.
- (f) asset items and other exposures secured, to the satisfaction of the competent authorities, by collateral in the form of debt securities issued by Zone A central government sovereigns, central banks, international organisations, multilateral development banks or Member States' regional governments or local authorities, which securities constitute claims on their issuer which would receive a 0% risk weighting under the Standardised Approach , or
- (g) asset items and other exposures secured, to the satisfaction of the competent authorities, by collateral in the form of cash deposits placed with the lending institution or with a[n] [credit] institution which is the parent undertaking or a subsidiary of the lending institution;
- (h) asset items and other exposures secured, to the satisfaction of the competent authorities, by collateral in the form of certificates of deposit issued by the lending institution or by a[n] [credit] institution which is the parent undertaking or a subsidiary of the lending institution and lodged with either of them;
- (i) asset items constituting claims on and other exposures to [credit] institutions, with a maturity of one year or less, but not constituting such institution's own funds;
- (j) asset items constituting claims on and other exposures to those institutions which are not credit institutions but which fulfil the conditions referred to in Article 45 (2) with a maturity of one year or less, and secured in accordance with the same paragraph;
- (k) bills of trade and other similar bills, with a maturity of one year or less, bearing the signatures of other [credit] institutions;
- (l) Covered bonds as defined in the Risk Based Capital Requirements Directive;
- (m) pending subsequent coordination, holdings in insurance companies referred to in Article 51 (3) up to 40% of the own funds of the credit institution acquiring such a holding [to be considered further];

- (n) asset items constituting claims on regional or central credit institutions with which the lending institution is associated in a network in accordance with legal or statutory provisions and which are responsible, under those provisions, for cash-clearing operations within the network;
- (o) for [credit] institutions using the Financial Collateral Simple method, as laid down in Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive, exposures secured, to the satisfaction of the competent authorities, by collateral in the form of securities other than those referred to in (f) ~~provided that those securities are not issued by the [credit] institution itself, its parent company or one of their subsidiaries, or by the client or group of connected clients in question~~. The securities used as collateral must be valued at market price, have a value that exceeds the exposures guaranteed and be either traded on a stock exchange or effectively negotiable and regularly quoted on a market operated under the auspices of recognised professional operators and allowing, to the satisfaction of the competent authorities of the Member State of origin of the [credit] institution, for the establishment of an objective price such that the excess value of the securities may be verified at any time. The excess value required shall be 100%; it shall, however, be 150% in the case of shares and 50% in the case of debt securities issued by [credit] institutions, Member States' regional governments or local authorities other than those referred to in Article 44, and in case of debt securities issued by multilateral development banks other than those receiving a 0% risk weighting under the Standardised Approach. Where there is a mismatch between the maturity of the exposure and the maturity of the credit protection, the collateral shall not be recognised. Securities used as collateral may not constitute [credit] institutions' own funds;
- (p) loans secured, to the satisfaction of the competent authorities, by mortgages on residential property or by shares in Finnish residential housing companies, operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation and leasing transactions under which the lessor retains full ownership of the residential property leased for as long as the lessee has not exercised his option to purchase, in all cases up to 50% of the value of the residential property concerned. The value of the property shall be calculated, to the satisfaction of the competent authorities, on the basis of strict

valuation standards laid down by law, regulation or administrative provisions. Valuation shall be carried out at least once a year. For the purposes of this point residential property shall mean residence to be occupied or let by the borrower;

- (q) 50% of the medium/low risk off-balance-sheet items referred to in Annex II;
- (r) subject to the competent authorities' agreement, guarantees other than loan guarantees which have a legal or regulatory basis and are given for their members by mutual guarantee schemes possessing the status of credit institutions, subject to a weighting of 20% of their amount;

Member States shall inform the Commission of the use they make of this option in order to ensure that it does not result in distortions of competition;

- (s) the low risk off-balance-sheet items referred to in Annex II, to the extent that an agreement has been concluded with the client or group of connected clients under which the exposure may be incurred only if it has been ascertained that it will not cause the limits applicable under paragraphs 1, 2 and 3 to be exceeded.

7X For the purposes of [this Section of the Directive] Member States may, in respect of credit institutions using the Financial Collateral (Comprehensive Method) in the calculation of their regulatory capital requirements under Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive, in the alternative to availing of the exemptions provided for under paragraphs (7)(f), (g), (h), and (o), permit such institutions to substitute the fully-adjusted value of their exposure to a counterparty (E\*) as calculated under Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive for the nominal value of that exposure.

Where an institution uses the IRB Foundation approach under the solvency regime E\* can be derived from the LGD\* amount calculated by the institution for an exposure using the following formula:

$$E^* = E(1 + H_E) - [C_{VA}/E]$$

7Y (a) Member States may permit [credit] Institutions using the Advanced IRB Approach for an exposure class that are able, to the satisfaction of the competent authorities, to estimate the effects of financial collateral on their exposures separately from other LGD-relevant aspects, to recognise such effects in calculating the amount of their exposures for the purposes of this Part.

(b) Competent authorities should be satisfied as to the suitability of the estimates produced by the institution for use for the reduction of the exposure amount to be taken for the purposes of considering compliance with the provisions of this Article.

(c) Where an institution uses its own estimates of the effects of financial collateral on its exposures for large exposures purposes, it must do so on a consistent basis to the satisfaction of the competent authorities. In particular, this approach must be adopted for all exposures the nominal value of which would be a large exposure within the meaning of Article 48(1).

(d) Such institutions that do not calculate the value of their exposures taking into account their own estimates of the effects of collateral may be permitted by Member States to use the Financial Collateral (Comprehensive Method) as described in paragraph 7X above or the approach set out under Paragraph 7(o) above for calculating the value of their exposure having regard to collateral taken.

(e) Each credit institution shall use only one of the two methods set out in the subparagraph (d).

8. For the purposes of paragraphs 1, 2 and 3, Member States may apply a weighting of 20% to asset items constituting claims on Member States' regional governments and local authorities where those claims would receive a 20% risk weight under the Standardised Approach and to other exposures to or guaranteed by such governments and authorities claims on which receive a 20% risk weight under the Standardised Approach; however, Member States may reduce that rate to 0% in respect of to asset items constituting claims on Member States' regional governments and local authorities where those claims would receive a 0% risk weight under the Standardised Approach and to other exposures to or guaranteed by such governments and authorities claims on which receive a 0% risk weight under the Standardised Approach.
9. For the purposes of paragraphs 1, 2 and 3, Member States may apply a weighting of 20% to asset items constituting claims on and other exposures to [credit] institutions with a maturity of more than one but not more than three years and a weighting of 50% to asset items constituting claims on [credit] institutions with a maturity of more than three years , provided that the latter are represented by debt instruments that were issued by a[n] [credit] institution and that those debt instruments are, in the

opinion of the competent authorities, effectively negotiable on a market made up of professional operators and are subject to daily quotation on that market, or the issue of which was authorised by the competent authorities of the Member State of origin of the issuing [credit] institutions. In no case may any of these items constitute own funds.

10. By way of derogation from point (i) of paragraph 7 and paragraph 9, Member States may apply a weighting of 20% to asset items constituting claims on and other exposures to [credit] institutions, regardless of their maturity.

11. Where an exposure to a client is guaranteed by a third party, or by collateral in the form of securities issued by a third party under the conditions laid down in point (o) of paragraph 7, Member States may:

- treat the exposure as having been incurred to the third party rather than to the client, ~~[if the exposure is directly and unconditionally guaranteed by that third party, to the satisfaction of the competent authorities];~~
- treat the exposure as having been incurred to the third party rather than to the client, if the exposure defined in point (o) of paragraph 7 is guaranteed by collateral under the conditions there laid down.

11X. Where Member States apply the treatment set out in paragraph 11, first indent:

- where the guarantee is denominated in a currency different from that in which the exposure is denominated the amount of the exposure deemed to be covered will be calculated in accordance with the provisions on the treatment of currency mismatch for unfunded protection in Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive ;

- a mismatch between the maturity of the exposure and the maturity of the protection will be treated in accordance with [maturity mismatch provisions of Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive ;

- partial coverage may be recognised in accordance with the treatment set out in Title II, Chapter 1, Section III of the Risk Based Capital Requirements Directive;

11Y Where the effects of collateral are recognised under the terms of paragraphs 7X or 7Y above, Member States may treat any covered part of the counterparty exposure as an exposure to the collateral issuer.

12. By 1 January 1999 at the latest, the Council shall, on the basis of a report from the Commission, examine the treatment of interbank exposures provided for in point (i) of paragraph 7 and paragraphs 9 and 10. The Council shall decide on any changes to be made on a proposal from the Commission.

## **Article 50**

### **Supervision on a consolidated or unconsolidated basis of large exposures**

[This article will be amended to reflect the new provisions on scope of application of the solvency regime. ]

1. If the institution is neither a parent undertaking nor a subsidiary, compliance with the obligations imposed in Articles 48 and 49 or in any other Community provision applicable to this area shall be monitored on an unconsolidated basis.
2. In other cases, compliance with the obligations imposed in Articles 48 and 49 or in any other Community provision applicable to this area shall be monitored on a consolidated basis in accordance with Articles 52 to 56.
3. Member States may waive monitoring on an individual or subconsolidated basis of compliance with the obligations imposed in Articles 48 and 49 or in any other Community provision applicable to this area by an institution which, as a parent undertaking, is subject to monitoring on a consolidated basis and by any subsidiary of such an institution which is subject to their authorisation and supervision and is covered by monitoring on a consolidated basis.

Member States may also waive such monitoring where the parent undertaking is a financial holding company established in the same Member State as the institution, provided that company is subject to the same monitoring as institutions. In the cases referred to in the first and second subparagraph measures must be taken to ensure satisfactory allocation of risks within the group.